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# 310 CMR 7.00: AIR POLLUTION CONTROL

Section


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## STATUTORY AUTHORITY

All provisions of 310 CMR 7.00 are adopted pursuant to the authority granted by M.G.L. c. 111, §§ 142A through 142J. In addition, 310 CMR 7.08(2) is adopted pursuant to the authority granted by M.G.L. c. 111, § 150A and the following provisions of 310 CMR 7.00 are adopted pursuant to the authority granted by M.G.L. c. 21C, §§ 4 and 6 and by M.G.L. c. 21E, § 6.

(1) The following definitions in 310 CMR 7.00:

(a) COMBUSTION EFFICIENCY (C.E.).

(b) FUEL, including the definition of HAZARDOUS WASTE FUEL and USED OIL FUEL.

(c) GENERATOR.

(d) HAZARDOUS WASTE.

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(e) HAZARDOUS WASTE INCINERATOR.
(f) PRINCIPAL ORGANIC HAZARDOUS CONSTITUENT (POHC).
(g) PRODUCTS OF INCOMPLETE COMBUSTION (PICs).
(h) RECYCLABLE MATERIAL.
(i) REGULATED RECYCLABLE MATERIAL.
(j) SPACE HEATER, including the definition of USED OIL FUEL FIRED SPACE HEATER.
(k) TOTAL HALOGENS.
(l) UNUSED WASTE OIL.
(m) USED OIL FUEL.
(n) USED WASTE OIL.
(o) WASTE.

(2) 310 CMR 7.02(1)(f).

(3) 310 CMR 7.04(9).

(4) 310 CMR 7.05(7), (8), and (9) and Table 310 CMR 7.05(8).

(5) 310 CMR 7.08(4).

LEGEND

The following symbols will indicate, in the attached 310 CMR 7.00: *Air Pollution Control*, which Air Pollution Control Districts they apply to:

U = Universal, all districts
B = Berkshire
CM = Central Massachusetts
MV = Merrimack Valley
MB = Metropolitan Boston
PV = Pioneer Valley
SM = Southeastern Massachusetts

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Massachusetts Cities & Towns
with corresponding DEP
Regional Offices and Air Pollution Control Districts

| City/Town | Region | District |
|---|---|---|
| | A | |
| Abington | SE | MB |
| Acton | C | MB |
| Acushnet | SE | SM |
| Adams | W | B |
| Agawam | W | PV |
| Alford | W | B |
| Amesbury | NE | MV |
| Amherst | W | PV |
| Andover | NE | MV |
| Arlington | NE | MB |
| Ashburnham | C | CM |
| Ashby | C | CM |
| Ashfield | W | PV |
| Ashland | NE | MB |
| Athol | W | CM |
| Attleboro | SE | SM |
| Auburn | C | CM |
| Avon | SE | MB |
| Ayer | C | MV |
| | B | |
| Barnstable | SE | SM |
| Barre | C | CM |
| Becket | W | B |
| Bedford | NE | MB |
| Belchertown | W | PV |
| Bellingham | C | SM |
| Belmont | NE | MB |
| Berkley | SE | SM |
| Berlin | C | CM |
| Bernardston | W | PV |
| Beverly | NE | MB |
| Billerica | NE | MV |
| Blackstone | C | CM |
| Blandford | W | PV |
| Bolton | C | MB |
| Boston | NE | MB |
| Bourne | SE | SM |
| Boxborough | C | MB |
| Boxford | NE | MV |
| Boylston | C | CM |
| Braintree | S | MB |
| Brewster | SE | SM |
| Bridgewater | SE | MB |
| Brimfield | W | PV |
| Brockton | SE | MB |
| Brookfield | C | CM |
| Brookline | NE | MB |
| Buckland | W | PV |
| Burlington | NE | MB |
| Cambridge | NE | MB |
| Canton | S | MB |
| Carlisle | NE | MV |
| Carver | SE | SM |
| Charlemont | W | PV |
| Charlton | C | CM |
| Chatham | SE | SM |
| Chelmsford | NE | MV |
| Chelsea | NE | MB |
| Cheshire | W | B |
| Chester | W | PV |
| Chesterfield | W | PV |
| Chicopee | W | PV |
| Chilmark | SE | SM |
| Clarksburg | W | B |
| Clinton | C | CM |
| Cohasset | S | MB |
| Colrain | W | PV |
| Concord | NE | MB |
| Conway | W | PV |
| Cummington | W | PV |
| | D | |
| Dalton | W | B |
| Danvers | NE | MB |
| Dartmouth | SE | SM |
| Dedham | NE | MB |
| Deerfield | W | PV |
| Dennis | SE | SM |
| Dighton | SE | SM |
| Douglas | C | CM |
| Dover | NE | MB |
| Dracut | NE | MV |
| Dudley | C | CM |
| Dunstable | C | MV |
| Duxbury | SE | MB |
| | E | |
| E. Bridgewater | SE | MB |
| E. Longmeadow | W | PV |
| E. Brookfield | C | CM |
| Eastham | SE | SM |
| Easthampton | W | PV |
| Easton | SE | MB |
| Edgartown | SE | SM |
| Egremont | W | B |
| Erving | W | PV |
| Essex | NE | MB |
| Everett | NE | MB |

7.00: continued

| City/Town | Region | District |
|---|---|---|
| | F | |
| Fairhaven | SE | SM |
| Fall River | SE | SM |
| Falmouth | SE | SM |
| Fitchburg | C | CM |
| Florida | W | B |
| Foxborough | SE | SM |
| Framingham | NE | MB |
| Franklin | C | SM |
| Freetown | SE | SM |
| | G | |
| Gardner | C | CM |
| Gay Head | SE | SM |
| Georgetown | NE | MV |
| Gill | W | PV |
| Gloucester | NE | MB |
| Goshen | W | PV |
| Gosnold | SE | SM |
| Grafton | C | CM |
| Granby | W | PV |
| Granville | W | PV |
| Greenfield | W | PV |
| Groton | C | MV |
| Groveland | NE | MV |
| Gt. Barrington W | B | |
| | H | |
| Hadley | W | PV |
| Halifax | SE | SM |
| Hamilton | NE | MB |
| Hampden | W | PV |
| Hancock | W | B |
| Hanover | SE | MB |
| Hanson | SE | MB |
| Hardwick | W | CM |
| Harvard | C | CM |
| Harwich | SE | SM |
| Hatfield | W | PV |
| Haverhill | NE | MV |
| Hawley | W | PV |
| Heath | W | PV |
| Hingham | S | MB |
| Hinsdale | W | B |
| Holbrook | S | MB |
| Holden | C | CM |
| Holland | W | PV |
| Holliston | C | MB |
| Holyoke | W | PV |
| Hopedale | C | CM |
| Hopkinton | C | MB |
| Hubbardston | C | CM |
| Hudson | C | MB |
| Hull | S | MB |
| Huntington | W | PV |
| | I | |
| Ipswich | NE | MB |
| | K | |
| Kingston | SE | SM |
| | L | |
| Lakeville | SE | SM |
| Lancaster | C | CM |
| Lanesborough | W | B |
| Lawrence | NE | MV |
| Lee | W | B |
| Leicester | C | CM |
| Lenox | W | B |
| Leominster | C | CM |
| Leverett | W | PV |
| Lexington | NE | MB |
| Leyden | W | PV |
| Lincoln | NE | MB |
| Littleton | C | MV |
| Longmeadow | W | PV |
| Lowell | NE | MV |
| Ludlow | W | PV |
| Lunenburg | C | CM |
| Lynn | NE | MB |
| Lynnfield | NE | MB |
| | M | |
| Malden | NE | MB |
| Manchester | NE | MB |
| Mansfield | SE | SM |
| Marblehead | NE | MB |
| Marion | SE | SM |
| Marlborough | C | MB |
| Marshfield | SE | MB |
| Mashpee | SE | SM |
| Mattapoisett | SE | SM |
| Maynard | C | MB |
| Medfield | C | MB |
| Medford | NE | MB |
| Medway | C | SM |
| Melrose | NE | MB |
| Mendon | C | CM |
| Merrimac | NE | MV |
| Methuen | NE | MV |
| Middleborough | SE | SM |
| Middlefield | W | PV |
| Middleton | NE | MB |
| Milford | C | SM |
| Millbury | C | CM |
| Millis | C | MB |
| Millville | C | CM |
| Milton | NE | MB |

7.00: continued

| City/Town | Region | District |
|---|---|---|
| Monroe | W | PV |
| Monson | W | PV |
| Montague | W | PV |
| Monterey | W | B |
| Montgomery | W | PV |
| Mt. Washington | W | B |
| | N | |
| N. Attleborough | SE | SM |
| N. Brookfield | C | CM |
| N. Reading | NE | MB |
| Nahant | NE | MB |
| Nantucket | SE | SM |
| Northampton | W | PV |
| Northborough | C | CM |
| Natick | NE | MB |
| Needham | NE | MB |
| New Salem | W | PV |
| New Braintree | C | CM |
| New Ashford | W | B |
| New Marlborough | W | B |
| New Bedford | SE | SM |
| Newbury | NE | MV |
| Newburyport | NE | MV |
| Newton | NE | MB |
| Norfolk | C | MB |
| North Adams | W | B |
| North Andover | NE | MV |
| Northbridge | C | CM |
| Northfield | W | PV |
| Norton | SE | SM |
| Norwell | SE | MB |
| Norwood | S | MB |
| | O | |
| Oak Bluffs | SE | SM |
| Oakham | C | CM |
| Orange | W | PV |
| Orleans | SE | SM |
| Otis | W | B |
| Oxford | C | CM |
| Palmer | W | PV |
| Paxton | C | CM |
| Peabody | NE | MB |
| Pelham | W | PV |
| Pembroke | SE | MB |
| Pepperell | C | MV |
| Peru | W | B |
| Petersham | W | CM |
| Phillipston | C | CM |
| Pittsfield | W | B |
| Plainfield | W | PV |
| Plainville | SE | SM |
| Plymouth | SE | SM |
| Plympton | SE | SM |
| Princeton | C | CM |
| Provincetown | SE | SM |
| | Q | |
| Quincy | NE | MB |
| | R | |
| Randolph | S | MB |
| Raynham | SE | SM |
| Reading | NE | MB |
| Rehoboth | SE | SM |
| Revere | NE | MB |
| Richmond | W | B |
| Rochester | SE | SM |
| Rockland | SE | MB |
| Rockport | NE | MB |
| Rowe | W | PV |
| Rowley | NE | MV |
| Royalston | W | CM |
| Russell | W | PV |
| Rutland | C | CM |
| | S | |
| Salem | NE | MB |
| Salisbury | NE | MV |
| Sandisfield | W | B |
| Sandwich | SE | SM |
| Saugus | NE | MB |
| Savoy | W | B |
| Scituate | SE | MB |
| Seekonk | SE | SM |
| Sharon | SE | MB |
| Sheffield | W | B |
| Shelburne | W | PV |
| Sherborn | NE | MB |
| Shirley | C | CM |
| Shrewsbury | C | CM |
| Shutesbury | W | PV |
| Somerset | SE | SM |
| Somerville | NE | MB |
| South Hadley | W | PV |
| Southampton | W | PV |
| Southborough | C | MB |
| Southbridge | C | CM |
| Southwick | W | PV |
| Spencer | C | CM |

7.00: continued

| City/Town | Region | District |
|---|---|---|
| Springfield | W | PV |
| Sterling | C | CM |
| Stockbridge | W | B |
| Stoneham | NE | MB |
| Stoughton | SE | MB |
| Stow | C | MB |
| Sturbridge | C | CM |
| Sudbury | NE | MB |
| Sunderland | W | PV |
| Sutton | C | CM |
| Swampscott | NE | MB |
| Swansea | SE | SM |
| | T | |
| Taunton | SE | SM |
| Templeton | C | CM |
| Tewksbury | NE | MV |
| Tisbury | SE | SM |
| Tolland | W | PV |
| Topsfield | NE | MB |
| Townsend | C | CM |
| Truro | SE | SM |
| Tyngsborough | N | MV |
| Tyringham | W | B |
| | U | |
| Upton | C | CM |
| Uxbridge | C | CM |
| | W | |
| Wakefield | NE | MB |
| Wales | W | PV |
| Walpole | S | MB |
| Waltham | NE | MB |
| Ware | W | PV |
| Wareham | SE | SM |
| Warren | W | CM |
| Warwick | W | PV |
| Washington | W | B |
| Watertown | NE | MB |
| Wayland | NE | MB |
| Webster | C | CM |
| Wellesley | NE | MB |
| Wellfleet | SE | SM |
| Wendell | W | PV |
| Wenham | NE | MB |
| W. Brookfield | C | CM |
| W. Stockbridge | W | B |
| W. Springfield | W | PV |
| West Newbury | NE | MV |
| W. Bridgewater | SE | MB |
| West Tisbury | SE | SM |
| West Boylston | C | CM |
| Westborough | C | CM |
| Westfield | W | PV |
| Westford | N | MV |
| Westhampton | W | PV |
| Westminster | C | CM |
| Weston | NE | MB |
| Westport | SE | SM |
| Westwood | NE | MB |
| Weymouth | S | MB |
| Whately | W | PV |
| Whitman | SE | MB |
| Wilbraham | W | PV |
| Williamsburg | W | PV |
| Williamstown | W | B |
| Wilmington | NE | MB |
| Winchester | NE | MB |
| Winchendon | C | CM |
| Windsor | W | B |
| Winthrop | NE | MB |
| Woburn | NE | MB |
| Worcester | C | CM |
| Worthington | W | PV |
| Wrentham | SE | SM |
| | Y | |
| Yarmouth | SE | SM |

## PREAMBLE

The purpose of 310 CMR 7.00 is to prevent the occurrence of conditions of air pollution where such do not exist and to facilitate the abatement of conditions of air pollution where and when such occur. They are designed to attain, preserve, and conserve the highest possible quality of the ambient air compatible with needs of society.

7.00: continued

DEFINITIONS

When used in 310 CMR 7.00 or in communications, notices or orders relative thereto, the following words and phrases shall have the meanings ascribed to them below:

12-MONTH PERIOD, 12-MONTH ROLLING PERIOD, ROLLING 12-MONTH PERIOD, CONSECUTIVE 12-MONTH TIME PERIOD OR CONSECUTIVE 12-MONTH PERIOD means a consecutive rolling 12-month period over which emissions are calculated for the purpose described by the regulatory section in which this phrase appears. A rolling 12 month period is calculated monthly starting with the month just ended and counting back 12 months (*e.g*. December through the previous January, January through the previous February, February through the previous March, *etc*.)

ACT means the Federal Clean Air Act, 42 U.S.C. 7401 *et seq*.

ACTUAL CONSTRUCTION means in general, initiation of physical on-site construction activities of any facility subject to the requirements of 310 CMR 7.00, which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework and construction of permanent structures.

ACTUAL EMISSIONS means the rate that an emission unit or facility discharges air contaminants into the ambient air. This can be calculated on a daily, weekly, monthly, ozone season, 12-month rolling, calendar year basis or other time period as determined by the requirements of the applicable regulation(s). Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period including the efficiency of pollution control equipment, if present.

ADD-ON PART as used in 310 CMR 7.40 means any aftermarket part which is not a modified part or a replacement part.

ADEQUATELY WET means fixing or coating with water or water to which a surfactant has been added, or with a remover-encapsulant, so as to prevent a friable condition and visible emissions.

ADHESION PROMOTER means a coating designed to facilitate the bonding of a primer or topcoat on surfaces such as trim moldings, door locks, and door sills, where sanding is impracticable, and on plastic parts and the edges of sanded areas.

ADMINISTRATOR means the administrator of the U.S. Environmental Protection Agency or his designee.

AEROSOL means a system of solid or liquid particles dispersed in a gas.

AFFECTED FACILITY for the purposes of 310 CMR 7.16 means any employment facility at which 250 or more employees are commuters, or any educational facility at which 1000 or more persons are commuters.

AFTERMARKET PART as used in 310 CMR 7.40 means any part of a motor vehicle emission control system sold for installation on a vehicle after the original retail sale of the vehicle.

AGRICULTURE (for the purpose of 310 CMR 7.07) means those practices involved with the cultivation of soil for purposes of crop production and/or the raising of livestock when such crops are produced primarily for commercial foodstuffs and such livestock are raised primarily for commercial foodstuffs or work purposes.

AIR means atmosphere.

AIR CONTAMINANT means any substance or man-made physical phenomenon in the ambient air space and includes, but is not limited to, dust, flyash, gas, fume, mist, odor, smoke, vapor, pollen, microorganism, radioactive material, radiation, heat, sound, any combination thereof, or any decay or reaction product thereof.

DEFINITIONS: continued

AIR CONTAMINATION SOURCE means any place at or from which any air contaminant is emitted to the ambient air space.

AIR POLLUTION means the presence in the ambient air space of one or more air contaminants or combinations thereof in such concentrations and of such duration as to:

(a) cause a nuisance;

(b) be injurious, or be on the basis of current information, potentially injurious to human or animal life, to vegetation, or to property; or

(c) unreasonably interfere with the comfortable enjoyment of life and property or the conduct of business.

ALTER OR ALTERATION means any physical change or change in the method of operation (including modification or reconfiguration of an emissions unit, change in the raw material used or change in the operating rate) which would result in an increase in potential emissions or an increase in ambient air impacts (*i.e.*, reduced stack height).

ALTERNATIVE FUEL means any fuel designated as such on an annual list issued by the Department, including methanol, denatured ethanol, and other alcohols; mixtures containing 85% or more by volume of methanol, denatured ethanol, and other alcohols with gasoline or other fuels; natural gas; liquified petroleum gas; hydrogen, coal-derived liquid fuels; fuels (other than alcohol) derived from biological materials; electricity (including electricity from solar energy); and any other fuel that the Department determines is substantially not petroleum.

ALTERNATIVE FUEL VEHICLE means a motor vehicle as defined in M.G.L. c. 90, § 1, which the Department determines to:

(a) operate exclusively on an alternative fuel; and

(b) meets applicable state and federal safety and emission standards.

AMBIENT AIR SPACE means the unconfined space occupied by the atmosphere above the geographical area of the District which includes the air outside a facility or structure.

ANTI-GLARE SAFETY COATING means a low gloss coating formulated to eliminate glare for safety purposes on interior surfaces of a vehicle, as specified under the U.S. Department of Transportation Motor Vehicle Safety Standards.

APPLICABLE REQUIREMENT for the purposes of 310 CMR 7.02(12) means any emission limitation, standard, term, condition or other requirement provided for in a Department regulation, a plan approval, an emission control plan or other document issued by the Department pursuant to 310 CMR 7.00 *et seq.*

APPLICATION AREA means any area where a coating is applied, including but not limited to application by dipping, rolling, spraying or flowcoating techniques.

AQUEOUS CLEANER means a cleaning fluid or device using a cleaning fluid that is composed of soap and/or other water-soluble materials in a water solution.

ASBESTOS means all asbestiform varieties of the mineral family called silicates including: serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite-(atmosite), anthophyllite, and actinolite- tremolite.

ASBESTOS-CONTAINING MATERIAL means friable asbestos and any material containing 1% or more asbestos by area as determined by a laboratory using USEPA approved methods. This term includes but is not limited to sprayed-on and troweled-on materials applied to ceilings, walls, and ceilings, walls, and other surfaces, insulation on pipes, boilers, tanks, ducts, and other equipment, structural and non-structural members, tiles, shingles or asbestos-containing paper.

DEFINITIONS: continued

ASBESTOS-CONTAINING WASTE MATERIAL means any friable asbestos-containing material removed during a demolition/renovation project and anything contaminated in the course of a demolition/renovation project including asbestos waste from control devices, bags or containers that previously contained asbestos, contaminated clothing, materials used to enclose the work area during the demolition/renovation operation, and demolition/renovation debris.

ASPHALT means a dark-brown to black cementitious material (solid, semi-solid, or liquid) in which the predominating constituents are bitumens which occur in nature as such, or which are obtained as residue in refining petroleum.

ATTAINMEMT AREA means any area determined by the Administrator as one in which the ambient air concentration for a criteria pollutant does not exceed a primary or a secondary National Ambient Air Quality Standard.

AUTOMOBILE means a motor vehicle capable of carrying no more than 12 passengers.

AUTOMOTIVE EXTERIOR FLEXIBLE PARTS means flexible plastic parts used in the manufacture or repair of exterior components of automobiles.

AUTOMOTIVE EXTERIOR RIGID (NON-FLEXIBLE) PARTS means rigid plastic parts used in the manufacture or repair of exterior components of automobiles.

AUTOMOTIVE INTERIOR PARTS means plastic parts used in the manufacture or repair of interior components of automobiles.

AUTOMOTIVE REFINISHING FACILITY means any facility at which the interior or exterior bodies of automobiles, motorcycles, trucks, mobile equipment, or vans are re-painted. This definition includes refinishing operations that travel to various locations, that refinish new vehicles damaged in transit before their initial sale, and that refinish aftermarket vehicles.

AUTOMOTIVE SURFACE COATING means the coating at automobile assembly plants of bodies and front end sheet metal (hood and fenders) of passenger cars capable of seating 12 or fewer passengers or light duty vehicles rated at 8500 pounds gross weight or less or derivatives of such vehicles.

Btu means British thermal unit, the amount of heat necessary to raise the temperature of one pound of water from 39°F to 40°F.

BAKERY means a facility consisting of one or more ovens for the baking of bread or other yeast leavened products.

BASE DATE means the date on which the base number of single occupant commuter vehicles at a particular employment facility or educational institution must be determined.

NON-TEXT PAGE

DEFINITIONS: continued

BEST AVAILABLE CONTROL TECHNOLOGY means an emission limitation based on the maximum degree of reduction of any regulated air contaminant emitted from or which results from any regulated facility which the Department, on a case-by-case basis taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems and techniques for control of each such contaminant. The best available control technology determination shall not allow emissions in excess of any emission standard established under the New Source Performance Standards, National Emission Standards for Hazardous Air Pollutants or under any other applicable section of 310 CMR 7.00, and may include a design feature, equipment specification, work practice, operating standard, or combination thereof.

BIOTECHNOLOGY means the use of cellular and molecular processes from living systems to make or assist in making products.

BLANKET means a rubber-covered cylinder that receives the printed image from the plate cylinder and transfers the image to the substrate.

BOSTON METROPOLITAN PLANNING ORGANIZATION means the organization designated for maintaining a continuing, cooperative, and comprehensive (3C) transportation planning process under Section 134 of the Federal Aid Highway Act and Section 5303 of the Federal Transit Act in the Boston metropolitan region.

BOSTON TRANSPORTATION DEPARTMENT means the agency within the City of Boston responsible for transportation and traffic-related activities including the regulation of off-street parking spaces in the City under M.G.L. c. 148, § 56.

BOTTOM FILLING means the filling of a tank truck or stationary storage tank through an opening which is flush with the bottom of the tank.

BUBBLE means an alternative emission control strategy where several emission points are regarded as being placed under an hypothetical dome which is then regarded as a single emission source. Sources under a bubble may reallocate emission decreases and increases so long as the requirements of 310 CMR 7.00 are met. Bubbles need not be confined to a single facility or source site.

BULK PLANT means any organic material storage and/or distribution facility with an average daily throughput (1/30 of the total throughput on a rolling 30 day time period) of greater than or equal to 4,000 but less than 20,000 gallons of organic material having a true vapor pressure greater than 1.5 psia under actual storage conditions.

BULK TERMINAL means any organic material storage and/or distribution facility with an average daily throughput (1/30 of the total throughput on a rolling 30 day time period) of greater than 20,000 gallons of organic material having a true vapor pressure greater than 1.5 psia under actual storage conditions.

CALIFORNIA AIR RESOURCES BOARD hereafter referred to as California ARB means the California state agency established and empowered to regulate sources of air pollution in California, including motor vehicles, pursuant to California Health & Safety Code Sections 39500 *et seq.*

CAPTURE EFFICIENCY means the ability of a building, enclosure or system to capture air contaminants within the building, enclosure or system before the air contaminants are directed to an air pollution control device. Capture efficiency is determined in accordance with EPA Reference Test Method Number 204, as specified in 40 CFR Part 51 Appendix M, or by other methods approved by the Department and EPA.

CEMS means a continuous emissions monitoring system

DEFINITIONS: continued

CFR means the Code of Federal Regulations.

CHAIRMAN OF THE BOSTON MPO means the chairman of the Boston Metropolitan Planning Organization; which position is held by the Massachusetts Secretary of Transportation and Construction.

CHART means the Ringelmann Scale for grading the density of smoke, as published by the United States Bureau of Mines and as referred to in the Bureau of Mines Information Circular No. 8333, or any smoke inspection guide approved by the Department.

CLASS I HARDBOARD PANELING FINISH means a finish that meets the specifications for Class I of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute (ANSI).

CLASS II HARDBOARD PANELING FINISH means a finish that meets the specifications of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute (ANSI).

CLEANUP SOLUTION means a solution which is used to clean any equipment and its parts.

CLEAR COAT means a coating which lacks color and opacity or is transparent and uses the undercoat as a reflectant base or undertone color.

COATING means a material applied onto, or impregnated into, a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealants, adhesives and temporary protective coatings.

COATING LINE(S) means one or more apparatuses or operations which apply, convey and dry a surface coating comprised of including but not limited to the coating applicator (knife coating, roll coating, spray booths, flow coaters, dipping), conveyors, flashoff areas, air dryers, drying ovens and curing ovens. A coating line is considered to convey, apply and dry one or more layers of surface coating including but not limited to base coat, single coat, prime coat, and top coat.

COATING MIXING TANK means any portable or stationary tank used to disperse, blend, strain, thin, or tint an ink or formulation used for surface coating.

COMBINED CYCLE COMBUSTION TURBINE means any combustion turbine, including the duct burner portion thereof, in which heat is recovered from the exhaust gases to heat water or generate steam.

COMBUSTION DEVICE means all equipment, including, but not limited to, thermal incinerators, catalytic incinerators, flares, boilers, and process heaters used for combustion of organic vapors.

COMBUSTION EFFICIENCY (C.E.) means a measure of the completeness of combustion, expressed as a percent, determined by the measurement of carbon dioxide ($CO_2$) and carbon monoxide (CO) in flue gas in accordance with the following formula: C.E. = $[CO_2/(CO + CO_2)]$ x 100.

DEFINITIONS: continued

COMMENCE OPERATION as used in 310 CMR 7.24(6), means that point at which a motor vehicle fuel dispensing facility or tank truck, where a Stage II system has been installed or substantially modified, begins dispensing motor vehicle fuel for the purpose said facility or tank truck is intended.

COMMERCIAL PARKING SPACES means, for the purposes of 310 CMR 7.30, parking spaces provided for a fee, excluding employee parking spaces.

COMMISSIONER means the Commissioner of the Department of Environmental Protection.

COMMUTER means any employee or student during his or her journey to or from work or classes and whose automobile is not customarily required to be used in the course of employment or classes.

COMPLIANCE CERTIFICATION means a statement detailing the compliance status of the emission unit or facility in regards to each applicable requirement, signed by a responsible official of the facility as being complete, accurate and true to the best knowledge of the signatory.

COMPONENT for the purpose of 310 CMR 7.18(19) means a piece of equipment, including but not limited to pumps, valves, compressors, and pressure relief valves, which has the potential to leak volatile organic compounds.

COMPOUND EMISSION RATE: for the purpose of 310 CMR 7.22 means the sum of all sulfur dioxide ($SO_2$) emissions from the fuels burned at any fuel utilization facility(ies) included in the emission rate, divided by the sum of all Btu inputs of said fuel(s). All emission credits generated under an approved control plan shall be included in calculating the average. It shall be calculated annually for the period January 1 through December 31.

CONDENSATE for the purposes of 310 CMR 7.24, means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature and/or pressure and remains liquid at standard conditions.

CONDENSIBLE SUBSTANCES means any inorganic or organic compound or element, which exist in vapor phase prior to being emitted to the ambient atmosphere and undergoes rapid condensation under ambient conditions.

DEFINITIONS: continued

CONDENSOR means a device which cools a gas stream to a temperature which removes specific organic compounds by condensation.

CONSOLIDATED PART as used in 310 CMR 7.40 means a part which is designed to replace a group of original equipment parts.

CONSTRUCT OR CONSTRUCTION means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in an increase in potential emissions.

CONTAMINATED GROUNDWATER TREATMENT SYSTEM (CGTS) means a system designed to remediate groundwater contaminated with VOC through stripping of VOC from the water and transferring the VOC to an air stream.

CONTAMINATED SOIL VENTING SYSTEM means a system designed to remediate soil contaminated with a volatile organic compound (VOC) through stripping of the VOC from the soil by use of an on site venting system constructed into the contaminated soil area. This definition does not include the venting of landfills.

CONTINUOUS COMPLIANCE means meeting emission limitations established by 310 CMR 7.00 at all times.

CONTINUOUS PROCESS POLYSTYRENE RESIN MANUFACTURING PLANT means a plant in which styrene, with various dissolved additives, is continuously fed into a thermal reactor system and a molten resin product is continuously discharged from the reactor system.

COOLING TOWER as used in 310 CMR 7.02(2)(g)6. means, an open water recirculation device that uses fans or natural draft to draw or force ambient air through the device to cool warm water by direct contact.

CRITERIA AIR CONTAMINANT or CRITERIA POLLUTANT means ozone ($O_3$), PM10, sulfur oxides measured as sulfur dioxide ($SO_2$), nitrogen dioxide ($NO_2$), volatile organic compounds (VOC) as non-methane hydrocarbons, carbon monoxide (CO) or lead (Pb), or any other air contaminant for which national ambient air quality standards have been adopted.

CRUDE OIL means a naturally occurring mixture which consists of hydrocarbons, and sulfur, nitrogen and/or oxygen derivatives of hydrocarbons which is a liquid at standard conditions.

CURB WEIGHT describes a vehicle's weight classification as determined by the Registrar of Motor Vehicles.

CUTBACK ASPHALT means asphalt cement which has been liquefied by blending with petroleum solvent (diluents) such that the blend contains greater than seven per cent by weight of such petroleum solvents. Upon exposure to atmospheric conditions the diluents evaporate, leaving the asphalt cement to perform its function.

CYLINDER means any one of several components of a printing press used to transfer printed images or guide paper through the press including but not limited to intermediate, blanket, impression, plate and sheet transfer cylinders.

DEMOLITION/RENOVATION, for the purpose of 310 CMR 7.15, means any operation which involves the wrecking, taking out, removal, stripping, or altering in any way (including repairing, restoring, drilling, cutting, sanding, sawing, scratching, scraping, or digging into) or construction of one or more facility components or facility component insulation. This term includes load and nonload- supporting structural members of a facility.

DEPARTMENT means the Department of Environmental Protection (pursuant to St. 1989 c. 240, §§ 101, "...the department of environmental quality engineering shall be known as the department of environmental protection").

DEFINITIONS: continued

DISTRICT means the Berkshire (BAPCD), Central Massachusetts (CMAPCD), Merrimack Valley (MVAPCD), Metropolitan Boston (MBAPCD), Pioneer Valley (PVAPCD), and Southeastern Massachusetts (SMAPCD) Air Pollution Control Districts.

DRY BOTTOM means a furnace design in which the coal-fired unit equipped with an ash disposal hopper bottom with sufficient cooling surface so that the ash particles impinging on the furnace walls or hopper bottom can be removed in a dry state.

DUCT BURNER means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a heat recovery steam generating unit.

DUST means finely divided solid matter.

DYEING FORMULATION means a fluid used to apply color to a textile substrate.

ELASTOMERIC COATING means a coating that is designed for application over flexible parts, such as elastomeric bumpers.

ELECTROMAGNETIC INTERFERENCE/RADIO FREQUENCY INTERFERENCE (EMI/RFI) COATING means a coating used in plastic business machine housings to attenuate electromagnetic and radio frequency interference signals that would otherwise pass through the plastic housings.

ELECTROSTATIC SPRAY APPLICATION means the application of charged atomized paint particles thereby enhancing deposition by electrostatic attraction of the paint to the substrate.

EMERGENCY DEMOLITION/RENOVATION OPERATION means any operation that was not planned but results from a sudden unexpected event which requires the demolition/renovation of a structurally sound or unsound facility or facility component. This term includes operations necessitated by non-routine failures of equipment.

EMERGENCY MOTOR VEHICLE as used in 310 CMR 7.24(6) means any publicly or privately-owned motor vehicle used for the restoration or maintenance of electricity, gas, telephone, or other utilities essential to maintain public services during an emergency situation; any publicly-owned motor vehicle operated by a peace officer in performance of their duties; any authorized emergency motor vehicle used for fighting fires or responding to emergency fire calls; any publicly-owned authorized emergency motor vehicle used by an emergency medical technician or paramedic; any publicly or privately-owned motor vehicle under contract for snow removal; any publicly or privately-owned motor vehicle used for towing or servicing other emergency motor vehicles; or any ambulance used by a private entity under contract with a public agency.

EMERGENCY SITUATION as used in 310 CMR 7.24(6), means a situation in which a local, state, or federal official has declared a "state of emergency," or during fire fighting activities.

EMERGENCY OR STANDBY ENGINE for the purposes of 310 CMR 7.02(8)(i) and 7.03(10), means any stationary internal combustion engine which operates as an emergency or standby mechanical or electrical power source. A load shaving unit, peaking power production unit or a standby engine in an energy assistance program is not an emergency or standby engine under this definition.

EMERGENCY VEHICLES as used in 310 CMR 7.40 means any publicly owned vehicle operated by a peace officer in performance of their duties, any authorized emergency vehicle used for fighting fires or responding to emergency fire calls, any publicly owned authorized emergency vehicle used by an emergency medical technician or paramedic, or used for towing or servicing other vehicles, or repairing damaged lighting or electrical equipment, any motor vehicle of mosquito abatement, vector control, or pest abatement agencies and used for those purposes, or any ambulance used by a private entity under contract with a public agency.

DEFINITIONS: continued

EMISSION means any discharge or release of an air contaminant to the ambient air space.

EMISSION CONTROL LABELS means those permanent stickers affixed to all 1995 and subsequent model year passenger cars and light duty trucks, certified for sale in California, in accordance with Title 13 CCR 1965 *as amended* July 12, 1991, and incorporated herein by reference, and "California Motor Vehicle Emission Control Label Specifications" as last amended July 12, 1991.

EMISSION CONTROL PLAN means a plan approved by the Department which details the methods and schedules which will be used in order to achieve compliance with an emission limit imposed in 310 CMR 7.00. (*e.g.* 310 CMR 7.18, 310 CMR 7.19 or 310 CMR 7.22)

EMISSION CONTROL WAIVER means an exemption from the requirements of 310 CMR 7.40 granted by the Massachusetts Registry of Motor Vehicles, pursuant to M.G.L. c. 90, § 2 or regulations promulgated thereunder.

EMISSION POINT means any place (including but not limited to a stack or vent) at or from which any air contaminant is emitted to the ambient air space.

EMISSION STATEMENT is a certification submitted by the owner or operator of a facility that describes the actual annual emissions of VOC and/or NOx from the facility as well as the average Ozone Season daily emissions from the facility.

EMISSION UNIT means any individual piece of equipment from which any air contaminant is emitted to the ambient air space; for example, an individual boiler, a single degreaser, etc.

EMISSIONS CAPTURE AND CONTROL EQUIPMENT means a system designed to limit the release of air contaminants into the ambient air by collecting emissions from a facility or emission unit, before they are emitted to the ambient air, and controlling these emissions by reducing or eliminating the mass of the air contaminants contained in the emissions. Control methods include, but are not limited to, oxidation, filtration, scrubbing, condensation, absorption and adsorption.

EMPLOYEE means any person who performs work for an employer 17 or more hours per week and for more than 20 weeks per year for compensation and who travels to and from work by any mode of travel.

EMPLOYEE PARKING SPACES means for the purposes of 310 CMR 7.30, parking spaces provided for use by employees of MASSPORT and employees of tenants at Logan Airport.

EMPLOYER means any person or entity who employs 250 or more daytime employee commuters at any time during a calendar year at any employment facility, or any educational institution with 1000 or more commuters.

EMPLOYMENT FACILITY means any facility or group of facilities of the same employer which are within walking distance of each other at which 250 or more persons are commuters.

END SEALING COMPOUND means a synthetic rubber compound which is coated on to ends of cans and which functions as a gasket when the can is assembled.

ENERGY CONSERVATION MEASURE: for the purpose of 310 CMR 7.22 means non-load management measures, applied to the production or use of electricity, that accomplish a more efficient use of energy resources.

ENERGY INPUT CAPACITY means the ability of a fuel utilization facility, based on the Higher Heating Value (HHV) of the fuel, to combust a stated maximum amount of fuel on a steady state basis, as determined by the physical design and characteristics of the fuel utilization facility and does not include the energy input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources.

DEFINITIONS: continued

EPA means the United States Environmental Protection Agency.

EXECUTIVE ORDER, as used in 310 CMR 7.24(6), means a certification document, including but not limited to, applicable exhibits, manufacturer guidance documents and manufacturer advisory correspondence or mail outs as issued or approved by the California Air Resources Board, in accordance with the applicable certification procedures (Title 17 of the California Code of Regulations, section 94011, as amended April 12, 1996) and adopted by the Department of Environmental Protection in 310 CMR 7.24(6)(g) in accordance with M.G.L. c. 30A.

EXISTING FACILITY for the purposes of 310 CMR 7.02(8), means any facility that is in operation on or before June 1, 1972, or any proposed facility of which the construction, substantial reconstruction or alteration of which has been approved in writing by the Department on or before June 1, 1972. All facilities as specified in the Federal Register, Volume 36, No. 247, December 23, 1971, the construction or modification of which was initiated after August 17, 1971 shall not be defined as existing facilities.

EXTERNAL FLOATING ROOF means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

EXTERIOR BASE COAT means any coating applied to the exterior of a can to provide exterior protection to the metal and/or provide background for the lithographic or printing operation.

EXTREME ENVIRONMENTAL CONDITIONS means continuous exposure to temperatures consistently above 95°C, detergents, abrasives, scouring agents, solvents, corrosive atmospheres, or similar environmental conditions.

EXTREME PERFORMANCE COATING means coatings designed for exposure to harsh or extreme environmental conditions, as determined by the Department, including but not limited to constant weather exposure, detergents, temperatures consistently above 203°F (95°C), or corrosive atmospheres.

FABRIC SURFACE COATING means the coating of a textile substrate to impart properties that are not initially present, such as strength, stability, water or acid repellency, or appearance.

FACE FIRING means a furnace firing design in which the burners are mounted in an array on one or more vertical walls including

(a) opposed firing, where the burners are mounted on two opposite walls; and
(b) single-wall firing, where the burners are mounted on only one wall.

FACILITY means any installation or establishment and associated equipment, located on the same, adjacent or contiguous property, capable of emissions; and for the purpose of 310 CMR 7.15, it means any structure, installation, building, equipment, or ship.

FACILITY COMPONENT means any part of a facility, including, but not limited to, any equipment, pipe, duct, boiler, tank, turbine, furnace, structural or non-structural member at the facility.

FEDERALLY ENFORCEABLE means all limitations and conditions which are enforceable by the Administrator, including but not limited to, those requirements developed pursuant to 40 CFR Part 60 (New Source Performance Standards), 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants for Source Catergories), 40 CFR Parts 72 through 80 (Acid Rain Program) and requirements within the Massachusetts State Implementation Plan. Federally enforceable requirements also include those requirements in operating permits issued either pursuant to 40 CFR part 71 or under 310 CMR 7.00: *Appendix C*, (except those listed as state enforceable only) any permit requirements established pursuant to 40 CFR 52.21 (Prevention of

DEFINITIONS: continued

significant deterioration of air quality), under plan approval requirements in either 310 CMR 7.02 or 310 CMR 7.00: *Appendix A.* Federally enforceable limitations and conditions can also be contained in either a permit restriction issued under 310 CMR 7.02(9), 7.02(10), 7.02(11) or equipment installed under 310 CMR 7.03, that has been made federally enforceable after the EPA has approved 310 CMR 7.02 and 7.03 into the Massachusetts SIP.

FEDERAL POTENTIAL TO EMIT or FEDERAL POTENTIAL EMISSIONS means the maximum capacity of a stationary source to emit a regulated pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a regulated pollutant, including air pollution control equipment and restriction on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable. To be federally enforceable, a limitation on any facility's capacity to emit a pollutant shall include testing, monitoring, and recordkeeping procedures sufficient to demonstrate compliance with the limitations. Examples of permit or SIP limitations generally considered federally enforceable are limitations on the allowable capacity of the equipment, requirements for the installation, operation and maintenance of pollution control equipment, limits on hours of operation, and restrictions on amounts of materials combusted, stored, or produced. To be federally enforceable, restrictions on operation, production, or emissions must be stated in terms of the shortest averaging time that can be used as a practical matter, *e.g.*, pounds per hour, or gallons per hour, and they must be tied to other enforceable operating restrictions at the source. General limitations on potential to emit, such as yearly limits (*e.g.*, in tons per year), by themselves, are not considered federally enforceable. The use of hourly, daily, weekly, or monthly rolling limits are generally acceptable. Any federally enforceable limitations or conditions must be enforceable as a practical matter, ensure continuous compliance with the restrictions, and include adequate testing, monitoring, and record keeping procedures sufficient to demonstrate compliance with the limitations or conditions of an applicable federally enforceable document described above. Fugitive emissions, to the extent quantifiable, are included in determining the potential to emit of a stationary source. Secondary emissions do not count in determining the potential to emit of a stationary source.

FERROUS CUPOLA FOUNDRY means a vertical cylindrical furnace using pig iron, scrap iron, scrap steel and coke as charging components. Ferrous Cupola Foundries can be separated into “Jobbing” Foundries and “Production” foundries. Jobbing foundries run intermittently for just long enough at one time to pour the molds that are ready on the foundry floor on a job-by-job basis. Production foundries will melt metal continuously and pour to a succession of molds that are constantly being prepared to receive the flow of molten iron.

FINAL FINISH APPLICATION LINE means one or more apparatuses or operations which apply, convey, and dry/cure a final finish on to a textile substrate.

FINAL FINISHING means the functional enhancement of a textile by application of shape-retentive, water-repellent, stain-resistant, antistatic, flame-retard- ant, or other chemical treatments.

FINISHING FORMULATION means a material applied to a textile substrate to enhance the textile's performance or appearance.

FLASHOFF AREA means part of a coating line between the application area and the oven.

FLAT WOOD PANELING means hardwood plywood, thin particleboard and hardboard, but does not include Class I hardboard panels, exterior siding, tile board, insulation board or particleboard used in furniture manufacturing.

FLAT WOOD PANELING SURFACE COATING means a coating applied to flat wood panels including: printed interior panels made of hardwood plywood and thin particleboard; natural finish hardboard plywood panels; and hardwood paneling with Class II finishes.

DEFINITIONS: continued

FLEETWIDE AVERAGE means a motor vehicle manufacturer's average vehicle emissions of all non-methane organic gases from all vehicles subject to 310 CMR 7.40, sold in the Commonwealth of Massachusetts in any model year, based on the calculation in Title 13 CCR 1960.1(g)(2), *as amended* December 8, 1993, and incorporated herein by reference.

FLEXOGRAPHIC PRINTING means the application of words, designs, and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.

FLYASH means the aerosolized solid component of burned or partially burned fuel. "Soot" and "cinders" are included within the meaning of the term "flyash".

FOUNTAIN ADDITIVE means any of several volatile and/or non volatile compounds or mixtures of compounds used to enhance the functioning of dampening systems in offset lithographic presses.

FOUNTAIN SOLUTION means a mixture of water and fountain additives, including isopropyl alcohol, for use in the dampening system of offset lithographic presses. Also referred to as dampening solution.

FOUR-STAGE COATING SYSTEM means a topcoat system composed of a colored basecoat, two semi-transparent midcoats, and a final transparent clearcoat. For compliance purposes, the VOC content of four-stage coating systems shall meet the emission limitation for three or four-stage topcoats in Table 7.18(28)(c), and is calculated according to the following formula:

$$VOC\ T_{4\text{-}stage} = \frac{VOC_{bc} + VOC_{mc1} + VOC_{mc2} + 2\ VOC_{cc}}{5}$$

Where:

$VOC\ T_{4\text{-}stage}$ is the weighted average of the VOC content, as applied, in the basecoat, midcoat, and clearcoat system.
$VOC_{bc}$ is the VOC content, as applied, of any given basecoat.
$VOC_{mc1}$ is the VOC content, as applied, of the first midcoat.
$VOC_{mc2}$ is the VOC content, as applied, of the second midcoat.
$2VOC_{cc}$ is twice the VOC content, as applied, of any given clearcoat.

FREEBOARD HEIGHT means for a Cold Cleaner degreaser, the distance from the top of the liquid level to the lip of the tank; for an Open Top Vapor Degreaser, the distance from the top of the vapor zone during idling to the lip of the degreaser tank; for a Conveyorized Cold Cleaner, the distance from the top of the solvent level to the bottom of the entrance or exit opening, whichever is lower, for a Conveyorized Vapor Degreaser, the distance from the top of the solvent vapor level while idling to the bottom of the entrance or exit opening, whichever is lower.

FREEBOARD RATIO means ratio of the freeboard height to the smaller interior dimension (length, width, or diameter) of the degreaser.

FRIABLE means material that can be crumbled, pulverized or reduced to powder when dry, by hand pressure.

FRIABLE ASBESTOS-CONTAINING MATERIAL means any dry material containing 1% or more asbestos by area, as determined by a laboratory using USEPA approved methods, that hand pressure can crumble, pulverize, or reduce to powder.

FUEL means any solid, liquid, or gaseous material such as, but not limited to, coal, gasoline, manufactured gas, natural gas, oil, or wood, used for the production of heat or power by burning.

-ALTERNATIVE FUEL for the purposes of 310 CMR 7.22 means any non-fossil fuel including but not limited to wood or biomass; nuclear fuel is not included in this definition.

-COAL means all solid fuels classified as anthracite, bituminous, subbituminious, or lignite by the American Society of Testing and Materials in ASTM D388-77, standard specification for classification of coals by Rank, coal-derived synthetic fuels, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures.

DEFINITIONS: continued

-DISTILLATE FUEL OIL means No. 1 or No. 2 fuel oil. Distillate fuel oil having a sulfur content of 0.17 pounds of million Btu heat release potential is approximately equal to distillate fuel oil having a sulfur content of 0.3% by weight.

-FOSSIL FUEL means coal, coke, distillate oil, residual oil, used oil fuel or natural or manufactured gas.

-HAZARDOUS WASTE FUEL means a regulated recyclable material, other than waste oil, and other than a material that [i] has the hazardous waste characteristics set forth in 310 CMR 30.120 through 30.125, [ii] has waste oil as a significant ingredient, and [iii] does not have as an ingredient any hazardous waste, other than waste oil, listed or otherwise identified in 310 CMR 30.130 through 30.136,

1. that is recycled by being burned for energy recovery in an industrial or utility boiler or in an industrial furnace, but not in a hazardous waste incinerator licensed pursuant to 310 CMR 30.800 and 310 CMR 7.08 and
2. that is:
   a. presumed to be hazardous waste fuel pursuant to 310 CMR 30.215,
   b. a mixture of
      (i) any hazardous waste, other than waste oil, or of any material presumed to be hazardous waste fuel pursuant to 310 CMR 30.215, with
      (ii) any other material (including, without limitation, waste oil, any other hazardous waste, any material presumed to be hazardous waste fuel pursuant to 310 CMR 30.215, specification used oil fuel, off-specification used oil fuel, unused commercial fuel oil, unused commercial crude oil, or any hazardous or non-hazardous material burnable as fuel), and
3. that is managed in compliance with 310 CMR 30.200.

-NATURAL GAS means

1. a naturally occurring mixture of hydrocarbon and nonhydrocarbon gas found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or
2. liquefied petroleum gas, as defined by the American society of Testing & Materials in ASTM D1835-97, "Standard Specification for Liquefied Petroleum Gases"

-RESIDUAL FUEL OIL means No. 4, No. 5, or No. 6 fuel oil. Residual fuel oil having a sulfur content of 0.55 or 0.28 pounds per million Btu heat release potential is approximately equal to residual fuel oil having a sulfur content of 1.0 or 0.5% by weight respectively.

-USED OIL FUEL means a regulated recyclable material

1. that is recycled by burning for energy recovery, and
2. that is:
   a. a waste oil, or
   b. any fuel, other than hazardous waste fuel, produced from waste oil by processing, blending, or other treatment, and
3. that is managed in compliance with 310 CMR 30.200.

-WOOD FUEL means all wood intended to be used as a fuel included but not limited to trees, cord wood, logs, lumber, saw dust, and wood from: manufacturing processes (but offs, shavings, turnings, sander dust, etc.), wood pellets, slabs, bark, chips, waste pallets, boxes, etc. This definition does not include materials which are chemically treated with any preservative, paint, or oil.

FUEL ADDITIVE means any substance which is not a natural component of the fuel to which it may be added or in conjunction with which it may be used.

FUEL CELL means an electrochemical device that converts the chemical energy in a fuel into electricity and heat.

FUEL UTILIZATION FACILITY means any furnace(s), fuel burning equipment, boiler(s), space heaters or any appurtenance thereto used for the burning of fuels, for the emission of products of combustion, or in connection with any process which generates heat and emits products of combustion, but does not mean a motor vehicle or an incinerator; except that for the purposes of 310 CMR 7.22, means a single furnace, fuel burning equipment, boiler or space heater for the purpose of generating electricity or thermal energy.

FUGITIVE EMISSIONS means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

DEFINITIONS: continued

FUME means any aerosol resulting from chemical reaction, distillation, or sublimation.

FURNACE means any enclosed structure designed to produce heat from the burning of a fuel therein, but does not mean open hearths, incinerators, stoves for cooking, fireplaces, or equipment for the melting, reclaiming, or refining of metals or maple syrup.

GAS means the state of matter having neither independent shape nor independent volume but having a tendency to expand and diffuse infinitely.

GASOLINE for the purpose of 310 CMR 7.24, means any petroleum distillate having an RVP of more than four pounds per square inch as defined by ASTM Method D323. Mixtures of 10% or greater simple alcohols are excluded from this definition.

GASOLINE MARKETING FACILITY for the purpose of 310 CMR 7.24, means a stationary tank having a capacity of greater than 250 gallons in which gasoline is stored or from which it is dispensed be it through retail or wholesale transfer.

GENERATOR means any person, by site, whose act or process produces hazardous waste, or whose act first causes a hazardous waste to become subject to regulation pursuant to 310 CMR 30.000.

GLASS means a hard amorphous inorganic substance made by fusing silicates, and sometimes borates and phosphates, with certain basic oxides.

GLASS MELTING FURNACE means equipment using heat for the production of glass. A unit comprising a refractory vessel in which raw materials are charged, melted at high temperature, refined, and conditioned to produce molten glass.

HALOGENATED ORGANIC COMPOUND is any compound of carbon (excluding metallic carbides or carbonates and ammonium carbonate) combined with a halogen. For purposes of 310 CMR 7.12 and 310 CMR 7.18, halogenated organic compounds (HOC) are the following specific chemicals: methylene chloride, perchloroethylene (tetrachloroethylene), CFC-11 (trichlorofluoromethane), CFC-12 (dichlorodifluoromethane), CFC-22 (chlorodifluoromethane), FC-23 (trifluoromethane), CFC-114 (dichlorotetrafluoro- ethane), and CFC-115 (chloropentafluoroethane).

HAND-FIRED FURNACE means any furnace in which fuel is manually placed directly on the hot fuel bed but does not mean stoves or fireplaces or other equipment used for the cooking of food.

HARDBOARD is a panel manufactured primarily from inter-felted ligno-cellulosic fibers that are consolidated under heat and pressure in a hot press.

HARDENER means an additive designed to promote a faster cure of coatings which cure by chemical cross-linking of the resin components.

HARDWOOD PLYWOOD is plywood whose surface layer is a veneer of hardwood.

HAZARDOUS AIR POLLUTANT (HAP) means an air contaminant designated by EPA under 42 U.S.C. 7412, as modified by EPA in 40 CFR Part 63, Subpart C (40 CFR 63.60 through .69). That list is incorporated by reference herein, together with all amendments and supplements thereto. A copy of the list is available from the Department.

HAZARDOUS WASTE means a waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical or infectious characteristics may cause, or significantly contribute to an increase in serious irreversible, or incapacitating reversible illness or pose a substantial present or potential hazard to human health, safety, or welfare or to the environment when improperly treated, stored, transported, used or disposed of, or otherwise managed, however, not to include solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act of 1967 as amended, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954. Hazardous waste shall include any waste which is

DEFINITIONS: continued

listed, identified, or otherwise determined to be hazardous waste pursuant to 310 CMR 30.100 subject to 310 CMR 30.355, 30.356 and 30.380.

HEAT RELEASE RATE means the steam generating unit design heat input capacity (in Btu per hour) divided by the furnace volume (in cubic feet); the furnace volume is that volume bounded by the front furnace wall where the burner is located the furnace side waterwall, and extending to the level just below or in front of the first row of convection pass tubes.

HEATSET OFFSET LITHOGRAPHIC PRINTING means offset lithographic process that requires heat to set or dry the ink.

HIGH OCCUPANCY VEHICLE (HOV) means an automobile, van or bus with one or more passengers in addition to the driver, including taxi's with a single passenger.

HIGH OCCUPANCY VEHICLE LANE means a lane of travel designated for the sole use of high occupancy vehicles.

HIGH VOLUME LOW PRESSURE (HVLP) SPRAY APPLICATION means spray equipment used to apply a coating by means of a spray gun which operates between 0.1 and 10 Psig air pressure.

IMPACT-RESISTANT COATING means a coating designed to resist chipping caused by road debris.

IN GAS SERVICE (for the purpose of 310 CMR 7.18(19)) means any component which contacts process fluid that is in the gaseous state under operating conditions.

IN LIGHT LIQUID SERVICE (for the purpose of 310 CMR 7.18(19)) means a component is in contact with a fluid containing greater than 10% by weight light liquid.

IN VOC SERVICE (for the purpose of 310 CMR 7.18(19)) means equipment handling 10% or greater VOC by weight is subject to 310 CMR 7.00.

INCINERATOR means any article, machine, equipment, contrivance, structure, or part of a structure, used primarily for the reduction of combustible waste(s) by burning.

- COMMERCIAL or INDUSTRIAL INCINERATORS means any incinerator operated by any commercial or industrial establishment primarily for the reduction of refuse generated by said establishment.
- DOMESTIC INCINERATOR means any incinerator used primarily for the reduction of domestic refuse generated on the premises.
- FLUE-FED INCINERATOR means any incinerator provided with a single flue which serves as both the charging chute and the duct for conduction of the products of combustion to the ambient air space.
- HAZARDOUS WASTE INCINERATOR means any incinerator used for the reduction of hazardous waste except infectious waste as regulated by the Department of Public Health pursuant to the provisions of 105 CMR 130.354.
- MODULAR INCINERATOR means any incinerator of a standard design and identifiable by the manufacturer's markings.
- MUNICIPAL INCINERATOR means any incinerator operated by any person primarily for the reduction of refuse generated by the public at large.
- SPECIAL INCINERATOR means any incinerator designed for a special purpose such as but not limited to burning of biological, pathological, or toxicological refuse or for a specific facility.

INTERNAL FLOATING ROOF means a cover in a fixed roof tank which rests upon or is floated upon the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the cover's edge and the tank shell.

INTERIOR BASE COAT means any coating applied by roller coater or spray to the metal sheets for three piece cans to provide a protective lining between the can metal and the product.

DEFINITIONS: continued

INTERIOR BODY SPRAY means any coating sprayed on the interior of the can body to provide a protective film between the product and the can.

ISOLATE means for the purposes of 310 CMR 7.24(6), to take out of service one or more components of a Stage II system so that the remainder of the Stage II system operates as required by the terms and conditions of the system's currently applicable Executive Order.

KNIFE COATING means the application of any coating to a substrate by means of drawing the substrate beneath a thin blade that spreads the coating evenly over the full width of the substrate

LARGE APPLIANCE SURFACE COATING means the coating of doors, cases, lids, panels, and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water-heaters, dishwasher, trash compactors, air conditioners, and other associated products.

LEAK (for the purpose of 310 CMR 7.18(19) and 7.24(8)) means the emission of a volatile organic compound concentration greater than or equal to 10,000 parts per million by volume (ppmv) as shown by monitoring or dripping of process fluid.

LEAKING COMPONENT (for the purpose of 310 CMR 7.18(19) and 7.24(8)) means any component which has a leak.

LEAN BURN ENGINE means a stationary reciprocating internal combustion engine in which the amount of $O_2$ in the engine exhaust gases is 1.0% or more.

LEASE CUSTODY TRANSFER means the transfer of produced crude oil and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other form of transportation.

LEATHER SURFACE COATING means the coating of a leather substrate to impart properties that are not initially present, such as strength, stability, water or chemical repellency, or appearance.

LIGHT-DUTY TRUCK means any motor vehicle rated at 8500 pounds gross vehicle weight or less which is designed primarily for the transportation of property, except as used in 310 CMR 7.40, LIGHT DUTY TRUCK means any motor vehicle, rated at 6000 pounds gross vehicle weight or less, which is designed primarily for purposes of transportation of property or is a derivative of such a vehicle, or is available with special features enabling off-street or off-highway operation and use.

LIGHT LIQUID (for the purpose of 310 CMR 7.18(19)) means a fluid with a vapor pressure greater than 0.3 kiloPascals (0.044 psi) at 20°C.

LIGHTERING OR LIGHTERING OPERATION means the offshore transfer of a bulk liquid cargo from one marine tank vessel to another vessel.

LIQUID-MOUNTED SEAL means a primary seal mounted in continuous contact with the liquid between the tank wall and the floating roof around the circumference of the tank.

LITHOGRAPHIC PRINTING means a printing process in which the image and non-image areas of the plate are on the same geometric plane. The image area is oil-receptive (hydrophobic) and the non-image area is water receptive (hydrophilic).

LOADING EVENT means an occurrence beginning with the connecting of marine terminal storage tanks to a marine tank vessel by means of pipes or hoses followed by the transferring of organic liquid cargo from the storage tank into the tank vessel and ending with the disconnecting of the pipes or hoses; or any other means of admitting any other organic liquid into marine vessel cargo tanks.

DEFINITIONS: continued

LOWEST ACHIEVABLE EMISSION RATE (LAER) means, for any source, the more stringent rate of emissions based on the following:

(a) The most stringent emissions limitation which is contained in any state SIP for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or

(b) The most stringent emissions limitation which is achieved in practice by such class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within a stationary source.

In no event shall LAER allow a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable pursuant to applicable New Source Performance Standards of 40 CFR Part 60.

MAGNET WIRE INSULATION SURFACE COATING means the application of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.

MAIL OUT means a widely distributed general correspondence issued by the California Air Resources Board whenever said Board needs information from the public, or when it wishes to inform the public of new information.

MAKEUP SOLVENT means any solvent(s) which is(are) added to printing inks to reduce viscosity or otherwise modify properties.

MALFUNCTION means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

MANUFACTURERS ADVISORY CORRESPONDENCE means a document issued by the California Air Resources Board, which is a policy interpretation for further clarification of the California Code of Regulations applicable to motor vehicles.

MANUFACTURING PLANT for purposes of 310 CMR 7.18(7), means a stationary source where automobile or light-duty truck bodies are manufactured and/or finished.

MARINE TANK VESSEL means any marine vessel which is capable of carrying liquid bulk cargo in tanks.

MARINE TERMINAL means any facility or structure constructed to load or unload organic liquid bulk cargo into or out of marine tank vessels.

MARINE VESSEL means any tugboat, tanker, freighter, barge, passenger ship, or any other boat, ship, or watercraft except those used primarily for recreation.

MASSACHUSETTS EMISSION INSPECTION TESTING MANUAL means a booklet which sets forth in detail the required exhaust emissions testing procedures to be used by all Certified Emissions Inspectors when performing the combined safety and emission inspection for motor vehicles which will result in the issuance of a certificate of inspection or a certificate of rejection.

MATERIAL RECOVERY SECTION means a vacuum devolatilizer system, styrene recovery system, or other system of equipment which separates styrene monomer and/or reaction by-products from polystyrene, or separates styrene monomer from reaction by-products.

MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY means the standard established by the Administrator pursuant to the Clean Air Act, §§ 112 and 129 (42 U.S.C. 7412 and 42 U.S.C. 7429), that represents the maximum degree of reduction in emissions of hazardous air pollutants determined, after examination of economics, health, and environmental impacts, to be achievable for new or existing sources in the category or sub-category to which the emission standard applies. MACT Standards may be determined by the Department pursuant to 40 CFR 63 Subpart B.

DEFINITIONS: continued

MAXIMUM DESIGN CAPACITY means the rated design capacity, operating rate or production rate of an emission unit as determined by the manufacturer of that unit or other method approved by the Department.

METAL CAN SURFACE COATING means the coating of two or three piece metal cans.

METAL COIL SURFACE COATING means the coating of any flat metal sheet or strip that comes in rolls or coils.

METAL FURNITURE SURFACE COATING means the coating of any metal parts which will be assembled with other metal, wood, fabric, plastic, or glass parts to form a furniture piece.

MINOR MODIFICATION means, for the purposes of 310 CMR 7.24(6), the re-installation, repair or replacement of one or more Stage II System components that is not substantial, including, but not limited to: less than 50% of the motor vehicle fuel dispensers (*e.g.*, 1 of 4 dispensers); a central vacuum unit of a Healy 400 ORVR nozzle system or Healy 600 nozzle system; ball float extractor valve housings; dispenser mounted vapor pumps; or "screw-on" spill or dry break buckets. If the re-installation, repair or replacement of Stage II System components occurs at a motor vehicle fuel dispensing facility with two or less dispensers, the re-installation, repair or replacement of only one of the motor vehicle fuel dispensers shall be a Minor Modification.

MISCELLANEOUS METAL PARTS AND PRODUCTS mean farm machinery (harvesting, fertilizing, and plant machines, tractors, combines, lawn mowers, rototillers, etc); small appliances; commercial and office equipment (computers and auxiliary equipment, typewriters, calculators, vending machines, etc.); fabricated metal products (metal doors, frames, etc.); industrial machinery (pumps, compressors, conveyor components, fans, blowers, transformers, etc.); and any other metal parts or products which are coated under Standard Industrial Classification Codes of Major Groups 33, 34, 35, 36, 37, 38, and 39. The use of autobody anti-chip coatings and underbody plastisols in automobile and light-duty truck surface coating is considered coating of miscellaneous parts and products. In addition, this definition includes exterior coating of assembled entire aircraft and assembled entire metal marine vessels. This definition does not include metal cans, flat metal sheets, and strips in the form of rolls or coils; magnet wire for use in electrical machinery; metal furniture; large appliances; automobile and light duty trucks, automobile refinishing; or customized topcoating of automobiles and trucks, if production is less than 35 vehicles per day.

MIST means any liquid aerosol formed by the condensation of vapor or by the atomization of liquids.

MOBILE EQUIPMENT means, for the purposes of 310 CMR 7.18(28), any equipment that is physically capable of being driven or drawn upon a highway including but not limited to construction vehicles (such as mobile cranes, bulldozers and concrete mixers); farming equipment (such as tractors and plows); hauling equipment (such as truck trailers, utility bodies and camper shells) and miscellaneous equipment (such as street sweepers and golf carts).

MODEL YEAR means a motor vehicle manufacturer's annual production period which includes January 1 of a calendar year or, if the manufacturer has no annual production period, the calendar year. In the case of any vehicle manufactured in two or more stages, the time of manufacture shall be the date of completion of the chassis.

MODIFIED PART as used in 310 CMR 7.40 means any aftermarket part intended to replace an original equipment emissions-related part and which is not functionally identical to the original equipment part in all respects which in any way affect emissions, excluding a consolidated part.

MONITOR (for the purpose of 310 CMR 7.18(19)) means to measure volatile organic compound concentration by the appropriate EPA reference method.

DEFINITIONS: continued

MOTOR VEHICLE means any equipment or mechanical device propelled primarily on land by power other than muscular power but does not mean railroad and railway engines and cars, vehicles operated by the system known as trolley motor or trackless trolley, or devices used for domestic purposes.

MOTOR VEHICLE FUEL means any petroleum distillate having a Reid Vapor Pressure of more than four pounds per square inch as determined by ASTM Method D323 and which is used primarily to power motor vehicles. This definition includes, but is not limited to, gasoline and mixtures of simple alcohols and gasoline.

DEFINITIONS: continued

MOTOR VEHICLE FUEL DISPENSING FACILITY means any facility where motor vehicle fuel is dispensed into motor vehicle fuel tanks or portable containers from a storage tank with a capacity of 250 gallons or more.

MOTOR VEHICLE PARKING SPACE means any space which is used for the purpose of parking motor vehicles (whether or not demarcated as such), and whether or not a fee has been charged for its use; except those parking spaces used by residents, on street parking spaces, parking spaces designated by the City of Boston as parking for residents only shall not be considered as motor vehicle parking spaces. Nor shall parking spaces used for the purpose of the temporary storage of motor vehicles for sale, or parking spaces owned or operated by the Massachusetts Bay Transit Authority and used solely by transit users be considered motor vehicle parking spaces.

MOTOR VEHICLE POLLUTION CONTROL SYSTEM means the combination of emission-related parts which controls air pollutant emissions from a motor vehicle or motor vehicle engine.

MW means megawatt or a unit of electrical power equal to one million watts.

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS) means those standards adopted by the U.S. Environmental Protection Agency and contained in the CFR Title 40, Part 61, and subsequent revisions as specified in the Regulations. Any emission testing to be compared with NESHAPS must be conducted in accordance with applicable procedures as specified in said CFR, Title 40, Part 61, or amendments thereto, or by another method which has been demonstrated to the satisfaction of the Department as being equivalent.

NATURAL DRAFT OPENING means any permanent opening in an enclosure that remains open during operation of the emission unit and is not connected to a duct in which a fan is installed.

NATURAL FINISH HARDWOOD PLYWOOD PANELS means panels whose original grain pattern is enhanced by essentially transparent finishes which are frequently supplemented by fillers and toners.

NEW SOURCE PERFORMANCE STANDARDS (NSPS) means Standards of Performance for New Stationary Sources adopted by the U.S. Environmental Protection Agency and contained in 40 CFR 60, and subsequent revisions as specified in the Regulations. Any emission testing to be compared with NSPS must be conducted in accordance with applicable procedures as specified in 40 CFR 60, or by another method which has been demonstrated to the satisfaction of the Department as being equivalent.

NEW VEHICLE means any passenger car or light duty truck with 7,500 miles or fewer on its odometer. As used in 310 CMR 7.45: NEW VEHICLE means any motor vehicle not previously titled for registration.

NEWSPAPER PRINTING is a non-heatset web offset lithographic process.

NO-BUILD ALTERNATIVE means the project roadway, the appurtenant highway network and roadway operational characteristics that would exist if the project were not built and assuming the level of development and services (*e.g.*, transit) which physically exist at the time of analysis or for which construction has commenced and completion and full utilization is expected prior to the projected completion date of the project under review.

NOISE means sound of sufficient intensity and/or duration as to cause or contribute to a condition of air pollution.

NONATTAINMENT AREA means an area designated by the EPA as not meeting the National Ambient Air Quality Standard for a criteria pollutant pursuant to the Clean Air Act, § 107 (42 U.S.C. 7407) and 40 CFR Part 81. The current Massachusetts attainment status is published at 40 CFR 81.322, Subpart C - Section 107 Attainment Status Designations.

DEFINITIONS: continued

NONATTAINMENT REVIEW is plan review for major sources and major modifications as defined and described in 310 CMR 7.00: *Appendix A.*

NON-COMBUSTION ENERGY SOURCE: for the purpose of 310 CMR 7.22 means a facility which does not rely on the burning of fossil or alternative fuel to produce electricity, such as wind, solar or geothermal. Sources regulated by the NRC or utilizing nuclear fuel are not included in this definition.

NON-CRITERIA POLLUTANT is any air contaminant that is not listed as a criteria pollutant.

NON-HEATSET OFFSET LITHOGRAPHIC PRINTING means offset lithographic process that does not require heat to set or dry the ink.

NON-ROAD VEHICLE means any motor vehicle and equipment which is not primarily designed or intended for operation on public roadways to provide transportation.

NORTHEAST STATES means Maine, New Hampshire, Vermont, Massachusetts, New York, Connecticut, Rhode Island, and New Jersey.

ODOR means that property of gaseous, liquid, or solid materials that elicits a physiologic response by the human sense of smell.

OFF-PEAK PARKING SPACES means motor vehicle parking spaces not available for parkers between the hours of 7:30 A.M. and 9:30 A.M. on weekdays.

OFFSET LITHOGRAPHIC PRINTING means a printing process that transfers the printing image to an intermediary surface, which, in turn, transfers the image to the printing substrate.

OFF-STREET PARKING SPACES means parking spaces on private or public property adjacent to and/or with access to but not on a public or private roadway.

OPACITY means that characteristic of matter which renders it capable of interfering with the transmission of rays of light and causes a degree of obscuration of an observer's view.

OPAQUE STAIN means all stains that contain pigments but are not classified as semitransparent stains, and includes stains, glazes and other opaque material applied to wood surfaces.

OPEN BURNING means burning under such conditions that the products of combustion are emitted directly to the ambient air space and are not conducted thereto through a stack, chimney, duct, or pipe. Open burning includes above or underground smoldering fires.

ORGANIC LIQUID for the purpose of 310 CMR 7.24(8) means any liquid organic material having a vapor pressure of equal to, or greater than 1.5 pounds per square inch absolute under actual storage conditions.

ORGANIC MATERIAL means any chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, metallic carbides and ammonium carbonates.

DEFINITIONS: continued

OVERVARNISH means a coating applied directly over ink to reduce the coefficient of friction, to provide gloss and/or to protect the finish against abrasion and corrosion.

OWNER/OPERATOR means any person, any department or instrumentality of the federal government, or any public or private group which: a) has legal title, alone or with others, of a facility, b) has the care, charge, or control of a facility, or c) has control of a demolition/renovation operation, including but not limited to contractors and subcontractors.

OXIDES OF NITROGEN($NO_x$) means all oxides of nitrogen including, but not limited to, nitrogen oxide and nitrogen dioxide.

OXYGENATE means any substance which, when added to gasoline, increases the amount of oxygen in that gasoline blend. Lawful use of any such substance or combination of substances must occur in compliance with Section 211 (f)(1) and 211 (m) of the Clean Air Act, or be permitted under a waiver granted by the US Environmental Protection Agency Administrator under the authority of section 211 (f)(4) of the Clean Air Act.

OXYGENATED GASOLINE means gasoline with an oxygen content of at least 2.7% but no more than 2.9% of oxygen by weight.

OXYGENATED GASOLINE CONTROL AREA means any community located with in the Metropolitan Boston Air Pollution Control District, the Merrimac Valley Air Pollution Control District, and the following specific communities: Bellingham, Berlin, Carver, Foxborough, Franklin, Halifax, Harvard, Hopedale, Kingston, Lakeville, Lancaster, Mansfield, Medway, Mendon, Middleborough, Milford, Norton, Plymouth, Plympton, Raynham, Shirley, Townsend, Upton, and Wrentham.

OXYGENATED GASOLINE CONTROL PERIOD means the period beginning November 1 of a calendar year and continuing through the last day of February of the subsequent calendar year.

PACKAGING ROTOGRAVURE PRINTING means rotogravure printing upon paper, paper board, metal foil, plastic films, and other substrates which are, in subsequent operations, formed into packaging products and labels for articles to be sold.

PAINT SPRAY BOOTH means a structure housing automatic or manual spray application equipment where coating is applied.

PAPER SURFACE COATING means the coating, including specialty printing, of paper with organic solvent borne material for a variety of decorative and functional products, including but not limited to, adhesive tapes, adhesive labels, metal foil, decorated, coated and glazed paper, book covers, office copier paper (zinc oxide coated), carbon paper, typewriter ribbons, and photographic films.

PARK AND FLY PARKING SPACES means privately owned and operated off-street parking spaces located in the East Boston Parking Freeze Area provided for use by Logan Airport air travellers and visitors.

PARKING FREEZE means a limitation on the number of parking spaces available for specific uses within a specific geographic area.

PARKING SPACE means that area of public or private property that is designated or used for the parking or storage of one motor vehicle, excluding areas used for the loading and the unloading of goods.

PARTICULATE means any material that exists in a finely divided form as a liquid or solid at ambient air temperatures, humidity and pressures.

PARTICULATE MATTER (PM) means any airborne finely divided solid or liquid material, other than uncombined water.

DEFINITIONS: continued

PARTICULATE MATTER EMISSIONS means all finely divided solid or liquid material, other than uncombined water, emitted into the ambient air, as measured by applicable reference methods, or equivalent or alternative specified methods, specified by EPA in the CFR, or by test methods specified by DEP and approved by EPA.

PASSENGER CAR means any motor vehicle designed primarily for transportation of persons and having a design capacity of 12 persons or less.

PENETRATING PRIME COAT means an application of low viscosity liquid asphalt to an absorbent surface used to prepare an untreated base for an asphalt surface.

PEAK HOUR means a one hour period where the highest volume of traffic is utilizing any given roadway segment.

PERSON means any individual, partnership, association, firm, syndicate, company, trust, corporation, department, authority, bureau, agency, political subdivision of the Commonwealth, law enforcement agency, fire fighting agency, or any other entity recognized by law as the subject of rights and duties.

PETROLEUM LIQUIDS means crude oil, condensate and any finished or intermediate products manufactured or extracted in a petroleum refinery (through the petroleum refining process).

PIGMENTED COAT means opaque coatings that contain binders and colored pigments and are formulated to conceal the wood surface either as an undercoat or topcoat.

PLAN APPROVAL means the written approval by the Department of a comprehensive plan application or a limited plan application issued under 310 CMR 7.02(1).

PLASTIC PARTS are parts made from a substance that has been formed from a resin through the application of heat, pressure or both. They include but are not limited to plastic components for the following areas: automotive interior parts; automotive exterior parts, both flexible and rigid; business and office machine parts; medical equipment housings; entertainment equipment housings; toys; musical equipment housings; sporting goods; outdoor signs; architectural structures such as doors, floors and window frames; transportation equipment; and other miscellaneous plastic parts.

PLASTIC PARTS SURFACE COATING means the coating of a plastic part to impart properties that are not initially present, such as strength, stability, water or chemical repellency, resistance to EMI/RFI or appearance.

PM10 or PARTICULATE MATTER 10 means particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers as measured by a reference method based on Appendix J of Part 50 of CFR 40 and designated in accordance with Part 53 or by an equivalent method designated in Part 53.

PM10 EMISSIONS means finely divided solid or liquid material, or condensible substance, other than uncombined water, emitted to the ambient air, as measured by applicable reference methods, or equivalent or alternative methods, specified by EPA in the CFR or by test methods specified by DEP and approved by EPA.

DEFINITIONS: continued

POTENTIAL EMISSIONS or POTENTIAL TO EMIT means the maximum capacity of a facility or a stationary source to emit any air contaminant or pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or stationary source to emit any air contaminant or pollutant, including air pollution control equipment and/or restrictions on hours of operation, or on the type or amount of material combusted, stored or processed, shall be treated as part of the design only if the limitation is specifically stated in the facility's or stationary source's plan approval(s), approved emission control plan(s), operating permit, certification(s), restricted emission status, notification(s) and applicable regulations, or in the case of *de minimis* sources, in records established and maintained at the facility or stationary source pursuant to 310 CMR 7.02(2)(b). Fugitive emissions, to the extent quantifiable, are included in determining the potential emissions or the potential to emit of a facility or stationary source; secondary emissions are not included.

PRESSURE RELIEF VALVE (for the purpose of 310 CMR 7.18(19)) means a safety relief device used in applications where the process pressure may exceed the maximum allowable working pressure of the vessel.

PRETREATMENT WASH PRIMER means the first coat applied to bare metal if solvent-based primers will be applied. This coating contains a minimum of 0.5% acid by weight, is necessary to provide surface etching, and is applied directly to bare metal surfaces to provide corrosion resistance.

PRIME COAT or PRIMER means a coating formulated to provide a firm bond between substrate and subsequent coats.

PRIMER SEALER means a coating that improves the adhesion of the topcoat, provides corrosion resistance, promotes color uniformity, and resists penetration by the topcoat.

PRIMER SURFACER means a coating that fills in surface imperfections and builds a film thickness in order to allow sanding.

PRINCIPAL ORGANIC HAZARDOUS CONSTITUENT (POHC) means a specific hazardous waste constituent(s) which is listed in 310 CMR 30.160 or otherwise specified by the Department, which is in a hazardous waste incinerator waste feed, and for which the Department determines that a performance standard shall apply. In determining whether a hazardous waste constituent shall be a POHC, the Department shall consider the degree of difficulty to incinerate (*e.g.* heat of combustion, auto ignition temperature, etc.), concentration or mass in the waste feed, toxicity, and other factors as determined by the Department.

PRINTING PRESS means a printing production assembly, with the ability to print one or multiple colors, designed to produce a printed product.

PRINTING INK means any fluid or viscous mixture used in printing, impressing, or transferring an image onto a substrate.

PRINT PASTE means a viscous mixture containing a pigment or dye which is applied to a textile substrate as a decorative pattern or design.

PRINTED INTERIOR PANEL means a panel whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.

PROCESS WEIGHT PER HOUR means the total weight of all materials introduced into any specific process that may cause any emissions of particulate matter. Solid fuels charged are considered as part of the process weight, but liquid and gaseous fuels and combustion air are not. For a cyclical or batch operation, the process weight per hour is derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For a continuous operation, the process weight per hour is derived by dividing the process weight for a typical period of time.

DEFINITIONS: continued

PRODUCTS OF INCOMPLETE COMBUSTION (PICs) means organic compounds in a hazardous waste incinerator flue gas other than principal organic hazardous constituents (POHCs).

PROJECT AREA means the geographical area defined by Executive Office of Environmental Affairs as the study area in its decision setting forth the scope of a project pursuant to 301 CMR 11.06.

PROJECT ROADWAY means the roadway which is enclosed (or proposed to be enclosed) within a tunnel or similar structure which is identified by the Executive Office of Environmental Affairs as falling within the project area in its determination issued pursuant to 301 CMR 11.06.

PROPANOL SUBSTITUTE means a non-propanol additive that contains volatile organic compounds and is used in fountain solution. Additives are used to reduce surface tension and increase viscosity of the fountain solution.

PUBLIC FACILITY means a facility wholly owned or operated by the Commonwealth; or by a city, town or governmental entity which is protected from the imposition of additional costs being assessed against such city, town or entity by M.G.L. c. 29, § 27C as amended (Proposition 2½).

PUBLICATION ROTOGRAVURE PRINTING Means rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.

QUARTERLY (for the purpose of 310 CMR 7.18(19)) means four times per year at 90 day intervals.

QUENCH AREA means a chamber where the hot metal exiting an oven is cooled by either a spray of water or a blast of air followed by water cooling.

RADIATION means any ionizing or non-ionizing, electromagnetic or particulate radiation or any sonic, infrasonic, or ultrasonic wave.

RADIOACTIVE MATERIAL means any material or materials in combination (solid, liquid, or gaseous) which emit(s) ionizing radiation.

REASONABLY AVAILABLE CONTROL TECHNOLOGY means the lowest emission limitation that a particular facility is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility.

RECALL means:

1. A manufacturer's issuing of notices directly to consumers that vehicles in their possession or control should be corrected;
2. A manufacturer's efforts to actively locate and correct vehicles in the possession or control of consumers.

RECALL CAMPAIGN means that plan approved by the California Air Resources Board or the Department, by which the manufacturer will effect the recall of noncomplying vehicles.

RECYCLABLE MATERIAL

(a) Recyclable material means any material that is used or reused or reclaimed.
(b) Used or reused material means any material that is either:
    1. employed as an ingredient (including use as an intermediate) in an industrial process to make a product, except when distinct components of the material are recovered as separate end products, or

DEFINITIONS: continued

2. employed in a particular function or application as an effective substitute for a commercial product.

(c) Reclaimed material means any material that is processed to recover a useable product or that is regenerated.

RECOVERY DEVICE means an individual unit of equipment, including, but not limited to, an absorber, carbon adsorber, or condenser, capable of and used for the purpose of removing vapors and recovering liquids or chemicals.

REDUCER means a solvent added to dilute a coating, usually for the purpose of lowering its viscosity.

NON-TEXT PAGE

DEFINITIONS: continued

REFRIGERATED CHILLER means a device which is mounted above the water jacket and the primary condenser coils, consisting of secondary coils which carry a refrigerant to provide a chilled air blanket above the solvent vapor to reduce emissions from the degreaser bath. The chilled air blanket temperature measured at the centroid of the degreaser at the coldest point shall be no greater than 30% of the solvents boiling point measured in °F.

REFUSE means any animal, vegetable, or mineral, solid, liquid, or gaseous waste. It includes, but is not limited to, rubbish, garbage, ashes, construction waste, industrial waste, commercial waste, demolition waste, agricultural waste, abandoned vehicles, and any unwanted or discarded material. It does not include hazardous waste.

REGENERATIVE CYCLE COMBUSTION TURBINE means any stationary combustion turbine which recovers heat from the combustion turbine exhaust gases to preheat the inlet combustion air to the combustion turbine.

REGISTRAR means the Registrar of the Registry of Motor Vehicles.

REGISTRY means the Registry of Motor Vehicles.

REGULATED POLLUTANT means any air contaminant regulated under the Federal Clean Air Act, 42 U.S.C. 7401 *et seq*., excluding pollutants regulated under 42 U.S.C.7401, § 112.

REGULATED RECYCLABLE MATERIAL means any recyclable material which either

(a) has a characteristic described in 310 CMR 30.120 through 30.125, or
(b) is listed or otherwise described in 310 CMR 30.131 through 30.136, or
(c) has been determined by the Department to be a hazardous waste pursuant to 310 CMR 30.144.

REID VAPOR PRESSURE is a standardized measure of the vapor pressure of a liquid in pounds per square inch absolute at 100°F as determined by ASTM Method D323.

REMOTE PARKING SPACES means any parking space (whether or not defined as a "motor vehicle parking space" for the purpose of 310 CMR 7.00) which serves end uses outside of a parking freeze area including, but not limited to, parking for airport use, for Downtown Boston parking, and for remote employee parking.

RENTAL MOTOR VEHICLE parking spaces means off-street parking spaces for rental/leased passenger motor vehicles at a facility owned, operated and/or leased by a motor vehicle rental company.

REPAIR (for the purpose of 310 CMR 7.18(19)) means to reduce the volatile organic compound concentration of a leaking component to below 10,000 ppmv as shown by monitoring.

REPLACEMENT PART as used in 310 CMR 7.40 means any aftermarket part which is intended to replace an original equipment emissions-related part and which is functionally identical to the original equipment part in all respects which in any way affect emissions (including durability), or a consolidated part.

REPOWERING means the replacement of an emission unit with a new unit that is less polluting and more efficient than the unit which is being replaced.

DEFINITIONS: continued

RESPONSIBLE OFFICIAL means, in the case of:

(a) a sole proprietorship - the sole proprietor.

(b) a partnership - a general partner with the authority to bind the partnership.

(c) a corporation or a non-profit corporation - a corporate official with authority to bind the corporation such as a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions of the corporation.

(d) a municipality or other public agency - a principal executive officer or ranking elected official who is empowered to enter into contracts on behalf of the municipality or public agency.

RESTRICTED USE PARKING for the purpose of 310 CMR 7.30, means parking spaces which are provided by Massport for use by Logan Airport air travellers and visitors for free when commercial parking space demand exceeds the supply of on-Logan airport commercial parking spaces, and which are not otherwise available for use by Logan Airport air travellers and visitors; *restricted use parking*, for the purpose of 310 CMR 7.33 means parking spaces which are provided for free when motor vehicle parking space demand exceeds the supply of motor vehicle parking spaces in the South Boston Parking Freeze area.

RICH BURN ENGINE means any stationary reciprocating internal combustion engine that is not a lean burn engine.

ROLL COATING means the application of a coating to a substrate by means of hard rubber or steel rolls.

ROLL PRINTING means the application of decorative print, words, designs, or pictures to a substrate by means of hard rubber or steel rolls each with only partial coverage of the substrate.

ROLLER PRINTING means rotogravure printing on a textile substrate.

ROTARY SCREEN PRINTING means the application of a decorative print, words, designs, or pictures to a textile substrate by means of a cylindrical, metal screen.

ROTOGRAVURE PRINTING means the application of words, designs and pictures to a substrate by means of a roll printing technique which involves an intaglio or recessed image areas in the form of cells.

ROUTINE MAINTENANCE means, for the purposes of 310 CMR 7.24(6), the regular re-installation, repair or replacement of one or more Stage II System components including, but not limited to: hoses; nozzles; breakaways; swivels; hose retractors; bucket plow rings; “slip-on” spill or dry break buckets; “O” rings and seals; submersible pumps or suction pipes; fill adaptors; fill tubes; vapor adaptors; fill and vapor caps; drain valves; monitor caps; or riser caps.

SEALER means a coating formulated and applied to prevent subsequent coatings from being absorbed into the substrate, or to prevent harm to subsequent coatings by materials in the substrate.

SECONDARY EMISSIONS means emissions which would occur as a result of the construction or operation of a major stationary source/facility or major modification but do not come from the major stationary source/facility or major modification itself. Secondary emissions must be specific, well defined, quantifiable, and impact the same general areas as the facility which causes the secondary emissions. Secondary emissions may include, but are not limited to:

- emissions from motor vehicles, ships or trains going to or from the major stationary source/facility, and

- emissions from any offsite support facility which would not otherwise be constructed, or increase its emissions as a result of the construction or operation of the major stationary source/facility or major modification.

DEFINITIONS: continued

SECRETARY means the Secretary of Transportation and Construction.

SEMI-TRANSPARENT STAIN means a coating which is formulated to change the color of the substrate but not conceal the substrate.

SHEET-FED means a printing operation in which the substrate is fed to the printing press in individual sheets.

SIMPLE CYCLE COMBUSTION TURBINE means any stationary combustion turbine which does not recover heat from the combustion turbine exhaust gases to heat water or generate steam.

SINGLE COAT means a single film of coating applied directly to the substrate omitting any primer application.

SINGLE-OCCUPANT COMMUTER VEHICLE means a motor-powered vehicle with four or more wheels with capacity for a driver plus one or more passengers which is used by a commuter traveling alone to and/ or from work or classes and is not customarily required to be used in the course of his employment, or studies.

NON-TEXT PAGE

DEFINITIONS: continued

SINGLE-STAGE TOPCOAT means a topcoat consisting of only one coating.

SMALLER EMPLOYERS means any person or entity who employs between 50 and 250 employee commuters who are located within an industrial or office park and are within walking distance of each other.

SMOKE means the visible aerosol, which may contain fly ash, resulting from combustion of materials but does not mean condensed water vapor.

SOAP means cleansing agents made of the alkali metal salts of fatty acids having from ten to 18 carbon atoms.

SOLIDS as used in 310 CMR 7.18, means the volume (in gallons) of solid material in a coating, ink, or other organic material as determined by EPA Test Method 24:40 CFR 60 Appendix A (volume of coating minus volume of carrier such as photochemically reactive and or non-photochemically reactive solvents and water) or as provided by the coating manufacturer.

SOLVENT means a substance that is used to dissolve or dilute another substance; this term includes, but is not limited to dissolvers, viscosity reducers, degreasing agents or cleaning agents.

SOLVENT METAL DEGREASING means the process of cleaning metal surfaces by using a volatile organic compound:

- Cold cleaning degreasing means the batch process of solvent metal cleaning by spraying, brushing, flushing or immersion while maintaining the solvent below its boiling point. Wipe cleaning is not included in this definition.
- Conveyorized degreasing means the continuous process of solvent metal cleaning by operating with either cold or vaporized solvents.
- Vapor degreasing means the process of solvent metal cleaning by condensing hot solvent vapor on the colder metal parts.

SOUND means the phenomenon of alternative increases and decreases in the pressure of the atmosphere, caused by radiations having a frequency range of from 20 to 20,000 cycles per second, that elicits a physiologic response by the human sense of hearing.

SPACE HEATER means a heating device that is used for the direct heating of the area in and adjacent to the area in which the device is located.

- Used Oil Fuel Fired Space Heater means a space heater that is capable of burning used oil fuel.

SPECIAL AND EXTREME SOLVENT METAL CLEANING means the use of degreasers:

(a) To clean metal parts used in the manufacturing and rework of electronic parts, assemblies, boxes, wiring harnesses, sensors and connectors used in aerospace service;

(b) To clean metal parts used in the manufacturing of ozone, nitrous oxide, fluorine, chlorine, bromine, halogenated compounds, or oxygen in concentrations greater than 23%; or

(c) To clean metal parts exposed to ozone, nitrous oxide, fluorine, chlorine, bromine, halogenated compounds, or oxygen in concentrations greater than 23%.

SPECIALTY COATING means a product which is necessary due to unusual job performance requirements. These coatings or additives include, but are not limited to, adhesion promoters, uniform finish blenders, elastomeric materials, impact resistant coatings, underbody coatings, weld through primers, gloss flatteners, bright metal trim repair, and anti-glare/safety coatings..

DEFINITIONS: continued

SPECIALTY PRINTING means all gravure and flexographic operations which print a design or image, excluding packaging rotogravure printing and publication rotogravure printing. Specialty printing operations include, but are not limited to, printing on paper cups and plates, patterned gift wrap, wall paper, and floor coverings.

SPLASH FILLING means the filling of a tank truck or stationary tank through a pipe or hose whose discharge opening is above the surface level of the liquid in the tank being filled.

STAGE II SYSTEM means a vapor collection and control system specifically designed for the purpose of controlling vapors during the direct dispensing of motor vehicle fuel to a motor vehicle and which was issued an Executive Order by the California Air Resources Board approving the system for use.

STANDARD CONDITIONS mean a temperature of 20°C and pressure of 760 millimeters of mercury.

STANDARD OPERATING PROCEDURE (S.O.P.) means the specific procedure for operation of, and which minimizes the emission from, an air contamination source.

STATE IMPLEMENTATION PLAN ("SIP") means the most recently prepared plan or revision thereof required by the Federal Clean Air Act which has been approved by the U.S. EPA.

STATIONARY COMBUSTION TURBINE means any stationary internal combustion engine which operates with a rotary motion, including any simple cycle turbine, regenerative cycle turbine, or any turbine portion of a combined cycle steam/electric generating system that is not self propelled.

STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINE means any reciprocating internal combustion engine. It does not include an engine that is regulated by EPA as a non-road engine pursuant to 42 U.S.C. 7543(e) and 42 U.S.C. 7547(e) or is self-propelled.

STENCIL COATING means an ink or pigmented coating which is rolled or brushed onto a template or stamp in order to add identifying letters, symbols, or numbers to motor vehicles, or their parts or components.

STOKER means a boiler/furnace design that incorporates a feeding mechanism, fuel distribution and ash residue collection system for the purpose of introducing solid fuel into the combustion zone of the boiler/furnace by feeding the fuel onto a grate.

STRUCTURAL MEMBER means any load-supporting member of a facility including beams and load-supporting walls, or any nonload-supporting member including ceilings and nonload-supporting walls.

STUDENT means any daytime student who does not live at the educational institution and who travels to and from classes by any mode of travel.

SUBMERGED FILLING means the filling of a tank truck or stationary storage tank through a pipe or hose whose discharge opening is entirely submerged below the surface level of the liquid in the tank when the pipe normally used to withdraw liquid from the tank can no longer withdraw liquid.

DEFINITIONS: continued

SUBSTANTIAL MODIFICATION means, for the purposes of 310 CMR 7.24(6), the re-installation, repair or replacement of one or more Stage II System components including, but not limited to: 50% or more of the motor vehicle fuel dispensers (*e.g.*, two of four dispensers); the replacement of one type of Stage II system with another type (*e.g.*, replacement of a balance system with a vacuum assist system, or a Healy 400 ORVR nozzle system or Healy 600 nozzle system with a Healy VP-1000 system); or the re-installation, repair or replacement of Stage II System components requiring excavation below a shear valve or tank pad (*e.g.*, vapor return piping, vent piping, vapor space tie bar, two-point or coaxial Stage I systems; or motor vehicle fuel storage tanks). If the re-installation, repair or replacement of one or more Stage II System components occurs at a motor vehicle fuel dispensing facility with two or fewer dispensers, the re-installation, repair or replacement of all motor vehicle fuel dispensers shall be a Substantial Modification.

SUBSTANTIAL RECONSTRUCTION means any physical change in, or changes in the method of operation of a facility or its appurtenances which changes the amount of emissions from such facility.

NON-TEXT PAGE

DEFINITIONS: continued

SUBSTRATE means the surface onto which a coating, ink or other material is applied or impregnated.

SULFUR IN FUEL - for the purpose of 310 CMR 7.05, sulfur in fuel is as follows:

(a) Oil

| | | |
|---|---|---|
| 2% sulfur | = 1.10 | pounds of sulfur per million Btu heat release potential |
| 1% sulfur content | = 0.55 | pounds of sulfur per million Btu heat release potential |
| 0.5% sulfur content | = 0.28 | pounds of sulfur per million Btu heat release potential. |

(b) Coal

| | | |
|---|---|---|
| 1.43% sulfur content | = 1.10 | pounds of sulfur per million Btu heat release potential (assuming 13,000 Btu per pound) |
| 0.72% sulfur content | = 0.55 | pounds of sulfur per million Btu heat release potential (assuming 13,000 Btu per pound) |
| 0.36% sulfur content | = 0.28 | pounds of sulfur per million Btu heat release potential (assuming 13,000 Btu per pound) |

SURFACE COATING means a process whereby a layer of one substance is deposited on or in another material. The layer of coating may be used to decorate, bond, protect, strengthen, or impart other properties to substrate.

SURFACE PREPARATION PRODUCT means a product formulated to dissolve and remove tar, grease, wax, and other hydrophobic contaminants from a surface prior to application of a primer.

SYNTHETIC ORGANIC CHEMICAL MANUFACTURING FACILITY (for the purpose of 310 CMR 7.18(19)) means a facility which manufactures, as a final or intermediate product, polyethylene, polypropylene, polystyrene, methyl tert-butyl ether (MTBE), or one of the chemicals listed in 40 CFR Part 60.489 as amended.

TANGENTIAL FIRING means a furnace firing design where the burners are mounted at the corners of the furnace chamber.

TANK TRUCK means a truck or trailer equipped with a storage tank and used for the transport of motor vehicle fuel from sources of supply to stationary fuel tanks, or to motor vehicle fuel tanks.

TEST VEHICLE means an experimental or prototype motor vehicle which appears to have very low emission characteristics or a used motor vehicle within which an experimental motor vehicle pollution control device is installed, and which has also received a test vehicle or fleet permit from the California Air Resources Board pursuant to Manufacturers Advisory Correspondence No. 83-01.

TEXTILE FINISHING means the preparation, decorative enhancement, or functional enhancement of a natural or man-made textile substrate. Specific textile finishing processes include, but are not limited to, textile cleaning (desizing and scouring), bleaching, dyeing, printing, and final finishing.

THIN PARTICLEBOARD means a manufactured board that is 0.25 inches or less in thickness, and made of individual wood particles that have been coated with a binder and formed into flat sheets by pressure.

THIRD-PARTY VANPOOL PROGRAM means a vanpool program operated by an organization other than an employer which acquires and provides vans to groups of interested commuters.

DEFINITIONS: continued

THREE PIECE CAN SIDE SEAM SPRAY means a coating sprayed on the exterior and interior of a welded, cemented or soldered seam to protect the exposed metal.

THREE-STAGE COATING SYSTEM means a topcoat system composed of a colored basecoat, a semi-transparent midcoat, and a final transparent clearcoat. For compliance purposes, the VOC content of three-stage coating systems shall meet the emission limitation for topcoats in Table 7.18(28)(c), and is calculated according to the following formula:

$$VOC\ T_{3-stage} = \frac{VOC_{bc} + VOC_{mc} + 2\ VOC_{cc}}{4}$$

Where:

VOC $T_{3\text{-stage}}$ is the weighted average of the VOC content, as applied, in the basecoat, midcoat, and clearcoat system.

$VOC_{bc}$ is the VOC content, as applied, of any given basecoat.

$VOC_{mc}$ is the VOC content, as applied, of any given midcoat.

$2VOC_{cc}$ is twice the VOC content, as applied, of any given clearcoat.

TILEBOARD means paneling that has a colored, waterproof surface coating.

TOPCOAT means the final film of coating applied in a multiple coat operation.

TOTAL HALOGENS means the total concentration, by weight, of fluorine, chlorine, bromine, and iodine, as measured by a method acceptable to the Department.

TOUCH-UP COATING means a coating applied by brush, airbrush, or non-refillable aerosol can of no more than eight ounces to cover minor surface damage and imperfections.

TRANSFER EFFICIENCY means the portion of coating solids which remain on the substrate during the application process, expressed as a percentage of the total volume of coating solids delivered by the applicator.

TWO PIECE CAN EXTERIOR END COATING means a coating applied by roller coating or spraying to the exterior end of a can to provide protection to the metal.

TUNNEL VENTILATION SYSTEM means any mechanical system which is designed to provide ventilation of any air contaminant regulated herein from any public roadway which is covered or otherwise enclosed in a tunnel or similar structure.

TWO-STAGE TOPCOAT means a basecoat/clearcoat system composed of a colored basecoat and a transparent final coat. For compliance purposes, the VOC content of basecoat/clearcoat systems shall meet the emission limitation for two-stage topcoats in Table 7.18(28)(c), and shall be calculated according to the following formula:

$$VOC\ T_{bc/cc} = \frac{VOC_{bc} + 2\ VOC_{cc}}{3}$$

Where:

VOC $T_{bc/cc}$ is the weighted average of the VOC content, as applied, in the basecoat (bc) and clearcoat (cc) system.

$VOC_{bc}$ is the VOC content, as applied, of any given basecoat.

$2VOC_{cc}$ is twice the VOC content, as applied, of any given clearcoat.

UNDERBODY COATING means a coating designed for protection and sound deadening that is typically applied to the wheel wells and underbody of an automobile.

UNIFORM FINISH BLENDER means a coating designed to blend a repaired topcoat into an existing topcoat.

UNIT TURNAROUND (for the purpose of 310 CMR 7.18(19) means unit shutdown and purge for internal inspection and repair.

DEFINITIONS: continued

UNUSED WASTE OIL means waste oil that is superfluous or abandoned fuel, storage tank bottoms, clean-out sludge, sludge from the separation of unused oil from a non-hazardous waste, contaminated oil resulting from the clean-up of a release of oil, and any other waste oil that is not used waste oil.

USED VEHICLE means any passenger car or light duty truck with more than 7,500 miles on its odometer.

USED WASTE OIL means used and/or reprocessed, but not subsequently re-refined, waste oil that has served its original intended purpose. Such oil includes, but is not limited to, fuel oil, engine oil, gear oil, cutting oil, transmission fluid, and dielectric fluid.

VACUUM ASSIST SYSTEM means a Stage II system utilizing a pump, blower, or other vacuum inducing device, to collect and, or, process vapors during the dispensing of motor vehicle fuel.

VAPOR means the gaseous state of certain substances that can exist in equilibrium with their solid or liquid states under standard conditions.

VAPOR BALANCE SYSTEM means a Stage II system utilizing direct displacement to collect and, or, process vapors during the dispensing of motor vehicle fuel.

VAPOR COLLECTION AND CONTROL SYSTEM (for the purpose of 310 CMR 7.24(6)) means any system certified by the Department and which prevents discharge to the atmosphere of at least 95% by weight of motor vehicle fuel vapors displaced during the dispensing of motor vehicle fuel into motor vehicle fuel tanks. Vapor collection and control systems certified by the Department for installation and operation under the requirements of 310 CMR 7.24(6) shall be listed periodically in the Massachusetts Environmental Protection Act office publication, the Environmental Monitor, issued in accordance with the provisions at 301 CMR 11.19.

VAPOR-MOUNTED SEAL means a primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof.

NON-TEXT PAGE

DEFINITIONS: continued

VINYL SURFACE COATING means the application of a decorative, protective or functional coating and/or printing on vinyl coated fabric or vinyl sheets.

VISIBLE EMISSIONS, for the purpose of 310 CMR 7.15, means any emissions that are detectable without the aid of instruments. This does not include condensed uncombined water vapor.

VOC COMPOSITE PARTIAL PRESSURE means the sum of the partial pressures of the compounds defined as VOC.

VOC Composite Partial Pressure is calculated as follows:

$$PP_c = \sum_{i=1}^{n} \frac{(W_i)(VP_i)/MW_i)}{\frac{W_w}{Mw_w} + \frac{W_e}{Mw_e} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where:

Wi = Weight of the "i"th VOC compound, in grams

Ww = Weight of water, in grams

We = Weight of exempt compounds, in grams

Mwi = Molecular weight of the "i"th VOC compound, in $\frac{g}{g\text{-mole}}$

Mww = Molecular weight of water, in $\frac{g}{g\text{-mole}}$

Mwe = Molecular weight of exempt compound, in $\frac{g}{g\text{-mole}}$

PPc = VOC composite partial pressure, in mm Hg

VPi = Vapor pressure of the "i"th compound, in mm Hg

n = The number of VOC compounds

VOLATILE ORGANIC COMPOUND is any compound of carbon which participates in atmospheric photochemical reactions. For the purpose of determining compliance, VOC is measured by the applicable reference test methods specified in 40 CFR 60. 310 CMR 7.00: VOLATILE ORGANIC COMPOUND includes all organic compounds except the following:

| CAS Number | Chemical Name |
|---|---|
| 67641 | acetone, |
| 506876 | ammonium carbonate, |
| 630080 | carbon monoxide, |
| 124389 | carbon dioxide, |
| 463796 | carbonic acid, |
| N/A | metallic carbides or carbonates, |
| 74828 | methane, |
| 74840 | ethane, |
| 79209 | methyl acetate, |
| 71556 | methyl chloroform (1,1,1-trichloroethane), |
| 107313 | methyl formate |
| 75092 | methylene chloride, (dichloromethane), |
| 98566 | parachlorobenzotrifluoride (PCBTF), |
| 127184 | perchloroethylene (tetrachloroethylene), |
| 75694 | CFC-11 (trichlorofluoromethane), |
| 75718 | CFC-12 (dichlorodifluoromethane), |
| 75456 | CFC-22 (chlorodifluoromethane), |
| 76131 | CFC-113 (trichlorotrifluoroethane), |
| 76142 | CFC-114 (dichlorotetrafluoroethane), |
| 76153 | CFC-115 (chloropentafluoroethane), |
| 75467 | FC-23 (trifluoromethane), |
| 593704 | HCFC-31 (chlorofluoromethane), |
| 306832 | HCFC-123 (2,2-dichloro-1,1,1-trifluoroethane), |
| 354234 | HCFC-123a (1,2-dichloro-1,1,2-trifluoroethane), |
| 2837890 | HCFC-124 (2-chloro-1,1,1,2-tetrafluoroethane), |

DEFINITIONS: continued

| | |
|---|---|
| 1717006 | HCFC-141b (1,1-dichloro-1-fluoroethane), |
| 75683 | HCFC-142b (1-chloro-1,1-difluoroethane), |
| 1615754 | HCFC-151a (1-chloro-1-fluoroethane), |
| 422560 | HCFC-225ca (3,3-dichloro-1,1,1,2,2-pentafluoropropane), |
| 507551 | HCFC-225cb (1,3-dichloro-1,1,2,2,3-pentafluoropropane), |
| 75105 | HFC-32 (difluoromethane), |
| 354336 | HFC-125 (pentafluoroethane), |
| 359353 | HFC-134 (1,1,2,2-tetrafluoroethane), |
| 811972 | HFC-134a (1,1,1,2-tetrafluoroethane), |
| 4129462 | HFC-143a (1,1,1-trifluoroethane), |
| 75376 | HFC-152a (1,1-difluoroethane), |
| 353366 | HFC-161 (ethylfluoride), |
| 690391 | HFC-236fa (1,1,1,3,3,3-hexafluoropropane), |
| 679867 | HFC-245ca (1,1,2,2,3-pentafluoropropane), |
| 24270664 | HFC-245ea (1,1,2,3,3-pentafluoropropane), |
| 431312 | HFC-245eb (1,1,1,2,3-pentafluoropropane), |
| 460731 | HFC-245fa (1,1,1,3,3-pentafluoropropane), |
| 431630 | HFC-236ea (1,1,1,2,3,3-hexafluoropropane), |
| 431890 | HFC-227ea (1,1,1,2,3,3,3-heptafluoropropane) |
| 406586 | HFC-365mfc (1,1,1,3,3-pentafluorobutane), |
| 138495428 | HFC 43-10mee (1,1,1,2,3,4,4,5,5,5-decafluoropentane), |
| 375031 | HFE-7000 or n-C3F7OCH3 (1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane |
| 163702076 | HFE-7100 or C4F9OCH3 (1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane), |
| 163702087 | (CF3)2CFCF2OCH3 (2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-hepta-fluoropropane), |
| 163702054 | HFE-7200 or C4F9OC2H5 (1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane), |
| 54376602 | HFE-7300 or L-14787 or C2F5CF(OCH3)CF(CF3)2 (1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane) |
| 163702065 | (CF3)2CFCF2OC2H5 (2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-hepta-fluoropropane), |
| 297730939 | HFE-7500 or HFE-s702 or T-7145 or L-15381 (3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane) |
| N/A | Cyclic, branched, or linear, completely fluorinated alkanes, |
| N/A | Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations, |
| N/A | Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations, |
| N/A | Cyclic, branched, or linear, completely methylated siloxanes, |
| N/A | Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine. |

The following compound(s) are Volatile Organic Compounds (VOC) for the purpose of all recordkeeping, emission reporting, photochemical modeling, and inventory requirements which apply to VOC and shall be uniquely identified in emission reports but are not VOC for the purposes of VOC emission limitations or VOC content requirements:

| | |
|---|---|
| 540885 | t-butyl acetate |

WASH COAT means a coating containing binders that raises wood surfaces, prevents undesired staining and controls stain penetration.

WASTE

(a) Waste means any solid, liquid, semi-solid, or contained gaseous material, resulting from industrial, commercial, mining, or agricultural operations or from municipal activities, or any refuse, or sludge, which:

1. is sometimes discarded or is being accumulated, stored, or physically, chemically, or biologically treated prior to being discarded; or

2. has served its original intended purpose or is no longer suitable for its original intended purpose; or

DEFINITIONS: continued

3. is a manufacturing or mining by-product and sometimes is discarded; or
4. has served its original intended purpose and will be "used" as defined in 310 CMR 30.000.

(b) A material is discarded if it is:
1. abandoned or intended to be abandoned;
2. disposed of;
3. incinerated; or
4. physically, chemically, or biologically treated in *lieu* of or prior to being disposed of or abandoned.

(c) A manufacturing or mining by-product is a material that is not one of the primary products of a particular manufacturing or mining operation, is a secondary and incidental product of the particular operation and would not be solely and separately manufactured or mined by the particular manufacturing or mining operation. The term does not include an intermediate manufacturing or mining product which results form one of the steps in a manufacturing or mining process and is typically processed through the next step of the process within a short time.

(d) Materials, which have been approved by the Department for reuse or burning as a fuel at the site of generation pursuant to 310 CMR 30.200, are not wastes.

WATER HOLD-OUT COATING means a coating applied to the interior cavity areas of doors, quarter panels, and rocker panels for the purpose of corrosion resistance to prolonged water exposure.

WAXY, HEAVY POUR CRUDE OIL means a crude oil with a pour point of 50°F or higher as determined by ASTM D97-66 " Test for Pour Point of Petroleum Oils."

WEB means a continuous roll of paper or other material which is used as a substrate.

WELD-THROUGH PRIMER means a primer that is applied to an area before welding is performed, and that provides corrosion resistance to the surface after welding has been performed.

WOOD PRODUCT means any product made of wood or a wood composite, including, but not limited to: kitchen cabinets, equipment cabinets, household furniture, and office furniture, but excluding flat wood panels.

WOOD PRODUCTS SURFACE COATING means the coating of a wood product to impart properties that are not initially present, such as strength, stability, water or chemical repellency, or appearance.

ZERO EMISSION VEHICLE (or "ZEV") means any passenger car or light duty truck which produces zero emissions of any criteria pollutants under any and all possible operational modes and conditions. Incorporation of a fuel fired heater shall not preclude a vehicle from being certified as a ZEV provided the fuel fired heater cannot be operated at ambient temperatures above 40°F and the heater is demonstrated to have zero evaporative emissions under any and all possible operational modes and conditions. In addition, Zero Emission Vehicle or "ZEV", means any ZEV placed in service in compliance with the California Project pursuant to the requirements of the Master Memorandum of Agreement adopted by the California Air Resources Board March 29, 1996.

## 7.01: General Regulations to Prevent Air Pollution

(1) No person owning, leasing, or controlling the operation of any air contamination source shall willfully, negligently, or through failure to provide necessary equipment or to take necessary precautions, permit any emission from said air contamination source or sources of such quantities of air contaminants which will cause, by themselves or in conjunction with other air contaminants, a condition of air pollution.

(2) (a) Accurate Submittal to the Department No person shall make any false, inaccurate, incomplete, or misleading statements in any application, record, report, plan, design, statement or document which that person submits to the Department pursuant to M.G.L. c. 111, §§ 142A through 142M, M.G.L. c. 111, § 150A, c. 21H, or 310 CMR 7.00 *et seq*.

(b) Accurate and Complete Record Keeping No person shall make any false, inaccurate, incomplete or misleading statements in any record, report, plan, file, log, or register which that person is required to keep pursuant to M.G.L. c. 111, §§ 142A through 142M, M.G.L. c. 111, § 150A, c. 21H, or 310 CMR 7.00 *et seq*. Such records shall be made available to the Department for inspection upon request.

(c) Certification Any person providing information required to be submitted to the Department pursuant to M.G.L. c. 111, §§ 142A through 142M, M.G.L. c. 111, § 150A, c. 21H, or 310 CMR 7.00 *et seq*. shall make the following certification: "I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

(d) Change in Ownership. Any person owning, operating or leasing a facility for which a notification or certification submitted to the Department under these regulations is in effect, or a plan approval, emission control plan, operating permit, certification, restricted emission status or any other approval issued by the Department is in effect, who transfers responsibility, coverage and liability, shall provide a written notification of said action to the Department containing the specific date of the transfer of responsibility, coverage, and liability between the current and new owner, operator or lessor.

(3) Any person subject to 310 CMR 7.00, who submits a notification (*e.g.* 310 CMR 7.02(11)) or certification (*e.g.* 310 CMR 7.26); or obtains a restricted emission status approval, plan approval, emission control plan approval, operating permit or other approval issued by the Department, shall comply with the terms and conditions contained therein.

## 7.02: U Plan Approval and Emission Limitations

(1) Purpose and Applicability.

(a) Purpose. The purpose of 310 CMR 7.02 is to provide procedures and standards for the issuance of approvals in the Commonwealth of Massachusetts, and establish emission limitations and/or restrictions for a facility or emission unit.

(b) Plan Approvals to Construct, Substantially Reconstruct or Alter. A plan approval is required prior to any construction, substantial reconstruction, alteration, or subsequent operation of a facility that may emit contaminants to the ambient air. The plan approval requirement of 310 CMR 7.02 is applicable to facilities constructed, reconstructed or altered after July 1, 1970 in the Metropolitan Boston Air Pollution Control District and after September 15, 1970 in all other districts. Exemptions to this requirement are provided in 310 CMR 7.02(2).

(c) Reserved.

(d) Determining Plan Approval Applicability. For the portion of the facility or emission unit that is proposed to be constructed, substantially reconstructed or altered and subsequently operated, the need for a plan approval is determined by comparing the maximum design capacity of the proposed equipment for fuel utilization facilities or the potential to emit to the plan approval thresholds.

(e) Department Participation. In approving or denying an application for plan approval, the Department shall limit its action to matters that may cause or contribute to a condition of air pollution.

7.02: continued

(2) Exemptions from Plan Approval.

(a) Introduction. 310 CMR 7.02(2)(b) specifies changes that may be made at a facility that are exempt from the approval requirements of 310 CMR 7.02(4) and (5). 310 CMR 7.02(2)(c) specifies situations that are not eligible for such exemption. 310 CMR 7.02(2)(d) through (f) specify record keeping, reporting and enforcement provisions.

(b) Exemptions. Except as provided by 310 CMR 7.02(2)(c), construction, substantial reconstruction or alteration of a facility or emission unit is exempt from the requirement to obtain a plan approval under 310 CMR 7.02(4) or 310 CMR 7.02(5) if it qualifies as one or more of the following:

1. Air Pollution Control Equipment. An air pollution control device, excluding oxidizers or afterburners, added to any facility currently in compliance with the provisions of 310 CMR 7.02. This exemption is only available where the air pollution control equipment is not otherwise required by regulation, the air pollution control equipment does not increase the potential emissions of any single criteria pollutant or any single non-criteria pollutant by one ton or more as calculated over any 12 consecutive month time period, and the air pollution control equipment does not replace an existing air pollution control device required by plan approval or regulation. Persons installing air pollution control equipment as allowed by this exemption shall notify the Department, within 60 days of installation, that air pollution control equipment has been installed.

2. Air Pollution Control Equipment for Control of Particulate. Replacement of an existing air pollution control device for particulate matter (*e.g.*, baghouse), even if required by a previous plan approval. The replacement device shall be similar in design as the existing control device, and the same size or larger than the original control device. The replacement control device must be designed to achieve the same or better collection efficiency as the original control device. The Department must be notified, in writing, that a particulate air pollution control device is going to be replaced. This notification must be made at least 30 days prior to installation of the new unit. Said notification shall include a full description of the replacement control device.

3. Battery Charging. Battery charging facilities used to charge lead acid batteries.

4. Reserved.

5. Burner Tip Replacement. A fuel utilization facility burner tip replacement.

6. Cooling Towers. A cooling tower that has maximum recirculation rate of 20,000 gallons per minute (gpm) or less, a drift eliminator, a non-chromium inhibitor, and has total dissolved solids concentration in the blowdown less than 1800 mg/l. The total dissolved solids concentration shall be determined using Part 2540C as published in the latest edition of *Standard Methods For the Examination of Water and Wastewater* as published by the American Public Health Association, American Waterworks Association and Water Pollution Control Federation or by an equivalent method approved by the Department.

7. *De minimis* Increase in Emissions. Construction, substantial reconstruction, or alteration that results in an increase in potential emissions of less than one ton of any air contaminant, calculated over any 12 consecutive month time period. In order to determine eligibility under 310 CMR 7.02(2)(b)7., emissions shall be calculated based on the increase in potential emissions (as defined in 310 CMR 7.00) of the planned action. Reductions in emissions resulting from reduced utilization or elimination of emission units cannot be deducted. Products of combustion from any fuel utilization facility and emissions from an emission unit(s) installed in compliance with 310 CMR 7.03 or 310 CMR 7.26 are not included when calculating an increase in potential emissions for the purpose of determining applicability under 310 CMR 7.02(4)(a)1. or 2. or 310 CMR 7.02(5)(a)1., 2. or 3. (*See* also 310 CMR 7.02(6)).

8. Emergency Engines or Stand-by Engines. An individual emergency or stand-by engine that operates in compliance with the provisions of 310 CMR 7.02(8)(i) if installed prior to June 1, 1990 or is in compliance with 310 CMR 7.03 for units installed on or after June 1, 1990. Emergency or stand-by engines that have received plan approval must comply with the terms and conditions of the plan approval.

9. Emergency Release Containment. An area constructed for the containment of unplanned releases.

7.02: continued

10. Fire Suppression Systems. Fire protection, fire fighting and fire suppression system, except for those fire suppression systems and activities associated with the intentional combustion of materials for the purpose of fire suppression system evaluation or fire science research.

11. Fuel and Chemical Storage Tanks. Organic liquid storage tanks with a capacity less than or equal to 40,000 gallons and used exclusively to store product with a vapor pressure of less than 1.5 psi at the average annual ambient temperature. Storage tanks subject to this exemption must be equipped with conservation vents and aboveground units shall have a white or reflective surface. Organic liquid storage tanks may be subject to 40 CFR Part 60, subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for which construction, substantial reconstruction, or modification commenced after July 23, 1984.

12 Fuel Atomization Equipment. Fuel utilization facility burner atomization equipment replacement or repair. Replacement of steam or air atomization with mechanical atomization is not eligible under this exemption.

13. Fuel Loading Racks. Organic liquid transfer racks that transfer less than 172,000 gallons per year of organic liquids or organic liquid transfer racks that transfer exclusively organic liquids with a vapor pressure of less than 1.5 psi at the average ambient annual temperature. Transfer racks eligible under this exemption must comply with the requirements of 310 CMR 7.24, as applicable.

14. Fuel Switching. Conversion of a fuel utilization facility rated at a maximum heat input capacity of less than 100,000,000 Btu per hour energy input where the unit is converted from oil or solid fuel to oil/natural gas dual-fuel capability or natural gas as the only fuel. For purposes of this exemption, a fuel utilization facility is defined as any single boiler, hot oil generator, melt furnace, process heater, oven or similar fuel burning unit as determined by the Department.

15. Fuel Utilization Facilities. Any fuel utilization facility, excluding internal combustion engines such as combustion turbines or reciprocating engines, where the individual fuel utilization emission unit being constructed, substantially reconstructed or altered has a maximum energy input capacity less than:

a. 10,000,000 Btu per hour utilizing natural gas or propane.

b. 10,000,000 Btu per hour utilizing distillate fuel oil.

c. 10,000,000 Btu per hour utilizing residual fuel oil with a sulfur content of not more than 0.28 pounds per million Btu heat release potential (approximately 0.5% sulfur by weight) (Also see 310 CMR 7.05(1) and (2)).

d. 5,000,000 Btu per hour utilizing residual fuel oil having a sulfur content of not more than 0.55 pounds per million Btu heat release potential (approximately equal to 1% sulfur by weight) (Also see 310 CMR 7.05(1) and (2)).

e. 3,000,000 Btu per hour utilizing solid fuel with automatic fuel feed.

f. 3,000,000 Btu per hour utilizing digester gas.

g. 1,000,000 Btu per hour utilizing hand-fired solid fuel.

NOTE: Multiple fuel utilization emission units installed at a single facility must be evaluated for aggregate emissions to ensure that 310 CMR 7.00: *Appendix A* or PSD (40 CFR 52.21) is not triggered.

16. Insignificant Activities. An activity listed in 310 CMR 7.00: *Appendix C* (5)(i), as well as office equipment, static electricity reduction devices, electric arcs, and motors that generate ozone.

17. Maintenance or Repair. Routine maintenance or repair of a facility.

18. Mixing and Blending Equipment. Equipment used exclusively to mix or blend materials at ambient temperatures to make water-based solutions containing no more than 5% volatile organic compound (VOC) by weight.

19. Molding. Plastic injection or compression molding machines. Extrusion molding and blow molding is not eligible under this exemption.

20. Motor Vehicle Maintenance. Motor vehicle maintenance and repair facilities. Automobile refinishing facilities are not eligible under this exemption.

21. Operating Hours. An increase in the hours of production of a facility not otherwise restricted.

22. Operating Rate/ Product Changes. An increase in the rate of production at a facility not otherwise restricted.

7.02: continued

23. Ownership. A change in facility ownership, provided that the Department is notified in writing of the ownership change within 60 days of the effective date of the change.
24. Plan Approval by Rule. An emission unit listed in 310 CMR 7.03 provided that the emission unit fully conforms to the design, operation, maintenance, and record keeping requirements of 310 CMR 7.03.
25. Plumbing. Plumbing soil stacks or vents.
26. Pressure Relief Devices. Safety pressure relief devices associated with emission units having plan approvals, unless otherwise required by the Department.
27. Relocation of Approved Equipment. Relocation of any previously approved equipment provided that the equipment is relocated within the facility or to a contiguous property and provided that the relocated equipment does not cause or contribute to a condition of air pollution.
28. Thermal and Catalytic Oxidizers. A process emission oxidizer or afterburner with a rated capacity of less than 40,000,000 Btu per hour using natural gas and installed on a previously approved facility or on a new facility which otherwise meets the plan approval exemptions provided in 310 CMR 7.02(2). This exemption is only available where the air pollution control equipment is not otherwise required by regulation, and the air pollution control equipment does not replace existing air pollution control equipment required by plan approval or regulation. Flares are not eligible under this exemption. Persons installing thermal or catalytic oxidizers as allowed by this exemption shall notify the Department, within 60 days of installation, that oxidizers have been installed.
29. Turbines and Reciprocating Engines.
    a. Prior to March 23, 2006, an individual internal combustion engine including a combustion turbine or reciprocating engine having an energy input capacity less than 3,000,000 Btu per hour or an internal combustion engine regulated by EPA as a non-road engine pursuant to 40 CFR 89, 90, 91, and 92.
    b. On and after March 23, 2006, an individual internal combustion engine including a combustion turbine or reciprocating engine installed and operated in compliance with 310 CMR 7.26(40) through (44), or an internal combustion engine regulated by EPA as a non-road engine pursuant to 40 CFR 89, 90, 91, and 92.
30. Wastewater Treatment. Wastewater treatment and/or pumping facilities with average daily input flows of less than 50,000 gallons per day, and that treat sanitary sewage exclusively.
31. Water Treatment. Water treatment systems for process cooling water or boiler feed water.
32. RACT, Organic Material Storage and Distribution, ERP, or NOx Allowance Program. Contruction, substantial reconstruction or alteration required to comply with the requirements of 310 CMR 7.18, 7.19, 7.24, 7.26, 7.27 or 7.28. This exception does not apply to any boiler complying with the repowering provisions of 310 CMR 7.19(4)(b), any printer complying with 310 CMR 7.26(23)(a)3., or any wood fuel-fired boiler.
33. Actions that Contravene an Issued Plan Approval. Except as provided in 310 CMR 7.02(2)(b)33.a. and b., the construction, substantial reconstruction, or alteration of a facility or emission unit that would contravene an issued plan approval does not require a new plan approval, provided that the planned construction, substantial reconstruction, or alteration does not increase potential emissions by one ton per year or more above the emission limitation established by the issued plan approval. Persons constructing, substantially reconstructing or altering a facility or emission unit as allowed by this exemption shall notify the Department within 30 days of any such action. In order to determine applicability under 310 CMR 7.02(2)(b)33., emissions shall be calculated based on the increase in potential emissions (as defined in 310 CMR 7.00) of the planned action. Reductions in emissions resulting from reduced utilization or elimination of, emission units cannot be deducted. Products of combustion from any fuel utilization facility and emissions from an emission unit(s) installed in compliance with 310 CMR 7.03 are not included when calculating an increase in potential emissions.
    a. Notwithstanding the provisions of 310 CMR 7.02(2)(b)33., the provisions of 310 CMR 7.02(4) and 310 CMR 7.02(5) requiring a written plan approval shall apply to any construction, substantial reconstruction, or alteration of a facility or emission unit that would contravene those provisions of an issued plan approval that require:
        i. emission control equipment design specifications; or

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ii. emission control equipment capture and/or destruction efficiency standards; or

iii. emission limits (except emission limits per year or rolling 12 month average); or

iv. air contaminant ventilation characteristics such as stack height; or

v. limitations on the VOC/HOC content of coatings; or

vi. recordkeeping, monitoring, testing or reporting requirements.

b. Where the action would result in an increase in allowable or potential emissions above limits established in an approved RES, the RES must be modified as described in 310 CMR 7.02(10).

34. Biotechnology Laboratory. A laboratory used solely for research, development or support for medical device, drug, or biologic products derived in whole or in part from biotechnology, and such products are either undergoing preclinical research in preparation for, or are the subject of, one of the following U.S. Food and Drug Administration (FDA) regulatory applications or notices: an Investigational New Drug Application, an Investigational Device Exemption Notice, a New Drug Application, premarket approval application, premarket notification pursuant to section 510(k) of the federal Food, Drug and Cosmetic Act (510(k)) and any other product exempted by FDA from the 510(k) premarket notification requirement.

(c) Exclusions from Exemptions. Notwithstanding the provisions of 310 CMR 7.02(2)(a), and 7.02(2)(b), the provisions 310 CMR 7.02(4) and 310 CMR 7.02(5) requiring a written plan approval shall apply to construction, substantial reconstruction or alteration of a facility or emission unit that:

1. specifically included in 310 CMR 7.02(4)(a)3. or 4.; or
2. is specifically included in 310 CMR 7.02(5)(a)5. through 13.; or
3. would cause increases in aggregate emissions above thresholds defined by 310 CMR 7.02(6); or
4. would cause or contribute to a condition of air pollution under 310 CMR 7.02(7).

(d) Record Keeping. The owner or operator of a facility or emission unit that is exempt from plan approval shall keep the following records on-site and up-to-date, such that year-to-date information is readily available for Department examination upon request:

1. Documentation of the date of construction, substantial reconstruction or alteration.
2. Documentation, including emission calculations, under the specific condition(s) that qualifies the activity for exemption (*e.g.*, size threshold, emissions).
3. Air pollution control and other equipment performance specifications.
4. Verification of the overall efficiency of any air pollution control device adequate to support assumptions of emission control equipment capture efficiency (documentation of permanent total enclosures) and destruction/removal efficiency.

(e) Reporting.

1. The owner or operator of a facility subject to the Source Registration reporting requirements of 310 CMR 7.12, shall report the construction, substantial reconstruction or alteration activities that qualified for exemption in the next required Source Registration. Quantification of emissions from exempt activities is not required unless specifically requested.
2. The owner or operator of a facility required to report under 310 CMR 7.02(2)(b)33. for contravening the provisions of a plan approval shall submit the report within 30 days of said action.

(f) Enforcement. If construction, substantial reconstruction, alteration or operation of an emission unit for which an exemption from plan approval is claimed, violates any provisions of 310 CMR 7.00, the person owning, leasing, operating or controlling the facility will be subject to enforcement under M.G.L. c. 111, §§ 142A and B, and c. 21A §, 16 and/or any other relief or remedy provided by law including, but not limited to, injunctive relief.

(3) General Requirements for Plan Approval.

(a) General. No person shall construct, substantially reconstruct, alter, or subsequently operate any facility subject to the requirements of 310 CMR 7.02(4) or (5) unless an application for a plan approval has been submitted to the Department and plan approval has been granted by the Department. Procedures and contents of an application for plan approval can be found at 310 CMR 7.02(4) and 310 CMR 7.02(5).

7.02: continued

(b) Form of Approval. Any plan approval or plan disapproval will be issued by the Department in writing. If a plan application is disapproved, the Department will provide a written explanation of the circumstances that led to the decision to disapprove the application.

(c) Conditions of Approval. The Department may impose any reasonable conditions in a plan approval including conditions determined to be necessary to insure that the facility will be built, operated, and maintained as specified in the application for plan approval.

(d) Monitoring and Testing. The Department may require the applicant to monitor and/or test emissions as a condition of approval. The plan approval may include conditions that direct the applicant to install sampling ports of a specified size, number or location, direct the applicant to provide safe access to each sampling port or direct the applicant to install instrumentation to monitor and record emissions data and/or operating parameters.

(e) Record Keeping and Reporting. The Department may require an applicant to maintain records and provide periodic reports to the Department, as necessary, to assure continuous compliance with standard operating procedures, standard maintenance procedures, emission limitations, and any work practices contained in the plan approval.

NON-TEXT PAGE

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(f) Compliance with Plan Approvals. Other than as provided in 310 CMR 7.02(2)(f), no person shall operate a facility approved under 310 CMR 7.02 except in compliance with any plan approval issued to the facility. A plan approval does not reduce or negate the responsibility of the facility owner or operator to comply with any other applicable requirements of the Department.

(g) Massachusetts Environmental Policy Act (MEPA) Review. Prior to obtaining a plan approval, an applicant must comply with the requirements of 301 CMR 11.00 if applicable. The review thresholds for stationary sources of criteria or hazardous air pollutants are contained at 301 CMR 11.03(8): *Air*.

(h) Opportunity for Comment. The Department will provide an opportunity for public comment as specified in 40 CFR Part 51.161 prior to issuing an approval or denial of a plan approval application required under 310 CMR 7.02(4) or (5) for any facility that meets or exceeds an MEPA Review threshold for stationary sources of criteria or hazardous air pollutants, contained at 301 CMR 11.03(8): *Air*.

(i) Reserved.

(j) Department Approval. Plan approval will be issued by the Department where:

1. The emissions from a facility do not result in air quality exceeding either the Massachusetts or National Ambient Air Quality Standards; and
2. The emissions from the facility do not exceed applicable emission limitations specified in 310 CMR 7.00; and
3. The emissions from the facility do not result in violation of any provision of 310 CMR 7.00; and
4. The facility does not require a plan approval pursuant to 310 CMR 7.00: *Appendix A* or the plan approval requirements of 310 CMR 7.00: *Appendix A* have been met by the application and a 310 CMR 7.00: *Appendix A* plan approval has been issued by the Department. The Department has the discretion to issue the 310 CMR 7.00: *Appendix A* plan approval in conjunction with a 310 CMR 7.02 plan approval; and
5. Reserved.
6. The emissions from such a facility or operation of such a facility represent the most stringent emission limitation as specified in 310 CMR 7.02(8); and
7. The owner or operator of the facility has made a demonstration of compliance required under 310 CMR 7.02(4)(d)5. or 310 CMR 7.02(5)(c)8.; and
8. The requirements of 40 CFR Part 63.40 through 40 CFR Part 63.44 are applicable and have been met and an approval has been issued as required by 40 CFR Part 63.40 through 40 CFR Part 63.44. The Department has the discretion to issue an approval under 40 CFR Part 63.40 through 40 CFR Part 63.44 in conjunction with a plan approval issued under 310 CMR 7.02..

(k) Plan Approval Revocation. The Department may revoke any plan approval if construction has not commenced within two years of the date of a plan approval or, if during construction, construction is suspended for a period of one year or more. For purposes of 310 CMR 7.02(3)(k), construction has commenced if the owner or operator of the facility has begun a continuous program of physical on-site construction of the facility or emission unit that is permanent in nature.

(l) Plan Approval Duration. Plan approvals are valid for the life of the emission unit or facility, regardless of changes in ownership. Plan approvals issued to a facility that changes ownership, are binding upon the new owner. (*See* 310 CMR 7.02(2)(b)23.)

(m) Reactivating an Inactive Emission Unit. Any person who owns, operates or controls an emission unit or facility that has not operated for at least 24 hours in each of the most recent two calendar years is required to obtain a new plan approval prior to re-commencing operation of that emission unit unless sufficient evidence is presented to convince the Department that the shutdown was temporary and the re-startup could occur within a short time period in full compliance with 310 CMR 7.00. Such evidence shall include documentation showing that during the shutdown period:

1. Continued maintenance of the equipment was performed,
2. There has been compliance with all regulatory requirements such as installation of any monitoring equipment, instrumentation, control equipment, or process controls,
3. The facility or unit was included in Source Registration submissions to the Department pursuant to 310 CMR 7.12, and
4. Any other relevant supporting information.

7.02: continued

If the facility does not, in the judgment of the Department, submit sufficient evidence to demonstrate to the Department that the shutdown was temporary, then the Department may revoke the plan approval. If the Department revokes the plan approval, the facility must obtain a new plan approval prior to re-commencing operation of that facility or emission unit.

(n) Prohibitions.

1. Concealing Emissions. No person shall cause, suffer, allow, or permit the installation or use of any material, article, machine, equipment, or contrivance which conceals an emission without reducing the total weight of emissions where such emission would constitute a violation of any applicable regulation.

2. Air Pollution Control Equipment. No person shall cause, suffer, allow or permit the removal, alteration or shall otherwise render inoperable any air pollution control equipment or equipment used to monitor emissions that is required by 310 CMR 7.00, without specific written authority of the Department or in conformance with the specific exemptions listed in 310 CMR 7.02(2). An exception to 310 CMR 7.02(3)(n)2. is allowed for reasonable maintenance periods or unexpected and unavoidable failure of the equipment provided that the Department is notified, in writing, within 24 hours of the occurrence of such failure.

(o) Compliance with the Massachusetts Annual Electric Generating Unit (EGU) Mercury Budget and Mercury Requirements.

1. Any person who owns, operates or controls an EGU (as defined in 40 CFR 60.24(h)(8)), other than an EGU at an affected facility as defined in 310 CMR 7.29, shall obtain, before the later of January 1, 2010 or the first date on which the unit meets the definition of an EGU and emits mercury, a plan approval that includes an annual cap on mercury emissions from all fuels used by the EGU, allocated from the 45 pound mercury set-aside established in 310 CMR 7.02(3)(o)3.

2. No person who owns, operates or controls an EGU (as defined in 40 CFR 60.24(h)(8)) at an affected facility as defined in 310 CMR 7.29 shall increase the EGU's mercury emissions from all fuels used by the EGU above the applicable baseline mercury emissions listed in 310 CMR 7.02(3)(o)2.: *Table A* unless and until the person obtains a plan approval that includes an annual cap on mercury emissions from all fuels used by the EGUs at the affected facility for the periods January 1, 2010 through December 31, 2017, and January 1, 2018 and thereafter. The cap shall equal, at most, the baseline maximum mercury emissions, as listed in 310 CMR 7.02(3)(o)2.: *Table A*, plus an amount to cover any increase in mercury emissions above the baseline amount. Only the increase in mercury emissions above the baseline shall be apportioned from the 45 pound mercury set-aside established in 310 CMR 7.02(3)(o)3.

| 310 CMR 7.02(3)(o)2.: Table A | | |
|---|---|---|
| Unit | Baseline Hg emissions (pounds) 1/1/2010 through 12/31/2017 | Baseline Hg emissions (pounds) beginning 1/1/2018 |
| Brayton Point unit 1 | 18.6 | 6.2 |
| Brayton Point unit 2 | 18.6 | 6.2 |
| Brayton Point unit 3 | 46.2 | 15.4 |
| Mount Tom unit 1 | 10.8 | 3.6 |
| Salem Harbor unit 1 | 6.3 | 2.1 |
| Salem Harbor unit 2 | 6.1 | 2.0 |
| Salem Harbor unit 3 | 10.8 | 3.6 |
| Somerset unit 8 | 9.3 | 3.1 |

3. There is a 45 pound mercury set-aside for applicants seeking plan approvals pursuant to 310 CMR 7.02(3)(o)1. and 2. The Department only shall issue a plan approval to an EGU (as defined in 40 CFR 60.24(h)(8)) if the mercury emissions capped in the plan approval, combined with mercury emissions previously capped pursuant to 310 CMR 7.02(3)(o)1. and mercury emissions increases previously capped pursuant to 310 CMR 7.02(3)(o)2., would not cause the set-aside of 45 pounds of mercury per calendar year to be exceeded.

7.02: continued

4. Any person who owns, operates or controls an EGU (as defined in 40 CFR 60.24(h)(8)) shall comply with all mercury monitoring, recordkeeping, and reporting requirements in 40 CFR Part 75 and "Hg Designated Representative For Hg Budget Sources" and "Monitoring and Reporting" in 40 CFR Part 60 Subpart HHHH.

5. In implementing the provisions of 40 CFR Part 75 concerning monitoring of mercury mass emissions, the terms used in that part shall have the meanings defined in 40 CFR Part 72; provided, however, that the term Permitting Authority shall mean the Department. In implementing the provisions of the Clean Air Mercury Rule in 40 CFR Part 60 Subparts Da and HHHH, the terms used in those subparts shall have the meanings defined in 40 CFR Part 60, provided, however, that the term Permitting Authority shall mean the Department, the term Hg Budget Trading Program shall mean 310 CMR 7.02 and 7.29, and the term Hg Budget Unit shall mean an EGU as defined in 40 CFR 60.24(h)(8).

(4) Limited Plan Application (LPA).

(a) Applicability. Calculation of potential emissions associated with an LPA shall be in accordance with 310 CMR 7.02(4)(b). An LPA is required from any person prior to constructing, substantially reconstructing, altering, or subsequently operating any facility or emission unit described as follows:

1. Emission Increase of Less Than Ten Tons Per Year. Any facility where the construction, substantial reconstruction, alteration or subsequent operation would result in an increase in potential emissions of a single air contaminant equal to or greater than one ton per year and less than ten tons per year, calculated over any consecutive 12 month time period.

2. Fuel Utilization Emission Units. Any fuel utilization emissions unit, excluding internal combustion engines such as combustion turbines or reciprocating engines, where construction, substantial reconstruction, alteration or subsequent operation results in an increase in potential emissions of a single air contaminant equal to or greater than one ton per year and the emission unit has a maximum energy input capacity equal to or greater than:

a. 10,000,000 Btu and less than 40,000,000 Btu per hour utilizing natural gas or propane;

b. 10,000,000 Btu and less than 30,000,000 Btu per hour utilizing distillate fuel oil;

c. 10,000,000 Btu and less than 20,000,000 Btu per hour utilizing residual fuel oil having a sulfur content of equal to or less that 0.28 pounds per million Btu heat release potential (approximately equal to 0.5% sulfur by weight) (Also *see* 310 CMR 7.05(1) and (2));

d. 5,000,000 Btu and less than 10,000,000 Btu per hour utilizing residual fuel oil having a sulfur content of less than 0.55 pounds per million Btu heat release (approximately equal to 1% sulfur by weight). (Also see 310 CMR 7.05(1) and (2)); or

e. 3,000,000 Btu and less than 10,000,000 Btu per hour utilizing used oil fuel (Also *see* 310 CMR 7.04(9), and 7.05(7),(8) and (9)).

NOTE: Multiple fuel utilization emission units constructed or modified at a single facility must be evaluated for aggregate emissions to ensure that 310 CMR 7.00: *Appendix A* or PSD (40 CFR 52.21) is not triggered.

3. Modification of Plan Approval Terms and Conditions. Except as provided in 310 CMR 7.02(5) and 310 CMR 7.02(6), construction, substantial reconstruction, alteration or subsequent operation of a facility that would contravene an existing plan approval, provided that:

a. The planned construction, substantial reconstruction, alteration or subsequent operation would increase potential emissions by equal to or greater than one ton per year but less than ten tons per year, calculated over any consecutive 12 month time period, over the emission limitation established by an existing plan approval, and

7.02: continued

b. The planned construction, substantial reconstruction, alteration, or subsequent operation would only affect the:

i. Allowable or potential emission rates; or

ii. Operating hours; or

iii. Process feed rates; or

iv. A combination of 310 CMR 7.02(4)(a)3.b.i. through iii.

Actions that would contravene emission control equipment design specifications, capture and/or destruction efficiency standards for control equipment, emission limits established by a BACT approval, air contaminant ventilation characteristics such as a reduction in stack height, or limitations on the VOC/HOC content of coatings, require a plan approval. Where the action would result in an increase in allowable or potential emissions above limits established in an approved RES, the RES must be modified as described in 310 CMR 7.02(10). In order to determine applicability under 310 CMR 7.02(4)(a)3.b., emissions must be calculated in accordance with 310 CMR 7.02(4)(b).

7.02: continued

4. Applicability of Non-attainment, PSD, or MACT Review. Any construction, substantial reconstruction, alteration or subsequent operation, unless enforceable restrictions are established would result in a portion or all of the facility being subject to:

a. Emission Offsets and Non-attainment Review at 310 CMR 7.00: *Appendix A*; or

b. PSD Permitting at 40 CFR Part 52.21; or

c. 40 CFR Part 63.40 through 40 CFR Part 63.44.

(b) Calculation of Emissions. Calculation of potential emissions associated with an LPA must be based on the potential emissions (as defined in 310 CMR 7.00) of the proposed construction, substantial reconstruction or alteration. Limitations on the potential emissions proposed in the application must be made enforceable as a practical matter to be federally enforceable (see definition of federal potential to emit. Reductions in emissions resulting from reduced utilization or elimination of an existing emission unit cannot be deducted, (i.e. no netting). Products of combustion are not included when calculating applicability under 310 CMR 7.02(4)(a)1. Emissions from an emission unit(s) installed in accordance with 310 CMR 7.03 or 310 CMR 7.26 are not included when calculating an increase in potential emissions for purposes of determining applicability under 310 CMR 7.02(4)(a)1. and 2.

(c) Reserved.

(d) Limited Plan Application Requirements. To apply for an LPA, an applicant shall satisfy each of the following conditions:

1. The application shall be made on a form furnished by the Department or by other means required by the Department.

2. The application shall be signed by a responsible official.

3. The application shall be submitted in duplicate.

4. The application shall be accompanied by sufficient information to document the facility's potential emissions.

5. The application shall contain an affirmative demonstration that any facility in Massachusetts owned or operated by such persons (or by an entity controlling, controlled by or under common control with such person) that is subject to 310 CMR 7.00, is in compliance with or on a Department approved compliance schedule to meet all provisions of 310 CMR 7.00 and any plan approval, notice of noncompliance order or plan approval issued thereunder.

(5) Comprehensive Plan Application (CPA).

(a) Applicability. Calculation of potential emissions associated with a CPA shall be in accordance with 310 CMR 7.02(5)(b). A CPA is required from any person prior to constructing, substantially reconstructing, altering or subsequently operating any facility or emission unit as follows:

1. Emission Increase Greater than or Equal to Ten Tons Per Year. Any facility where the construction, substantial reconstruction, alteration or subsequent operation would result in an increase in potential emissions of a single air contaminant equal to or greater than ten tons per year, calculated over any consecutive 12 month time period.

2. Fuel Utilization Emission Units. Any fuel utilization emission unit, excluding internal combustion engines such as combustion turbines or reciprocating engines, where construction, substantial reconstruction, alteration or subsequent operation results in an increase in potential emissions of a single air contaminant of equal to or greater than one ton per year, and said emission unit has a maximum energy input capacity equal to or greater than:

a. 40,000,000 Btu per hour utilizing natural gas or propane.

b. 30,000,000 Btu per hour utilizing distillate fuel oil.

c. 20,000,000 Btu per hour utilizing residual fuel oil having a sulfur content of equal to or less that 0.28 pounds per million Btu heat release potential (approximately equal to 0.5% sulfur by weight).

7.02: continued

d. 10,000,000 Btu per hour utilizing residual fuel oil having a sulfur content of less than 0.55 pounds per million Btu heat release (approximately equal to 1% sulfur by weight) or used oil fuel (See also the requirements of 310 CMR 7.04(9) and 310 CMR 7.05(7), (8) and (9)).

e. 3,000,000 Btu per hour utilizing:

i. Residual fuel oil having a sulfur content greater than 0.55 pounds per million Btu but not in excess of 1.21 pounds per million Btu heat release potential (greater than 1% sulfur by weight but less than or equal to approximately 2.2% sulfur by weight).

ii. Hazardous waste fuel.

iii. Solid fuel with automatic fuel feed.

iv. Landfill gas.

v. Digester gas.

NOTE: Multiple fuel utilization emission units installed at a facility must be evaluated for aggregate emissions to ensure that 310 CMR 7.00: *Appendix A* or PSD (40 CFR 52.21) is not triggered.

3. Internal Combustion Engines.

a. Prior to March 23, 2006 any individual internal combustion engine, such as a stationary combustion turbine or a stationary reciprocating engine, having a maximum energy input capacity equal to or greater than 3,000,000 Btu per hour, and the construction, substantial reconstruction, alteration or subsequent operation results in an increase in potential emissions of a single air contaminant of equal to or greater than one ton per year.

b. Any individual internal combustion engine, such as stationary combustion turbine or stationary reciprocating engine, installed on or after March 23, 2006 shall comply with the requirements of 310 CMR 7.26(40) through (44), Engines and Combustion Turbines, except as provided by 310 CMR 7.26(42)(a)1., 310 CMR 7.26(43)(a)2. and 310 CMR 7.26(43)(a)3.

c. An application is not required pursuant to 310 CMR 7.02(5)(a)3. if the internal combustion engine is regulated by EPA as a non-road engine pursuant to 40 CFR 89, 90, 91, and 92.

4. Hand-fired Solid Fuel Utilization Facilities. Any hand fired solid fuel utilization facility having an energy input capacity equal to or greater than 1,000,000 Btu per hour.

5. Incinerators. Any incinerator.

6. Aggregated *De minimis* Emission Increases. Any facility where the sum of the incremental changes (less than one ton each) in potential to emit, calculated over any consecutive 12 month time period, equals or exceeds ten tons for any single criteria pollutant or any single non-criteria pollutant. (*See* 310 CMR 7.02(6))

7. Facilities Subject to PSD, Nonattainment Review or Case-by-case MACT. Any facility, regardless of any exemption established elsewhere, where the construction, substantial reconstruction or alteration causes a facility to be subject to Prevention of Significant Deterioration (40 CFR Part 52.21), Emissions Offsets and Nonattainment Review (310 CMR 7.00: *Appendix A*), or Case-by-case MACT (40 CFR Part 63.40 through 40 CFR Part 63.44).

8. Modification of Plan Approval Conditions. Any facility, regardless of any exemption established elsewhere in 310 CMR 7.00, that requires a modification to a condition of any plan approval issued by the Department due to an increase in potential emissions equal to or greater than ten tons per year (calculated over any consecutive 12 month time period), over the emission limitation established by plan approval. The increase in potential emissions shall be calculated in accordance with 310 CMR 7.02(5)(b).

9. Modification of Non-attainment Review Plan Approval or Case-by-case MACT. Any facility, where the construction, substantial reconstruction or alteration would violate a condition of a Non-attainment Review approval or Case-by-case MACT (40 CFR Part 63.40 through 40 CFR Part 63.44) regardless of the expected change in emissions and any exemptions established elsewhere in 310 CMR 7.00.

7.02: continued

10. Facilities with the Potential to Cause or Contribute to Air Pollution. Any facility, regardless of any exemption established elsewhere in 310 CMR 7.00 that the Department determines has the potential for causing or contributing to a condition of air pollution.

11. Major Modifications at Large Combustion Emission Units (LCEU). A Comprehensive Plan Application is required for major modifications for any large combustion emission unit. The applicability criteria for a CPA and associated definitions for LCEU(s) are set forth in 310 CMR 7.54.

12. Electric Generating Unit (EGU). Any EGU (as defined in 40 CFR 60.24(h)(8)), other than an EGU at an affected facility as defined in 310 CMR 7.29, that will emit mercury above a mercury cap established in a written approval of a CPA. Mercury cap refers to a cap established pursuant to 310 CMR 7.02(3)(o).

13. Electric Generating Unit (EGU). Any EGU (as defined in 40 CFR 60.24(h)(8)) at an affected facility, as defined in 310 CMR 7.29, that will emit mercury from all fuels utilized above the baseline mercury emissions listed in 310 CMR 7.02(3)(o)2.: *Table A* plus any additional mercury allowed by a mercury cap in a written approval of a CPA. Mercury cap refers to a cap established pursuant to 310 CMR 7.02(3)(o).

(b) Calculation of Emissions. Calculation of potential emissions associated with a CPA must be based on the potential emissions (as defined in 310 CMR 7.00) of the proposed construction, substantial reconstruction or alteration. Limitations proposed on the potential emissions in the application must be made enforceable, as a practical matter, to be federally enforceable (*see* definition of federal potential to emit). Reductions in emissions resulting from reduced utilization or elimination of emission units cannot be deducted (*i.e*. no netting). Products of combustion are not included when calculating applicability under 310 CMR 7.02(5)(a)1. Emissions from an emission unit(s) installed in accordance with 310 CMR 7.03 or CMR 7.26 are not included when calculating an increase in potential emissions for purposes of determining applicability under 310 CMR 7.02(5)(a)1., 2. and 3.

(c) Comprehensive Plan Application Requirements. To apply for a CPA, an applicant shall satisfy each of the following conditions:

1. The application shall be made on a form furnished by the Department or by other means required by the Department.

2. The application shall be signed by a responsible official.

3. The application shall be submitted in duplicate.

4. The application shall be accompanied by a description of the proposed activity, site information, plans, specifications, drawings illustrating the design of the facility, calculations detailing the nature and amount of all emissions, and procedures describing the manner in which the facility will operate and be maintained.

5. The application shall demonstrate compliance with the requirements of 310 CMR 7.02(8)(a) relating to compliance with emission limitations.

6. Additional information shall be furnished upon request by the Department including, but not limited to, air dispersion modeling, additional plans or specifications, and documentation or evidence to support the application.

7. The application shall bear the seal and signature of a professional engineer registered in the Commonwealth of Massachusetts under the provisions of M.G.L. c. 112.

8. The application shall contain an affirmative demonstration that any facility(ies) in Massachusetts owned or operated by such persons (or by an entity controlling, controlled by or under common control with such person) that is subject to 310 CMR 7.00 *et seq*., is in compliance with or on a Department approved compliance schedule to meet all provisions of 310 CMR 7.00 *et seq*. and any plan approval, notice of noncompliance order or plan approval issued thereunder.

(d) Prevention of Significant Deterioration. In addition to the requirements contained at 310 CMR 7.02(5)(c), major new stationary sources of air contaminants and major modifications of existing major stationary sources located in attainment areas are subject to Prevention of Significant Deterioration (PSD) regulations promulgated in 40 CFR Part 52.21. Effective July 1, 1982, the PSD program was implemented by the Department in accordance with the Department's "Procedures for Implementing Federal Prevention of Significant Deterioration Regulations." Effective March 3, 2003, the PSD program is implemented by the U.S. Environmental Protection Agency.

7.02: continued

(e) Case-by-case Maximum Achievable Control Technology. In addition to the requirements contained at 310 CMR 7.02(5)(c), the construction or reconstruction of major sources of hazardous air pollutants (as defined by 40 CFR Part 63.41) is subject to 40 CFR Part 63.40 through .44. This is a requirement to satisfy The Clean Air Act, § 112(g) that construction or reconstruction after June 29, 1998 of a major source of hazardous air pollutants (as defined in 40 CFR Part 63.2) be equipped with MACT. These requirements apply only if the source has not been either regulated or exempted by a standard issued pursuant to The Clean Air Act, § 112(d), 112(h), or 112(j) or the process category has been delisted pursuant to The Clean Air Act, § 112(c)(9). 40 CFR Part 63.40 through .44 is implemented by the Department as of August 3, 2001.

(f) Facilities with Operating Permits. An owner or operator of a facility issued an operating permit under the provisions of 310 CMR 7.00: *Appendix C*, with proposed changes at the facility that are not a modification under any provision of Title I of the Clean Air Act, (42 U.S.C. 7401 through 7515) may elect a shorter plan review timeline available under 310 CMR 4.10(2)(j)(1) provided that a pre-application meeting is held with the appropriate regional office personnel no more than 90 days prior to the anticipated date that the CPA is to be submitted and an application for a minor modification of the operating permit is submitted to the Department in accordance with the requirements of 310 CMR 7.00: *Appendix C*(8) and timelines established at 310 CMR 7.00: *Appendix C*(4)(b)2.

(6) Aggregated Emissions.

(a) Applicability.

1. Any person who owns or operates a facility shall track emission increases as defined below over any consecutive 12 month time period which includes a particular emission increase in order to determine if plan approval is required pursuant to 310 CMR 7.02(5)(a)6.

2. Emission increases that are subject to this requirement are those associated with the construction, substantial reconstruction or alteration of a facility or emission units that:

a. Are individually not subject to plan approval under 310 CMR 7.02(4) or 310 CMR 7.02(5); and

b. Have not previously been aggregated for purposes of plan approval under 310 CMR 7.02(4) and 310 CMR 7.02(5); and

c. Are not part of a program of construction or modification in planned incremental phases previously approved by the Department.

(b) Calculation of Emissions. Aggregated emissions shall be calculated as the sum of the potential emissions of any air contaminant identified in 310 CMR 7.02(6)(a). Products of combustion from any fuel utilization facility or emissions resulting from construction, substantial reconstruction or alteration, in accordance with the requirements of 310 CMR 7.03 or 7.26, are not included in this calculation.

(7) Mitigation of Air Pollution.

(a) Requirement to Collect Information. When the Department determines that any facility or product manufactured therein has the likelihood of causing or contributing to a condition of air pollution, the Department may require the person owning, leasing or controlling said facility to submit information to document facility emissions, operating parameters of emission control equipment, and standard operating and maintenance procedures. In doing so, the Department may require any person who owns, operates or controls any facility, or who manufactures emissions control equipment or process equipment to:

1. Establish and maintain records;
2. Make reports;
3. Install, use, and maintain monitoring equipment;
4. Perform audits on monitoring equipment using standard procedures and methods;
5. Quantify emissions in accordance with the procedures, and methods as the Department may prescribe;
6. Keep records on control equipment parameters, production variables, and other indirect data when direct monitoring of emissions is not practical;
7. Conduct stack testing or submit modeling analysis; or
8. Maintain other records and provide any other information as the Department might reasonably require.

7.02: continued

(b) Department Review of Information. The Department will use information submitted pursuant to 310 CMR 7.02(7)(a) to determine the adequacy and application of existing air pollution control technology at a facility to prevent a condition of air pollution. In addition, the Department's representative, upon presentation of credentials:

1. Shall have right of entry to, upon, or through any premises of any such person in which records required by 310 CMR 7.02(7)(a) are located, and

2. May at reasonable times have access to copy any records, inspect any equipment, review any documents, and sample any emissions that the owner or operator of the facility is required to sample under 310 CMR 7.02(7)(a).

(c) Compliance Monitoring and Compliance Certification. The Department may require any person to perform compliance monitoring and submit a compliance certificate subject to the standards of 310 CMR 7.01(2). Compliance certifications shall include:

1. Identification of all applicable requirements that are the basis for certification;
2. The method used to determine compliance status of the facility;
3. The compliance status of the facility, and each emission unit;
4. Whether compliance is continuous or intermittent; and
5. Other facts as the Department might require.

(d) Plan Approval and Compliance Schedule Requirement. If, after review of the submitted information, the Department determines that the facility is in need of reconstruction, alteration or repair to prevent the facility from causing or contributing to a condition of air pollution, the Department may require the person owning, leasing, operating or controlling the facility to submit an application for a CPA under 310 CMR 7.02(5). The plan application required by this section shall be provided to the Department by the deadline specified by the Department and shall contain a proposed compliance schedule subject to Department approval.

(e) Continuing Operations. The Department may allow the facility to temporarily continue to operate pending reconstruction or repair provided that the person owning, leasing, operating or controlling the facility complies with all requirements and deadlines of 310 CMR 7.02(7)(d).

(8) Emission Limitations.

(a) Emission Limitations in Plan Approvals. The Department's written approval of an LPA or CPA shall include the most stringent emission limitation of the following, as applicable:

1. Lowest Achievable Emission Rate (LAER) where the construction, substantial reconstruction or alteration is subject to the requirements of Emission Offsets and Non-attainment Review in 310 CMR 7.00: *Appendix A.*

2. Best Available Control Technology (BACT). BACT is required of all LPA approvals and CPA approvals. In no case will BACT be less stringent than any applicable emissions limitation contained in a Department regulation (*e.g.*, 310 CMR 7.05, 7.18, 7.19, 7.24, 7.26 or 7.29) or federal regulation (*e.g.*, 40 CFR 60, 61 or 63). BACT may include a design feature, equipment specification, work practice, operating standard or combination thereof. (*See* Definition of BACT in 310 CMR 7.00.) Applicants shall identify BACT for their specific application using a top-down BACT analysis. Refer to Department guidance for conducting a top-down BACT analysis. In *lieu* of an emission-unit-specific top-down BACT analysis, an applicant may propose an emission control limitation by using one or more of the following approaches:

a. Propose a level of control from the most recent plan approval or other action issued by the Department (Top Case BACT).

b. Propose a combination of best management practices, pollution prevention, and a limitation on the hours of operation and/or raw material usage. This approach is only available if the proposed allowable emissions, calculated over any consecutive 12 month time period, are:

i. Less than 18 tons VOC and HOC combined;
ii. Less than 18 tons of total organic material HAP; and
iii. Less than ten tons of a single organic material HAP.

c. Notwithstanding 310 CMR 7.02(8)(a)2.a. and b., the Department may consider any other information in determining BACT for any given plan application and approval.

3. New Source Performance Standards (NSPS) as defined in 40 CFR Part 60.

7.02: continued

4. National Emission Standards for Hazardous Air Pollutants (NESHAP) as defined at 40 CFR Part 61.

5. National Emission Standards for Hazardous Air Pollutants for Source Categories as defined at 40 CFR Part 63 (MACT).

6. Case by case MACT as determined under 310 CMR 7.02(5)(e)

7. Plan Approvals under 310 CMR 7.02(7) or 7.02(5)(a)10. Any emission limitation required in such plan approval shall be sufficient to eliminate the potential to cause a condition of air pollution, even if said emission limitation is more stringent than an emission limitation that would otherwise be determined to be BACT.

(b) Fuel Switching. Applicants for conversion of fuel utilization facilities equal to or greater than 100,000,000 Btu per hour from oil or solid fuel to natural gas or dual-fuel oil/natural gas, are not required to provide an assessment of BACT in the application for plan approval (LPA or CPA). Further, this action is not considered a major modification subject to 310 CMR 7.00: *Appendix A* provided that the project qualifies as a pollution control project. For the purpose of 310 CMR 7.02(8), a fuel utilization facility is defined as any single boiler, hot oil generator, melt furnace, oven, or similar fuel burning unit as determined by the Department.

(c) Emission Limitations for Existing Facilities. Existing facilities must comply with the applicable requirements of 310 CMR 7.02(8)(d) through (g) unless subject to more stringent requirements that have been established by plan approval, state regulation or federal requirement (NSPS or NESHAP) as applicable. Under 310 CMR 7.02(8)(c) through (g), an existing facility is any facility or emission unit that was in operation on or before June 1, 1972 and has not been constructed, substantially reconstructed or altered since that date (See also Definition of Existing Facility in 310 CMR 7.00). Stationary combustion turbines and stationary reciprocating engines are not subject to the emission limits in 310 CMR 7.02: *Tables 4, 5* and *6*.

(d) Maximum Particulate Emission Limits in Areas of Critical Concern. Existing facilities in the communities listed in 310 CMR 7.02: *Table 3* shall, at a minimum, meet the particulate emission limits in Table 4 unless subject to a more stringent emission limit in a plan approval, state regulation or federal program (*e.g.* NSPS or NESHAP), as applicable. Stationary combustion turbines and stationary reciprocating engines are not subject to the emission limits in 310 CMR 7.02: *Table 4, 5* and *6*.

Table 3

| | | | |
|---|---|---|---|
| Adams | Fall River | Millbury | Southbridge |
| Amherst | Fitchburg | Milton | Springfield |
| Arlington | Gardner | Needham | Stoneham |
| Athol | Grafton | New Bedford | Taunton |
| Attleboro | Greenfield | Newburyport | Wakefield |
| Auburn | Hadley | Newton | Waltham |
| Belmont | Haverhill | North Adams | Ware |
| Boston | Holden | Northampton | Watertown |
| Boylston | Holyoke | Orange | Webster |
| Braintree | Lawrence | Palmer | West Boylston |
| Brookline | Lee | Peabody | Westfield |
| Cambridge | Leicester | Pittsfield | West Springfield |
| Canton | Leominster | Quincy | Weymouth |
| Chelsea | Longmeadow | Revere | Winchester |
| Chicopee | Lowell | Salem | Winthrop |
| Dalton | Ludlow | Sandwich | Woburn |
| Dedham | Lynn | Saugus | Worcester |
| Easthampton | Malden | Shrewsbury | |
| East Longmeadow | Medford | Somerset | |
| Everett | Melrose | Somerville | |

7.02: continued

Table 4

| Facility Type | Size | Existing unit |
|---|---|---|
| Ferrous Cupola Foundries | | |
| Production | all | 0.06 grains/DSCF[1] |
| Jobbing | all | 0.21 grains/DSCF |
| NonFerrous Cupola Foundries | all | 0.06 grains/DSCF |
| Municipal, Commercial, Industrial, and Institutional Incinerators | all | 0.1 grains/scf at 12% CO2[2] |
| Municipal Sewerage Sludge Incinerators | all | 0.65 gr./kg dry sludge input |
| Asphalt Batching plants | all | 0.04 gr./DSCF |
| Fossil Fuel Utilization Facility | 3 - 250 MMBtu[3] | 0.12 lb./MMBtu |
| | 250 MMBtu or larger | 0.12 lb./MMBtu |
| Fuel Utilization Facilities | ***City of Worcester only*** | |
| Solid Fuel | 3 MMBtu or larger | 0.12 lb./MMBtu |
| Residual Oil | 3 MMBtu or larger | 0.12 lb./MMBtu |
| Distillate oil | 3 MMBtu or larger | 0.10 lb./MMBtu |
| Natural gas | 3 MMBtu or larger | 0.10 lb./MMBtu |

(e) Maximum Particulate Emission Rate : All Other Communities. In communities other than those listed in 310 CMR 7.02: *Table 3*, existing facilities shall, at minimum, meet the particulate emission limits in 310 CMR 7.02: *Table 5* unless subject to more stringent emission limits as applicable in a plan approval, state regulation or federal program (NSPS or NESHAP). Stationary combustion turbines and stationary reciprocating engines are not subject to the emission limits in 310 CMR 7.02: *Table 4, 5* and *6*.

Table 5

| Facility Type | Size | Existing unit |
|---|---|---|
| Fossil Fuel Utilization Facility | 3 - 250 MMBtu | 0.15 lb./MMBtu |
| | 250 MMBtu or larger | 0.15 lb./MMBtu |
| Ferrous Cupola Foundries | | |
| Production | all | 0.13 gr./DSCF |
| Jobbing | all | 0.21 gr./DSCF |
| Non-Ferrous Cupola Foundries | all | 0.08 gr./DSCF |
| Municipal, Industrial, Commercial, and Institutional Incinerators | all | 0.1 gr./scf at 12% CO2 |
| Municipal Sewerage Sludge Incinerators | all | 0.65 gr./kg dry sludge input |
| Asphalt Batching Plants | all | 0.06 gr./DSCF |

(f) Any facility which, when constructed, was subject to a federal New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants, shall continue to be subject to such standard and operate in compliance with such standard unless more stringent requirements are applied through plan approval.

[1] DSCF - Dry Standard Cubic Foot

[2] CO2 - Carbon Dioxide

[3] MMBtu - Million British Thermal Units

7.02: continued

(g) Emission Testing and Monitoring. For purposes of determining compliance with 310 CMR 7.02(8)(d) through (f) and 7.02(8)(h), any emission testing for compliance with these limitations shall be conducted under isokinetic sampling conditions and in accordance with EPA test methods, as appropriate, including but not limited to Test Methods 1 through 5 as specified in the 40 CFR Part 60, Appendix A- Standards of Performance for New Stationary Sources, 40 CFR Part 60 Subpart E-Standards of Performance for Incinerators, (originally promulgated in the Federal Register, Volume 36, No. 247, December 23, 1971) or 40 CFR Part 60 Subpart O - Standards of Performance for Sewerage Treatment Plants (originally promulgated in the Federal Register, Volume 39, No.2, March 8, 1974) or by another method which has been correlated to the above method to the satisfaction of the Department.

(h) Particulate Emission Limitations for New Wood and Fossil Fuel Utilization Facilities. New facilities shall, at a minimum, comply with the particulate emission limits in 310 CMR 7.02: *Table 6* unless subject to more stringent emission limits as applicable in a plan approval, state regulation or federal program (NSPS or NESHAP). Stationary combustion turbines and stationary reciprocating engines are not subject to the emission limits in 310 CMR 7.02: *Table 4, 5* and *6*.

Table 6

| Facility Size<br>Million Btu/hr. Input | Emission Limitation<br>lbs.(particulate)/million Btu | |
|---|---|---|
| Wood | New | New (Critical Area –Table 3) |
| 3-25 | 0.20 | 0.10 |
| greater than 25 | 0.10 | 0.10 |
| Fossil Fuel | | |
| 3-250 | 0.10 | |
| greater than 250 | 0.05 | |

(i) U Emergency or Standby Engine(s).

1. Applicability. On and after March 23, 2006, the construction, substantial reconstruction, or alteration of any emergency or standby engine shall be governed by the requirements of 310 CMR 7.26(40) through (44), Engines and Combustion Turbines.

a. Persons owning, operating or controlling an emergency or standby engine(s) constructed, substantially reconstructed, or altered prior to June 1, 1990, having an energy input capacity equal or greater than 3,000,000 Btu per hour individually shall operate said engine(s) in compliance with 310 CMR 7.02(8)(i)2. through 5. Notwithstanding the previous sentence, an operator or owner of an emergency or standby engine(s) constructed, substantially reconstructed or altered prior to June 1, 1990 and having an energy input capacity equal to or greater than 3,000,000 Btu per hour individually may apply for alternative operating and reporting requirements under 310 CMR7.02(5)(a)3.

b. Persons owning, operating or controlling an emergency or standby engine(s) having an energy input capacity less than 3,000,000 Btu per hour per engine, who elect to establish limits on the hours of operations of said engine(s) shall comply with 310 CMR 7.02(8)(i)2. through 5., or 310 CMR 7.02(11).

2. Limits of Operation. Each engine may be operated no more than a total of 300 hours per any rolling 12 month period, and only during:

a. The normal maintenance and testing procedure as recommended by the manufacturer, and

b. Periods of electric power outage due to failure of the grid, in whole or in part, on-site disaster, local equipment failure, flood, fire or natural disaster, and

c. When the imminent threat of a power outage is likely due to failure of the electrical supply or when capacity deficiencies result in a deviation of voltage from the electrical supplier to the premises of 3% above or 5% below standard voltage, or periods during which the regional transmission organization directs the implementation of voltage reductions, voluntary load curtailments by customers, or automatic or manual load shedding within Massachusetts in response to unusually low frequency, equipment overload, capacity or energy deficiency, unacceptable voltage levels, or other emergency conditions.

7.02: continued

3. Record Keeping. The owner or operator shall maintain on site or, for remote locations, at the closest facility where records can be maintained, the following records for each engine:

a. Information on equipment type, make and model, and maximum power input/output; and

b. A monthly log(s) of hours of operation, gallons of fuel used, fuel type and heating value, and a monthly calculation of the total hours operated and gallons of fuel used in the previous 12 months; and

c. Purchase orders, invoices, and other documents to support information in the monthly log.

4. Availability of Records. Monthly log(s) and records established under 310 CMR 7.02(8)(i)3. shall be made available to the Department or its designee upon request. The owner or operator shall certify that the log is accurate and true in accordance with 310 CMR 7.01(2).

5. Fuel Requirements. On and after July 1, 2007, no person shall accept for delivery for burning in any engine subject to 310 CMR 7.02(8)(i), diesel or any other fuel that does not meet the applicable U.S. Environmental Protection Agency sulfur limits for fuel pursuant to 40 CFR 80.29, 40 CFR 80.500, and 40 CFR 80.520(a) and (b) as in effect January 18, 2001.

(9) Restricted Emission Status (RES).

(a) General. Any person who owns, leases, operates or controls a facility may apply to the Department for a restricted emission status in order to:

1. restrict potential emissions of regulated air contaminants to eliminate applicability of an otherwise applicable requirement, including but not limited to, restricting potential emissions to allow redesignation for purposes of annual compliance fee assessment (310 CMR 4.03); or

2. restrict potential emissions below the Reasonably Available Control Technology (RACT) applicability thresholds for halogenated organic compounds (HOC) (310 CMR 7.18); or,

3. restrict federal potential emissions below the Reasonably Available Control Technology (RACT) applicability thresholds for volatile organic compounds (310 CMR 7.18) and 310 CMR 7.00: *Appendix C* where applicable; or,

4. restrict federal potential emissions below the Reasonably Available Control Technology (RACT) applicability thresholds for oxides of nitrogen (NOx) (310 CMR 7.19) and 310 CMR 7.00: *Appendix C* where applicable; or,

5. restrict federal potential emissions of regulated pollutants for eliminating applicability to an otherwise applicable requirement, including but not limited to, 310 CMR 7.00: *Appendix C.*

(b) Application Requirements. Any person who owns, leases, operates or controls a facility may apply for a restricted emission status as follows:

1. The application shall be made on form(s) obtained from the Department or by other means prescribed by the Department.

2. The application shall be submitted in duplicate and signed by a responsible official.

3. The application shall be accompanied by sufficient information to document the proposed restriction.

4. Applications for restricted emission status to lower potential emissions below the Reasonably Available Control Technology (RACT) applicability thresholds for volatile organic compounds (VOC) or oxides of Nitrogen (NOx) stated in 310 CMR 7.18 *et seq*. and 7.19 *et seq*., shall include the following information:

a. the actual amount of VOC, HOC and/or NOx (as required) emitted from each affected emitting equipment for the highest emitting calendar year beginning January 1, 1990.

b. a description of the design and operation of the affected VOC, HOC and/or NOx emitting equipment, and

c. any other information deemed by the Department to be required to establish enforceable conditions to be contained in the permit restriction.

(c) Relationship to RACT. Restricted emission status to avoid RACT requirements at either 310 CMR 7.18 *et seq*. or 310 CMR 7.19 *et seq*. will only be available if actual emissions from the facility have not exceeded a threshold contained in 310 CMR 7.18 *et seq*. or 7.19 *et seq*. on or after January 1, 1990. If the facility was subject to the RACT requirements of a section of 310 CMR 7.18 before 1990, it will continue to be subject to these requirements.

7.02: continued

(d) Form of Appeal. Any restricted emission status the Department issues will be in writing.

(e) Conditions of Approval. Restricted emission status issued by the Department shall include:

1. some combination of production and/or operational limitations to ensure that emissions are limited by quantifiable and enforceable means. Operational limitations may include control equipment; and

2. requirements to maintain records sufficient to demonstrate that the limitations in the permit are followed and that emissions have not exceeded those allowed by the restriction.

(f) Federal Enforceability. Restricted emission status issued pursuant to 310 CMR 7.02(9) for the purpose of restricting federal potential emissions must be federally enforceable.

1. Federally enforceable permit restrictions shall contain per unit emission factors, production and/or operational limitations and controls, and monitoring, recordkeeping, and reporting requirements capable of assuring compliance with such limitations and controls.

2. All emissions limitations, controls, and other requirements imposed by such restricted emission status must be at least as stringent as all other applicable limitations and requirements contained in the Massachusetts SIP, enforceable under the Massachusetts SIP, or otherwise federally enforceable. All limitations, controls and other requirements imposed by such restricted emissions status must be permanent, quantifiable, and otherwise enforceable as a practical matter.

3. Federally enforceable restricted emission status shall go through the public review process at 310 CMR 7.02(9)(g).

(g) Notification and Public Comment. The following public review process shall apply to all proposed restricted emission status if they are to be federally enforceable.

1. After notification of receipt of a technically complete application the Department shall issue either a disapproval of the application and notify the applicant and EPA of said disapproval; or, issue a proposal that the application be approved or approved with conditions.

2. If the Department proposes to approve the application or approve the application with conditions, it shall:

a. Make available, in at least one location in the region in which the facility is located, a copy of all nonconfidential materials the applicant submitted, a copy of the proposed restricted emission status, a copy of the proposed approval or approval with conditions, and a copy or summary of other materials, if any, considered in making the proposed decision.

b. Notify the public of the Department's proposed action and availability of all related materials, by advertisement in a newspaper having wide circulation in the area of the facility applying for a permit restriction and allow not less than 30 days for public comment.

c. Send a copy of the notice of public comment to the applicant, the EPA, and officials and agencies having jurisdiction over the community in which the facility is located, including local air pollution control agencies, chief executives of said community, and any regional land use planning agency.

d. Consider all public comments in making a final decision on the proposed restricted emission status. The Department shall make all comments received available for public inspection in the same location(s) as all materials related to the Department's proposed restricted emission status had been made available.

e. Make a final determination whether the restricted emission status application should be approved or approved with conditions.

f. Notify the applicant and EPA in writing of the final determination and send a copy of the final restricted emission status approval or approval with conditions.

(h) Return to Major Status. If construction, substantial reconstruction or alteration of a facility operating under Restricted Emission Status (RES), results in the increase in emissions at the facility so that the facility can no longer stay below major source threshold(s), then the owner or operator must comply with previously applicable requirement(s), including, but not limited to obtaining an operating permit.

7.02: continued

(10) Modification of a Restricted Emission Status (RES).

(a) General. Any person who owns, leases, operates or controls a facility may apply to modify a RES for the purpose of increasing the facility-wide emission limit, amending the list of emission units included in the existing RES approval or adding emission units not included in the RES approval or to make administrative changes.

(b) Increase RES Cap. If it is proposed to modify a RES to increase the approved RES emission limits without construction, substantial reconstruction or alteration of emission units that require approval under 310 CMR 7.02(4) or (5), an application shall be made in accordance with the procedures in 310 CMR 7.02(9).

(c) Increase RES Cap with Construction. If it is proposed to construct, substantially reconstruct or alter a facility in a manner that requires plan approval, and which increases the facility wide emission limit, and the facility has a RES, then:

1. The following procedure will be used to modify the RES:

a. The proposed construction, substantial reconstruction or alteration shall be submitted for Department approval pursuant to 310 CMR 7.02(5)- Comprehensive Plan Application;

b. The emission limitations in the existing RES shall be modified to incorporate the new emissions approved through plan approval without additional application to the Department; and

c. The plan approval, and revised emission limitations established in the RES, shall be subject to public notice provisions of 310 CMR 7.02(9)(g).

2. Notwithstanding 310 CMR 7.02(10)(c)1., if the facility seeks to construct an emission unit not listed in the RES, the facility may elect to submit the appropriate limited or comprehensive plan application without modification to the RES. In this case, the potential to emit approved under the LPA or CPA will become additive to the potential of the emission units listed in the RES. It is the responsibility of the facility to ensure that the combined potential to emit will not exceed relevant regulatory thresholds.

(d) Construction with No Increase in RES Cap. If it is proposed to modify a RES approval to construct, substantially reconstruct or alter a facility, amend terms or conditions of the RES approval, and the construction, substantial reconstruction or alteration will not increase the facility-wide emission limit, the applicant shall:

1. File an application with the Department at least 30 days prior to the change at the facility that requires modification of the RES approval;

2. Provide a complete description of the proposed changes on forms obtained from the Department or by other means required by the Department;

3. Submit the application in duplicate, signed by a responsible official as being accurate and complete;

4. Provide in the application documentation of the equipment or procedure that will be used to ensure that short and long term emissions shall not exceed the limits in the RES approval including but not limited to, emission monitoring, and daily or monthly recordkeeping;

5. Provide a determination of BACT for those emission units not exempt from plan approval; and

6. Provide in the application a demonstration that the proposed construction, substantial reconstruction, or alteration is not subject to Nonattainment New Source Review (310 CMR 7.00: *Appendix A*) or MACT (40 CFR 63).

(e) Procedures for 310 CMR 7.02(10(d). For applications made pursuant to 310 CMR 7.02(10)(d), construction, substantial reconstruction or alteration may commence 30 days after receipt of the application for a modified RES under 310 CMR 7.02(10)(d) by the Department, unless the applicant is notified by the Department that other permits may be necessary. Operation of the newly constructed, substantially reconstructed or altered emission unit shall not occur until the public review process procedures of 310 CMR 7.02(9)(g) are complete at which time the modification will satisfy plan approval requirements of 310 CMR 7.02 (3), (4), and (5).

(f) Return to Major Source Status. If construction, substantial reconstruction or alteration of a facility operating under a RES approval results in an increase in emissions at the facility so that the facility can no longer stay below major source threshold(s), then the owner or operator of the facility must comply with the requirements of 310 CMR 7.00 applicable to major sources including, but not limited to, the implementation of RACT (310 CMR 7.18 and 310 CMR 7.19) and the requirement to obtain an operating permit (310 CMR 7.00: *Appendix C*).

7.02: continued

(11) U 50% or 25% Facility Emission Cap Notification.

(a) General.

1. 310 CMR 7.02(11) is an alternative means for an owner or operator to establish an emission cap on a facility's federal potential to emit. An owner or operator complying with 310 CMR 7.02(11) will no longer be subject to the restrictions established in the facility's RES granted pursuant to 310 CMR 7.02(9), or the requirements pursuant to 310 CMR 7.00: *Appendix C* after the Department has returned to the owner or operator a copy of the processed notification form.

2. Failure to comply with the emission cap set forth at 310 CMR 7.02(11)(e) or (f) means that an owner or operator is subject to all previously applicable requirements, including but not limited to, 42 U.S.C. 7401, § 112 (Title III), § 501 (Title V) and 40 CFR 52.21, or 310 CMR 7.18 (only where applicability is determined by the facility's potential to emit), 310 CMR 7.19, 310 CMR 7.00: *Appendix A* and/or 310 CMR 7.00: *Appendix C*.

3. Applicability of § 112 (Title III) may be avoided pursuant to 310 CMR 7.02(11) only where the owner or operator complies with 310 CMR 7.02(11) prior to the first substantive requirement of the applicable MACT standard. The first compliance date is defined as the date an owner or operator must comply with an emission limitation or other substantive regulatory requirement.

(b) Duty to Comply. Operation under 310 CMR 7.02(11) does not relax or eliminate any emission limitation(s), or recordkeeping requirement(s) established by regulation or previously issued source specific plan approval(s) or emission control plan(s). Annual emission limitations established by regulation or source specific plan approval or emission control plan, may not be less stringent than the emission limitations established at 310 CMR 7.02(11)(e) and (f).

(c) Plan Approval. Notwithstanding 310 CMR 7.02(11)(a), an owner or operator is subject to preconstruction plan approval pursuant to 310 CMR 7.02(1) for future construction, substantial reconstruction or alteration at the facility.

(d) Application Requirements. An owner or operator electing to comply with 310 CMR 7.02(11) shall notify the Department on forms provided by the Department, of his/her intentions to operate under one of the emission caps established at 310 CMR 7.02(11)(e) or (f), and that the facility's actual emissions in the prior calendar year were equal to or less than the emission cap. This facility wide emission cap shall remain in effect until the owner or operator notifies the Department.

(e) 50% Cap Requirements. For owners or operators electing 50% emission cap, in every 12-month period (rolling 12-month), the potential and actual emissions of the facility shall be less than or equal to the following limitations:

1. 25 tons per year of VOC or $NO_x$, or 50 tons per year of any other regulated air pollutant;
2. 5 tons per year of a single HAP;
3. 12.5 tons per year of any combination of HAPs; and
4. 50% of any lesser threshold for a single HAP that the EPA may establish by rule.

(f) 25% Cap Requirements. For owners or operators electing 25% emission cap, in every 12-month period (rolling 12-month), the potential and actual emissions of the facility shall be less than or equal to the following limitations:

1. 15 tons per year of VOC or $NO_x$, or 25 tons per year of any other regulated air pollutant;
2. 2.5 tons per year of a single HAP;
3. 6.25 tons per year of any combination of HAPs, and
4. 25% of any lesser threshold for a single HAP that the EPA may establish by rule.

(g) Eligible Restrictions. The owner or operator may take into account the operation of air pollution control equipment when calculating the facility's potential emissions, if the equipment is required by Federal or State regulations, or operated in accordance with 310 CMR 7.02(1) or 7.03, or an emission control plan issued pursuant to 310 CMR 7.18 or 310 CMR 7.19.

(h) Record Keeping. The owner or operator electing to operate under one of the emission caps established at 310 CMR 7.02(11)(e) or (f), shall establish and maintain records of actual emissions. Such information shall be summarized in a monthly log, maintained on site for five years, be made available to the Department or EPA staff upon request, and contain the following items where applicable:

7.02: continued

1. Coating or Solvent Usage.
   a. A list of process related coatings, solvents, inks and adhesives in use. This list shall include: information on the VOC and HAPs content in lbs per gallon as applied;
   b. A description of production equipment including type, make and model; maximum design process rate or throughput; control device(s) type and description (if any); and a description of the coating/solvent application/drying method(s) employed;
   c. A monthly log of the gallons consumed of each production solvent (including solvents used in clean-up and surface preparation), coating, ink and adhesive used;
   d. All purchase orders, invoices, and other documents to support information in the monthly log; and
   e. The emissions of VOC from any coating used in small amounts are exempt from the emission limitations provided the amount of all coatings exempted does not exceed 55 gallons on a rolling 12 month period. A list of coatings used in small amounts shall be established and records of the consumption of these coatings shall be maintained.
2. Organic Liquid Storage.
   a. A monthly log identifying the liquid stored and monthly throughput;
   b. Information on the tank design and specifications including control equipment; and
   c. The emissions of VOC from any coating used in small amounts are exempt from the emission limitations provided the amount of all coatings exempted does not exceed 55 gallons on a rolling 12 month period. A list of coatings used in small amounts shall be established and records of the consumption of these coatings shall be maintained.
3. Fuel Utilization Facility.
   a. Information on equipment type, make and model, maximum power input/output, minimum operating temperature and capacity, control equipment and all source test information;
   b. A monthly log of hours of operation, fuel type, fuel usage in gallons or tons as appropriate, fuel heating value, percent sulfur for fuel oil and coal; and
   c. All purchase orders, invoices, and other documents to support information in the monthly log.
4. Air Pollution Control Equipment.
   a. Information on equipment type and description, make and model, and emission units served by the control unit;
   b. Information on equipment design including where applicable: pollutants(s) controlled; control effectiveness; maximum design or rated capacity; inlet and outlet temperatures, and concentrations for each pollutant controlled; catalyst data (type, material, life, volume, space velocity, ammonia injection rate and temperature); baghouse data (design, cleaning method, fabric material, flow rate, air/cloth ratio); electrostatic precipitator data (number of fields, cleaning method, and power input); scrubber data (type, design, sorbent type, pressure drop); other design data as appropriate; all source test information; and
   c. A monthly log of hours of operation including notation of any control equipment breakdowns, upsets, repairs, maintenance and any other deviations from design parameters.
5. Not Otherwise Classified Process.
   a. Information on the process and equipment including the following: equipment type, description, make and model, maximum design process rate or throughput, control device(s) type and description (if any);
   b. Any additional information requested in writing by the Department;
   c. A monthly log of operating hours, each raw material used and its amount; and
   d. Purchase orders, invoices, and other documents to support information in the monthly log.

(i) Reporting. In order to document compliance and maintain an emissions inventory, the Department may require reporting from any owner or operator of a facility with an emissions cap established at 310 CMR 7.02(11)(e) or (f).

7.02: continued

(12) U Consolidation of Applicable Requirements.

(a) General. Any person who owns, leases, operates or controls a facility may apply to the Department to consolidate the facility's applicable requirements into a single plan approval to streamline the emission limitations, monitoring, emission testing, recordkeeping and reporting and other requirements as contained in the facility's plan approval(s), emission control plan(s) or other document(s) issued by the Department pursuant to any regulation under 310 CMR 7.00.

(b) 310 CMR 7.02(12) is only for use when the facility is not subject to the Department's operating permit and compliance program, 310 CMR 7.00: *Appendix C*. If the facility subsequently becomes subject to the operating permit and compliance program, the requirements of the consolidated plan approval will be incorporated into the facility's operating permit.

(c) When a consolidation application is made in conjunction with an application to construct, substantially reconstruct or alter the facility under 310 CMR 7.02(4) or (5), the decision concerning consolidation will be made under 310 CMR 7.02(12) following issuance of the plan approval.

(d) Application Requirements. An application to consolidate the applicable requirements shall, at a minimum:

1. Be made on form(s) obtained from the Department or by other means prescribed by the Department.
2. Be submitted in duplicate and signed by a responsible official.
3. Contain the following information for each emission unit in the application:
   a. an emission-unit-by-emission-unit, side-by-side comparison of all requirements to which the emission unit is subject;
   b. A determination of the most stringent emission limitations and/or performance standards and the documentation relied upon to make this determination;
   c. A set of proposed terms and conditions which detail the most stringent emissions limitations and/or standards, appropriate monitoring and its associated recordkeeping and reporting, and such other proposed conditions as are necessary to assure compliance with all applicable requirements; and
   d. A proposed schedule to implement any new monitoring/compliance approach relevant to a consolidated plan approval if the owner/operator of the facility requires additional time to implement the streamlined terms and conditions. The current record keeping, monitoring, and reporting requirements (applicable requirements) shall continue to apply until the new monitoring/compliance approach is operational.

(e) Form of Approval. Any consolidated plan approval issued by the Department shall be in writing.

(f) Conditions of Approval. A consolidated plan approval shall include:

1. A combination of production and/or operational limitations to ensure that emissions are limited by quantifiable and enforceable means.
2. Emissions limitations and control requirements that are at least as stringent as those imposed by the facility's applicable requirements.
3. A requirement to maintain records and conduct monitoring sufficient to demonstrate that emissions limitations and other applicable requirements are being achieved;
4. Reporting on a schedule as determined by the Department;
5. A list of previously issued plan approvals, emission control plans and other documents addressing the applicable requirements of the emission units covered by the consolidated plan approval; and
6. Other conditions as deemed necessary by the Department based on the applicable requirements.

(13) U Administrative Amendment to Plan Approval.

(a) An administrative amendment to a plan approval is required for the following:

1. A change in the business name, facility name, mailing address, telephone number or name of the facility contact; or
2. A change in the ownership of the facility that is subject to the plan approval; or
3. An increase in the frequency of recordkeeping, monitoring, reporting or testing above that previously specified in the plan approval; or

7.02: continued

4. Where the Department or the owner/operator of the facility determines that a plan approval has typographical errors; or

5. Other changes the Department determines are necessary for the effective administration of the Commonwealth's air pollution control program.

(b) The Department or the owner/operator may propose an administrative amendment to a plan approval on Department forms or in a format provided by the Department.

1. If the Department determines a plan approval should be amended, the Department will provide the owner/operator with a draft amended plan approval for review.

2. If the owner/operator determines a plan approval should be amended, the owner/operator shall submit an application for an administrative amendment to the Department within 60 days of the change described in 310 CMR 7.02(13)(a).

NON-TEXT PAGE

7.02: continued

(c) The administrative amendment shall take effect 30 days after receipt by the owner/operator or the Department respectively, unless prior to the expiration of the 30 days:

1. The owner or operator contests the administrative amendment in writing, or
2. The Department disapproves the proposed amendment in writing.

(d) In addition to complying with 310 CMR 7.02(13)(a) and (b), the owner/operator of a facility for which a final operating permit has been issued in accordance with the provisions of 310 CMR 7.00: *Appendix C*, shall comply with the Administrative Amendment procedures contained in 310 CMR 7.00: *Appendix C*(8).

7.03: U Plan Approval Exemption: Construction Requirements

(1) General.

(a) Any person who constructs, substantially reconstructs or alters, and subsequently operates an emission unit listed herein, may comply with the specific requirements of 310 CMR 7.03)(5) through (7) in *lieu* of filing either a Comprehensive Plan Application (CPA) required by 310 CMR 7.02(5)(a) or a Limited Plan Application (LPA) required by 310 CMR 7.02(4)(a), except as provided in 310 CMR 7.03(2).

(b) Under 310 CMR 7.03, VOC shall include Volatile Organic Compounds (VOC) and Halogenated Organic Compounds (HOC) as defined in 310 CMR 7.00.

(c) Nothing in 310 CMR 7.03 relieves a person who owns, operates, leases or controls a facility from having to comply with other applicable requirements of 310 CMR 7.00.

(d) 1. Any person who constructs, substantially reconstructs, or alters and subsequently operates an emission unit in accordance with 310 CMR 7.03(8), (15), (16) or (19) shall limit the facility-wide emission of any individual hazardous air pollutant (HAP) to less than 10 tons in each consecutive 12 month time period, and all combined HAPs to less than 25 tons in each consecutive 12 month time period.

2. The limits specified in 310 CMR 7.03(1)(d)1. do not apply to an owner or operator subject to 310 CMR 7.00 Appendix C: *Operating Permit and Compliance Program*.

(2) Prohibition. 310 CMR 7.03 is not an alternative to obtaining a plan approval pursuant to 310 CMR 7.02 if construction, substantial reconstruction or alteration would violate requirements of:

(a) 310 CMR 7.02(5)(a)7. relating to Prevention of Significant Deterioration (PSD) requirements or the need for Non-attainment Review;

(b) 310 CMR 7.02(5)(a)8. and 9. relating to plan approvals, Nonattainment Review approval or PSD permits, or MACT requirements at 40 CFR 63.40 through .44

(c) 310 CMR 7.02(5)(a)10. relating to Department determinations of a potential condition of air pollution;

(d) 310 CMR 7.02(5)(a)5. relating to any incinerator;

(e) 310 CMR 7.02(4)(a)3. relating to plan approvals; or

(f) 310 CMR 7.02(4)(a)4. relating to significant increase in federal potential emissions.

(3) Including Emission Units in Calculation of Net Emission Increase. Persons who construct, substantially reconstruct or alter an emission unit that complies with the requirements of 310 CMR 7.03 must include said emission unit in calculating significant net emission increase and determining applicability of Non-attainment New Source Review, 310 CMR 7.00: *Appendix A*, PSD (40 CFR 52.21) or Case-by-case MACT (310 CMR 7.02(5)(e)).

(4) Emission Units Constructed or Altered Since 1970.

(a) Persons who construct, substantially reconstruct, alter, or subsequently operate an emission unit after July 1, 1970 in the Metropolitan Boston Air Pollution Control District and after September 15, 1970 in all other districts are not required to obtain plan approval if said emission unit complies with the requirements of 310 CMR 7.03(5) through (7), *et seq.* and is not prohibited by 310 CMR 7.03(2).

(b) Persons who already have plan approval for emission units that might otherwise be subject to 310 CMR 7.03 must continue to comply with the terms and conditions of the plan approval and are not subject to the requirements of 310 CMR 7.03.

7.03: continued

(5) Reporting. Any construction, substantial reconstruction or alteration, as described in 310 CMR 7.03, at a facility subject to the reporting requirements of 310 CMR 7.12, shall be reported to the Department on the next required source registration.

(6) Record-keeping. A record-keeping system shall be established and continued in sufficient detail to document the date of construction, substantial reconstruction or alteration and that the respective emission rates, operational limitations, equipment specifications and other requirements pursuant to 310 CMR 7.03 are met. All records shall be maintained up-to-date such that year-to-date information is readily available for Department examination.

(7) Operation. No person shall operate a facility constructed, substantially reconstructed or altered pursuant to 310 CMR 7.03 except in conformance with the requirements established herein. This exemption from the requirements of 310 CMR 7.02(4) and (5) shall not affect the responsibility of the owner or operator to comply with other provisions of 310 CMR 7.00, other applicable regulations or any plan approval, notice of noncompliance order, PSD permit or other approval issued to said facility.

(8) Degreaser. Construction, substantial reconstruction or alteration of any degreaser in compliance with the criteria established in 310 CMR 7.18(8), regardless of the item being degreased, with a solvent consumption rate of less than 100 gallons per month. Consumption rate is the amount of solvent added into the unit less any documented solvent waste disposal or recycling amounts, each in gallons per month.

(9) Wave Solder. Construction, substantial reconstruction or alteration of an oil-less wave solder operation or any wave solder operation with a flux consumption rate, including any thinner, of less than 200 gallons per month, either equipped with an electrostatic precipitator capable of maintaining a particulate control efficiency of greater than 90% or emitting visible emissions with 0% opacity.

(10) Emergency or Standby Engine.

(a) On or after June 1, 1990, but prior to March 23, 2006, construction, substantial reconstruction or alteration of any emergency or standby engine shall comply with 310 CMR 7.03(10)(a) through (c). All such emergency or standby engines shall:

1. Have an energy input capacity of equal to or greater than 3,000,000 Btu per hour and less than or equal to 10,000,000 Btu per hour; and
2. Be equipped with an exhaust gas silencer so that sound emissions from the generator will not cause or contribute to a condition of air pollution; and
3. Utilize an exhaust stack that discharges so as to not cause or contribute to a condition of air pollution, and
4. Not operate more than a total of 300 hours per rolling 12 month period, and only during:
   a. The normal maintenance and testing procedure as recommended by the manufacturer; and
   b. Periods of electric power outage due to failure of the grid, in whole or in part, on-site disaster, local equipment failure, flood, fire or natural disaster; and
   c. When the imminent threat of a power outage is likely due to failure of the electrical supply or when capacity deficiencies result in a deviation of voltage from the electrical supplier to the premises of 3% above or 5% below standard voltage, or periods during which the regional transmission organization directs the implementation of voltage reductions, voluntary load curtailments by customers, or automatic or manual load shedding within Massachusetts in response to unusually low frequency, equipment overload, capacity or energy deficiency, unacceptable voltage levels, or other emergency conditions.

(b) On and after July 1, 2007, no person shall accept for delivery for burning in any engine subject to 310 CMR 7.03(10), diesel or any other fuel that does not meet the applicable U.S. Environmental Protection Agency sulfur limits for fuel pursuant to 40 CFR 80.29, 40 CFR 80.500, and 40 CFR 80.520(a) and (b) as in effect January 18, 2001.

(c) Reporting and record keeping requirements for 310 CMR 7.03(10), as required by 310 CMR 7.03(5) and (6), shall be in accordance with 310 CMR 7.02(8)(i)3. through 4.

7.03: continued

(11) Lead Melt Pots. Construction, substantial reconstruction or alteration of any lead melt pot(s) equipped with fabric filter control capable of maintaining 99.5% control efficiency of particulate matter.

(12) Dry Material Storage Silo. Construction, substantial reconstruction or alteration of any storage silo equipped with fabric filter control capable of maintaining 99.5% control efficiency.

(13) Motor Vehicle Fuel Dispensing Facility. Construction, substantial reconstruction or alteration of a vapor collection and control system (Stage I and/or Stage II) at a motor vehicle fuel dispensing facility, provided that such system meets the requirements of 310 CMR 7.24(2) and (6), and the Department is notified of said installation.

((14) Reserved)

(15) Non-heatset Offset Lithographic Printing. On or after July 1, 1992 construction, substantial reconstruction or alteration of any non-heatset offset lithographic printing press, except such presses present at a facility subject to 310 CMR 7.26(20), utilizing VOC containing compounds, including, but not limited to, makeup solvents, fountain solution additives, alcohol and cleanup solutions, complying with the following criteria:

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7.03: continued

(11) Lead Melt Pots. Construction, substantial reconstruction or alteration of any lead melt pot(s) equipped with fabric filter control capable of maintaining 99.5% control efficiency of particulate matter.

(12) Dry Material Storage Silo. Construction, substantial reconstruction or alteration of any storage silo equipped with fabric filter control capable of maintaining 99.5% control efficiency.

(13) Motor Vehicle Fuel Dispensing Facility. Construction, substantial reconstruction or alteration of a vapor collection and control system (Stage I and/or Stage II) at a motor vehicle fuel dispensing facility, provided that such system meets the requirements of 310 CMR 7.24(2) and (6), and the Department is notified of said installation.

((14) Reserved)

(15) Non-heatset Offset Lithographic Printing. On or after July 1, 1992 construction, substantial reconstruction or alteration of any non-heatset offset lithographic printing press, except such presses present at a facility subject to 310 CMR 7.26(20), utilizing materials containing VOCs or organic material, including but not limited to, printing inks, overprint coatings, makeup solvents, fountain solution additives, alcohol and cleanup solutions, complying with the applicable performance standards set forth in 310 CMR 7.03(15)(b) and (15)(c) shall be subject to the requirements in either 310 CMR 7.03(15)(a)1. or (a)2.

(a)1. The total facility, including the new or modified printing press, shall use less than 670 gallons per month of all materials containing VOCs, or alternatively, its emission rate shall be less than 2.5 tons of VOC per calendar month. This emission rate shall include emissions from all printing and non-printing operations at the facility, including, but not limited to, non-heatset offset lithographic printing presses. The owner/operator is subject to the reporting requirements of 310 CMR 7.12.

2. The total facility, including the new or modified printing press, shall use less than 2,000 gallons per 12-month rolling period of all materials containing organic material (includes VOC), or, alternatively, shall emit less than ten tons of organic material (includes VOC), per 12-month rolling period. This emission rate shall include emissions from all printing and non-printing operations at the facility, including, but not limited to, non-heatset offset lithographic printing presses. The owner/operator is not subject to the reporting requirements of 310 CMR 7.12 unless otherwise required.

(b) Non-heatset offset lithographic printing presses subject to 310 CMR 7.03(15) and employing a fountain solution containing VOC shall meet the following specifications:

1. For web presses installed prior to May 1, 1998:
   a. The fountain solution shall be maintained at 1.6% by volume or less of alcohol; or
   b. The fountain solution shall be maintained at 3% by volume or less of alcohol and the fountain solution refrigerated to a temperature of less than 60°F.
2. For web presses installed on or after May 1, 1998, the fountain solution shall not contain any alcohol.
3. For sheet-fed presses with cylinder widths greater than 21 inches installed before July 1, 1992:
   a. The fountain solution shall be maintained at 5% by volume or less of alcohol; or,
   b. The fountain solution shall be maintained at 8% by volume or less of alcohol and the fountain solution refrigerated to a temperature of less than 60°F.
4. For sheet-fed presses with cylinder widths greater than 21 inches installed on or after July 1, 1992:
   a. The fountain solution shall be maintained at 3% by volume or less of alcohol; or
   b. The fountain solution shall be maintained at 5% by volume or less of alcohol and the fountain solution refrigerated to a temperature of less than 60°F.
5. For sheet-fed presses with cylinder widths less than or equal to 21 inches, installed before July 1, 1992, the fountain solution shall be maintained at 10% by volume or less of alcohol.
6. For sheet-fed presses with cylinder widths of less than or equal to 21 inches, installed on or after July 1, 1992, the fountain solution shall be maintained at 5% by volume or less of alcohol.
7. For newspaper printing, the fountain shall contain 0% alcohol.

7.03: continued

8. Any VOC-containing fountain additive other than alcohol shall be limited to a mix ratio that will result in a VOC concentration in the fountain solution, excluding alcohol, equal to or less than 2.5% by volume.

(c) Cleanup solution containing VOC shall meet the following criteria:

1. Cleanup solution as used at the press shall either:
   a. not exceed 30% by weight VOC; or
   b. have a VOC composite partial pressure of 10 mmHg or less at 20°C (68°F).
2. Cleanup solution shall be kept in tightly covered containers during transport and storage; and
3. The used cleaning rags used in conjunction with the cleanup solution shall be placed, when not in use, in closed containers and collected for proper disposal or recycle.

(d) Any person subject to 310 CMR 7.03(15) shall maintain records sufficient to demonstrate compliance. Records kept to demonstrate compliance shall be kept on-site for three years and shall be made available to representatives of the Department upon request. Such records shall include, but are not limited to:

1. Identity, formulation (percent VOC by weight as determined by the manufacturer's formulation data or EPA Method 24 or 24A test), and quantity (gallons per calendar month) for each VOC-containing compound used at the facility, including, but not limited to:
   a. Alcohol;
   b. Makeup solvent;
   c. Fountain additives;
   d. Printing Ink;
   e. Cleanup solution; and
   f. Overprint coatings.
2. The percent by volume of alcohol in the fountain solution as measured each time alcohol or alcohol mix is added to the system but no less than once per day;
3. The volume percent of VOC-containing fountain additives other than alcohol in the fountain solution;
4. For fountain solutions subject to refrigeration requirements of 310 CMR 7.03(15)(b), the temperature of the fountain solution, as recorded on a once per shift basis; and
5. Total VOC emissions (tons per calendar month) for all printing presses combined at the facility, as described in 310 CMR 7.03(15)(a).

(16) Paint Spray Booths. Construction, substantial reconstruction or alteration of any paint spray booth utilizing coatings, thinners, reducers and cleanup solutions, and complying with the applicable performance standard of 310 CMR 7.03(16)(b)l. shall be subject to the requirements in either 310 CMR 7.03(16)(a)1. or (a)2.

(a) 1. The total facility, including the new or modified paint spray booth, shall use less than 670 gallons per calendar month of all materials containing VOCs, or alternatively, has an emission rate of less than 2.5 tons of VOC per calendar month. This emission rate includes all coating operations at the facility. The owner/operator is subject to the reporting requirements of 310 CMR 7.12.

2. The total facility, including the new or modified paint spray booth, shall use less than 2,000 gallons per 12-month rolling period of any material containing organic material (includes VOC), or alternatively, has an emission rate less than ten tons of organic material (includes VOC) per 12-month rolling period. This emission rate includes all coating operations at the facility. The owner/operator is not subject to the reporting requirements of 310 CMR 7.12 unless otherwise required.

(b) The coating operation shall be of a type described in 310 CMR 7.18, regardless of annual or potential emission applicability criteria contained in 310 CMR 7.18. These operations are:

310 CMR 7.18(3) Metal Furniture Surface Coating;
310 CMR 7.18(4) Metal Can Surface Coating;
310 CMR 7.18(5) Large Appliance Surface Coating;
310 CMR 7.18(6) Magnetic Wire Insulation Surface Coating;
310 CMR 7.18(7) Automobile Surface Coating;
310 CMR 7.18(10) Metal Coil Coating;
310 CMR 7.18(11) Surface Coating of Miscellaneous Metal Parts and Products;
310 CMR 7.18(21) Plastic Parts Surface Coating;

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310 CMR 7.18(22) Leather Surface Coating;
310 CMR 7.18(23) Wood Products Surface Coating;
310 CMR 7.18(24) Flat Wood Paneling Surface Coating; and
310 CMR 7.18(28) Automotive Refinishing

Operations not listed in 310 CMR 7.03(16)(b) are not covered by this exemption and require either a Limited Plans Application (LPA) or Comprehensive Plans Application (CPA) as required by 310 CMR 7.02.

(c) Except as provided in 310 CMR 7.18(11)(a)1., all coatings used in the new or modified spray booth shall comply with the as-applied formulations contained in 310 CMR 7.18 *et seq*., for the spray coating of material described by the relevant subsection. Notwithstanding the previous statement, for any person who owns, leases, operates or controls a facility with coating operation(s) subject to 310 CMR 7.03(16), the emissions of VOC from any coatings used in small amounts at the facility are exempt from the emission limitations of the relevant subsection, provided the person satisfies the following conditions:

1. the total amount of all coatings exempted does not exceed 55 gallons during any rolling 12 month period at the facility; and,
2. the person identifies and tracks the usage of the coatings covered by this exemption; and,
3. the person complies with the record keeping and testing requirements of the applicable section(s) of 310 CMR 7.03(16)(b).

(d) Spray guns shall utilize one of the following methods of spray application and be maintained and operated in accordance with the recommendations of the manufacturer:

1. Electrostatic spray application; or
2. High Volume Low Pressure (HVLP) spray application; or
3. Any other coating application method that achieves a transfer efficiency equivalent to electrostatic or HVLP spray application and is approved by the Department in writing.

(e) Each paint spray booth shall utilize two or more layers of dry fiber mat filter with a total thickness of at least two inches or an equivalent system as determined in writing by the Department and that achieves particulate control efficiency of at least 97% by weight. Filter material shall be disposed in accordance with all applicable DEP regulations.

(f) Face velocity of air at filter shall not exceed 200 feet per minute.

(g) For surface preparation, prior to coating, the VOC content of any surface preparation solution shall not exceed 1.67 pounds per gallon. However, for surface preparation of plastic parts the VOC content of the surface preparation solution shall not exceed 6.5 pounds of VOC per gallon.

(h) Spray guns shall be cleaned in a device that:

1. minimizes solvent evaporation during the cleaning, rinsing, and draining operations;
2. recirculates solvent during the cleaning operation so that the solvent is reused; and,
3. collects spent solvent in a container with a tight-fitting cover so that it is available for proper disposal or recycling.

(i) The paint spray booth shall have a stack conforming to the following criteria:

1. The stack shall discharge vertically upwards;
2. The stack shall not have rain protection of a type that restricts the vertical exhaust flow;
3. The stack gas exit velocity shall be greater than 40 feet per second; and
4. The minimum stack exit height shall be 35 feet above the ground or ten feet above roof level.

(j) Emissions from stack shall have 0% opacity.

(k) Sufficient records shall be prepared and maintained to demonstrate compliance for each calendar month. Such records shall include, but are not limited to:

1. For each coating, as applied:
   a. Gallons of coating used;
   b. Coating density (Pounds per gallon);
   c. Pounds of VOC per gallon of coating;
   d. Pounds of solids per gallon of coating;
   e. Pounds of water per gallon of coating;
   f. Pounds of other non-VOC liquid per gallon of coating; and
   g. Pounds of VOC per gallon of solids as applied.

7.03: continued

2. Gallons of exempt/non-compliance coatings used; and
3. Gallons of cleanup solution used and pounds VOC per gallon; and
4. Maintenance records of filter pad replacement and disposal.

(l) As an alternative to 310 CMR 7.03(16)(k)1. and (k)2., persons subject to 310 CMR 7.18(28): *Automotive Refinishing* shall maintain purchase records of coatings and surface preparation products on a monthly basis. The purchase records shall be summarized and include coating category, coating or coating component, and surface preparation product as identified on the container, the quantity of each coating or component, and surface preparation product, and the VOC content (in pounds per gallon) of each coating and surface preparation product, after mixing according to the manufacturer's instructions. Records shall be kept for three years, and be made available to representatives of the Department upon request.

(17) Groundwater/Soil Venting Systems. Construction, substantial reconstruction or alteration of any Contaminated Groundwater Treatment System (CGTS) or contaminated soil venting system complying with the following criteria:

(a) CGTS or contaminated soil venting systems shall be equipped and operated such that the system continuously reduces VOC in air effluent stream by at least 95% (by weight). Such systems include, but are not limited to, the following:

1. CGTS followed by carbon adsorber, incinerator or equivalent air pollution control device; or
2. Contaminated soil venting followed by carbon adsorber, incinerator or equivalent air pollution control device.

(b) Systems shall be equipped and operated with the necessary procedures and instrumentation to assure operation in compliance with this standard including, but not limited to:

1. Interlock to prevent operation of the entire system without proper control device operation including, but not limited to, automatic shutoff if incinerator drops below normal operating temperature;
2. Inlet/outlet incinerator temperature indicators;
3. For a CGTS, flowmeter(s) indicating rate and total amount of groundwater being treated, if applicable; and
4. On-site regeneration of carbon or regularly scheduled replacement of carbon, if used.

(d) Sufficient records shall be prepared and maintained to demonstrate emissions compliance for each month. Records shall include, but are not limited to, the following, as applicable:

1. Once per month, measurement of water flow rate and total flow to date for the month;
2. For a CGTS, once per month measurement of inlet and effluent water VOC concentration;
3. Once per month, measurement of VOC concentration in air prior to control, and VOC concentrations after control;
4. Once per month, measurement of overall VOC reduction efficiency of the air pollution control system in percent by weight;
5. Maintenance records of the system;
6. Monthly operating hours of the system;
7. Once per month, measurement of incinerator outlet temperatures; and
8. Carbon regeneration/replacement records.

(18) Fuel Cells. Construction, substantial reconstruction or alteration of any fuel cell(s) complying with the following criteria:

(a) The emissions from the fuel cell will not exceed the following standards based upon a one hour averaging time:

1. NOx - 0.03 pounds per megawatt hour.
2. Carbon Monoxide - 0.05 pounds per megawatt hour.
3. Non methane organic compounds - 0.008 pounds per megawatt hour.

(b) Any person subject to 310 CMR 7.03(18) shall keep records of monthly electric generation.

7.03: continued

(19) Flexographic, Gravure, Letterpress and Screen Printing. On and after May 1, 1998, construction, substantial reconstruction, or alteration of any flexographic, gravure, letterpress, or screen printing press at a facility not subject to 310 CMR 7.26(20) through (29), utilizing materials containing VOC or organic material, including but not limited to, printing inks and overprint coating, alcohol, makeup solvents, and cleanup solutions complying with the applicable performance standards in 310 CMR 7.26(25) and 310 CMR 7.26(26) shall be subject to the limits and reporting requirements in either 310 CMR 7.03(19)(a)1. or (a)2.

(a) 1. The total facility, including the new or modified printing press, and non-printing operations at the facility shall use less than 670 gallons per calendar month of all materials containing VOCs or, alternatively, its emission rate shall be less than 2.5 tons of VOC per calendar month. The owner/operator is subject to the reporting requirements of 310 CMR 7.12.

2. The total facility, including the new or modified printing press, and non-printing operations at the facility, shall use less than 2,000 gallons per 12-month rolling period of all materials containing organic material (includes VOC) or alternatively, its emission rate shall be less than ten tons of organic material (includes VOC) per 12-month rolling period. The owner/operator is not subject to the reporting requirements of 310 CMR 7.12 unless otherwise required.

(b) Any person subject to 310 CMR 7.03(19) shall maintain records sufficient to demonstrate compliance. Such records shall include, but not limited to, records demonstrating that cleanup solutions, inks, coatings, and adhesives are in compliance with applicable standards set forth in 310 CMR 7.26(20) through (29) and that the usage rate or the emissions rate do not exceed the rates set forth in 310 CMR 7.03(19)(a). Records kept to demonstrate compliance shall be kept on site for three years and shall be made available to representatives of the Department upon request.

(21) Corona Surface Treatment Devices. Construction, substantial reconstruction or alteration of any bare-roll or covered-roll corona surface treatment device equipped with a catalytic ozone decomposer designed to reduce ozone emissions by 99.9% or to an emission limit of 0.1 ppm at the catalytic device outlet.

(22) Conveyors, and Dry Material Storage (except Silos). Construction, substantial reconstruction or alteration of equipment used exclusively to convey or store dry solid materials in an enclosed system or equipped with a fabric filter or equivalent particulate control device capable of maintaining 99.5% control efficiency for particulate emissions. In addition, said operation shall not generate any visible emissions and shall comply with provisions of 310 CMR 7.10: *U Noise*. This standard is not applicable to conveyors and dry material storage associated with Standard Industrial Classification Code Major Group 1400 (Mining), Major Group 2900 (Petroleum and Coal products) and Major Group 3200 (Stone, Clay and Glass Products).

(23) Temporary Boilers. Construction or installation of a temporary boiler at a facility where a boiler is no longer available for use. A boiler is considered unavailable for use if it has been shut down for repair or inspection or is no longer available or operating due to circumstances beyond the control of the person who owns or operates the facility. Temporary boilers must meet the following conditions:

(a) Have a maximum heat input capacity less than or equal to the boiler it is replacing;
(b) Be installed for a period not to exceed 120 days;
(c) Use the same or lower sulfur content fuel as the boiler it is replacing; and
(d) Comply with all other applicable requirements for the boiler that it replaced.

The Department may grant an extension to operate the temporary boiler beyond 120 days. Such an extension shall be considered upon receiving a written request for an extension. Approval of an extension will be issued in writing.

(24) Welding. Construction, substantial reconstruction, alteration or operation of welding equipment provided that:

(a) The facility uses ten tons or less of welding rod per year; and
(b) Each welding station is equipped with a ventilation system designed to vent fumes and particulate to a particulate collection device having a control efficiency of 90% or greater.

7.03: continued

(25) Biotechnology Surface Disinfection Processes.

(a) Construction, substantial reconstruction, or alteration of any surface disinfection process used in making any of the following medical device, drug, or biologic products:

1. a product derived in whole or in part from biotechnology, and

2. one of the following applications or notices has been filed with U.S. Food and Drug Administration (FDA) for such product: an Investigational New Drug Application, an Investigational Device Exemption Notice, a New Drug Application, a premarket approval application, or a premarket notification pursuant to section 510(k) of the federal Food, Drug and Cosmetic Act (510(k)) (including an FDA-approved exemption from the 510(k) premarket notification requirement).

(b) Surface disinfection processes shall comply with the following criteria:

1. The total facility-wide actual emissions, including new or modified surface disinfection processes, shall comply with the requirements in either 310 CMR 7.03(25)(b)1.a. or 1.b.

a. 15 tons of volatile organic compounds (VOC) per 12-month rolling period. This VOC emission limitation includes all process operations at the facility. In addition, facility-wide actual emissions of VOC shall not exceed 2.5 tons per calendar month. The owner/operator is subject to the reporting requirements of 310 CMR 7.12.

b. Less than ten tons of materials containing organic material (includes VOC) per 12-month rolling period. This organic material emission limitation includes all process operations at the facility. The owner/operator is not subject to the reporting requirements of 310 CMR 7.12 unless otherwise required.

2. The total facility-wide actual emissions, shall not exceed nine tons of any single Hazardous Air Pollutants (HAP as defined at 40 CFR Part 63) per 12-month rolling period, and shall not exceed 15 tons of any combination of (total) HAP per 12-month rolling period. In addition, facility-wide actual emissions of any individual HAP shall not exceed two tons per calendar month, and any combination of (total) HAP shall not exceed three tons per calendar month.

3. Processes that emit or will emit VOCs or HAPs in exceedance of limitations for VOCs and HAPs established in 310 CMR 7.02(25)(b)1. or (b)2., are subject to 310 CMR 7.02(5): Comprehensive Plan Approval (CPA), and a person shall obtain written Department plan approval prior to commencement of construction, installation and operation of said processes.

4. Combustion processes that support processes subject to 310 CMR 7.03(25) are subject to regulatory standards found at 310 CMR 7.02: Plan Approval and Emission Limitations, 310 CMR 7.03: Plan Approval Exemption: Construction Requirements, or 310 CMR 7.26: Industry Performance Standards.

5. Cleaning, sterilization, disinfection, and other operations:

a. Cleaning, sterilization, disinfection, and other solutions which contain VOC shall be kept in tightly closed containers when not in active use and during transport and storage, and

b. The spent cleaning cloths and/or wipes used in conjunction with the cleaning and sterilization solutions shall be placed, after use, in tightly closed containers and collected for proper recycling or disposal.

6. Any person subject to this regulatory standard shall maintain records sufficient to demonstrate compliance with 310 CMR 7.03(25) for each calendar month. Records kept to demonstrate compliance with 310 CMR 7.03(25) shall be maintained on-site for five years and shall be made available to representatives of the Department upon request. For each process and operation, such records shall include, but not be limited to:

a. Gallons of VOC used;

b. Pounds of VOC used;

c. Gallons of individual and total HAP used; and

d. Pounds of individual and total HAP used.

(26) Rock Crushing and Processing Operations - Existing Equipment Replacement.

(a) Applicability on and after July 24, 2009. 310 CMR 7.03(26) shall apply to the replacement of equipment at a rock crushing and processing facility operating with a written plan approval from the Department under the provisions of 310 CMR 7.02.

7.03: continued

(b) Definitions. When used in 310 CMR 7.03(26) the following terms shall mean:

1. Conveying Systems means a device for transporting materials from one piece of equipment or location to another piece of equipment or location.

2. Crusher means a machine used to crush nonmetallic minerals into smaller pieces, and includes, but is not limited to, the following types: jaw, gyratory, cone, roll, rod mill, hammermill, and impactor.

3. Dust Suppression System means a water spray system designed to minimize fugitive emissions throughout the rock crushing and processing operation.

4. Rock Crushing and Processing Equipment means a combination of equipment that is used to crush and sort nonmetallic minerals including, but not limited to, crushers, screening operators, conveying systems, dust suppression systems, feeders, and wash systems.

5. Screening Operation means a device for separating material according to size by passing undersized material through one or more mesh surfaces (screens) in series, and retaining oversized material on the mesh surfaces.

(c) Equipment Replacement. An owner or operator may replace rock crushing and processing equipment under the provisions of 310 CMR 7.03(26) provided that:

1. The rock crushing and processing equipment was previously approved by the Department in writing under the provisions of 310 CMR 7.02 and said approval is valid at the time of equipment replacement, and

2. Equipment replacement will not increase overall processing capacity or emissions (including noise) from the rock crushing and processing operation, and

3. The owner or operator complies with the provisions of 310 CMR 7.03(26) in its entirety, and

4. The rock crushing and processing operation shall be equipped with a dust suppression system that will limit opacity to less than 10% at all time, and

5. The rock crushing and processing operation will be operated in accordance with all applicable conditions and limitations contained in the Department's plan approval for the original equipment.

(d) Testing. Within seven days of recommencement of operation after completion of equipment replacement, visible emission observations shall be conducted for the rock crushing and processing operations in accordance with 40 CFR 60: *Appendix A Method 9* to verify compliance with 310 CMR 7.03(26)(c)4.

(e) Record Keeping. Records documenting any equipment replacement as provided in 310 CMR 7.03(26) and of visible emission observations as required by 310 CMR 7.03(26)(d) shall be maintained on-site in accordance with the provisions of 310 CMR 7.03(6).

(f) Reporting. Replacement of equipment shall be reported to the Department in accordance with the provisions of 310 CMR 7.03(5).

(g) Duty to Comply. Compliance with the provisions of 310 CMR 7.03(26) does not obviate the need to comply with 40 CFR 60 Subpart OOO if applicable.

7.04: U Fossil Fuel Utilization Facilities

((1) Reserved)

(2) U Smoke Density Indicator.

(a) on or after June 1, 1990, no person shall cause, suffer, allow, or permit the burning of any grade oil or solid fuel in any fuel utilization facility having an energy input capacity rated by the Department equal to or greater than 40,000,000 Btu per hour, unless such facility is equipped with a smoke density sensing instrument and recorder which are properly maintained in an accurate operating condition, operates continuously and is equipped with an audible alarm to signal the need for combustion equipment adjustment or repair when the smoke density is equal to or greater than No. 1 of the Chart. Such smoke density equipment shall be available for inspection at reasonable times by a representative of the Department. Such inspection may include the review of recording charts which must be retained and made available for a period of one year from the date of use.

(b) the Department may require any fuel utilization facility, other than those specified under the provision of 310 CMR 7.04 (2)(a) to be equipped with smoke density sensing devices and appurtenances if, in the opinion of the Department, such are deemed necessary.

7.04: continued

(c) On or after July 1, 2000 any person owning or operating a fuel utilization facility with an energy input capacity equal to or greater than 10,000,000 Btu per hour but less than 40,000,000 Btu per hour is no longer required to install or maintain a smoke density sensing instrument and recorder even if required in a previous plan approval. Applicability is based on the size of an individual fuel utilization emission unit.

(d) Notwithstanding the requirements of 310 CMR 7.04(2)(a) and (c), a new or modified fuel utilization facility may be required to install instrumentation to monitor opacity should it be subject to New Source Performance Standards contained at 40 CFR Part 60, Subparts D, Da, Db or Dc.

((3) Reserved)

(4) U Inspection, Maintenance and Testing.

(a) On and after December 31, 1977, no person shall cause, suffer, allow, or permit the operation of any fossil fuel utilization facility rated by the Department as having an energy input capacity equal to or greater than 3,000,000 Btu per hour unless said facility has been inspected and maintained in accordance with the manufacturers recommendations and tested for efficient operation at least once in each calendar year. The results of said inspection, maintenance, and testing and the date upon which it was performed shall be recorded and posted conspicuously on or near the facility. Unless otherwise required, 310 CMR 7.04(4)(a) shall not apply to stationary combustion turbines and stationary reciprocating engines.

(b) No person shall cause, suffer, allow, or permit the removal, alteration or shall otherwise render inoperative any air pollution control equipment which has been installed as a requirement of 310 CMR 7.00, other than for reasonable maintenance periods or unexpected and unavoidable failure of equipment.

(5) U Fuel Oil Viscosity. On or after July 1, 1978, no person shall cause, suffer, allow, or permit the burning of any grade residual oil in any fossil fuel utilization facility with an energy input capacity rated by the Department as equal to or greater than 250,000,000 Btu per hour unless said facility is equipped with an automatic viscosity controller that shall control the viscosity of the fuel oil to the burners. The automatic controller shall be of a type approved by the Department.

The Department may require a fossil fuel utilization facility with an energy input capacity rated by the Department as equal to or greater than 100,000,000 Btu per hour but less than 250,000,000 Btu per hour to be equipped with an automatic viscosity controller if, in the opinion of the Department, such is deemed necessary.

(6) U. No person shall cause, suffer, allow, or permit the installation or use of any material, article, machine, equipment, or contrivance which conceals an emission without reducing the total weight of emissions where such emission would constitute a violation of any applicable regulation.

(7) CM Prohibition of Unapproved Burners in the City of Worcester.

(a) Upon receipt of written notification from the Department, no person shall cause, suffer, allow, or permit the operation of a fossil fuel utilization facility having an energy input capacity greater than 3,000,000 Btu per hour located in the City of Worcester utilizing a burner or burners of a design not approved by the Department, without the approval of the Department pursuant to 310 CMR 7.00.

(b) 310 CMR 7.04(7)(a) shall not apply to those facilities having met any one of the following conditions:

1. demonstrated an ability to maintain compliance with applicable regulations;
2. demonstrated to the satisfaction of the Department that the fossil fuel utilization facility is used only as an emergency or standby unit; or
3. demonstrated to the satisfaction of the Department that utilization of distillate fuel oil in the fossil fuel utilization facility will not cause a violation 310 CMR 7.00.

(c) No person shall cause, suffer, allow, or permit the operation of any fossil fuel utilization facility subject to the provisions of 310 CMR 7.04(7)(a) unless said person has submitted a schedule to the Department on a form provided by the Department specifying the dates by which compliance with 310 CMR 7.04(7)(a) will be achieved. Compliance in all instances shall be achieved as expeditiously as practicable but in no case later than September 1, 1980.

7.04: continued

(8) CM Prohibition of Natural Draft in Fossil Fuel Utilization Facilities in the City of Worcester.

(a) Upon receipt of written notification from the Department, no person shall cause, suffer, allow, or permit the use of natural draft as a secondary air supply in a fossil fuel utilization facility having an energy input capacity greater than 3,000,000 Btu per hour located in the City of Worcester, without the approval of the Department pursuant to 310 CMR 7.00

(b) 310 CMR 7.04(8)(a) shall not apply to those facilities having met either of the following conditions:

1. demonstrated an ability to maintain compliance with applicable regulations; or
2. demonstrated to the satisfaction of the Department that the fossil fuel utilization facility is used only as an emergency or standby unit.

(c) No person shall cause, suffer, allow, or permit the operation of any fossil fuel utilization facility subject to the provisions of 310 CMR 7.04(8)(a) unless said person has submitted a schedule to the Department specifying the dates by which compliance with 310 CMR 7.04(8)(a) will be achieved. Compliance in all instances shall be achieved as expeditiously as practicable, but in no case later than September 1, 1980.

(9) Used Oil Fuel.

(a) Except as provided for in 310 CMR 7.04(9)(b) through (e), no person having control of a fossil fuel utilization facility shall cause, suffer, allow, or permit the burning therein of used oil fuel unless:

1. the Department has in writing approved the plans, specifications, Standard Operating Procedure, and maintenance procedure for the facility in which the used oil fuel is to be burned, and
2. the used oil fuel is burned in said facility in accordance with the plans, specifications, Standard Operating Procedure, and maintenance procedure as approved in writing by the Department, including all terms and conditions which the Department may include in such approval, and
3. a minimum combustion efficiency of 99.5% is achieved, and
4. the energy input capacity for each individual facility is equal to or greater than 3,000,000 Btu per hour.

(b) A person who, on July 1, 1986, was lawfully burning used oil fuel in a fossil fuel utilization facility other than a used oil fuel fired space heater may continue to do so

1. between that date and December 31, 1986 only if
   a. a minimum combustion efficiency of 99.5% is achieved, and
   b. the energy input capacity for each individual facility is equal to or greater than 3,000,000 Btu per hour, and
   c. the activity is in compliance with all applicable provisions of 310 CMR 7.00, except that specific approval by the Department to burn used oil fuel in the fossil fuel utilization facility shall not be required during that time, and
   d. the activity is in compliance with all applicable provisions of 310 CMR 30.099(16) and 310 CMR 30.200, including but not limited to the conditions set forth in 310 CMR 30.205, except that a recycling permit shall not be required during that time, and
2. after December 31, 1986 only if
   a. such person has applied in writing to the Department for the Department's approval of the plans, specifications, Standard Operating Procedure, and maintenance procedure for the fossil fuel utilization facility in which the used oil fuel is to be burned, and
   b. such application was received by the Department by no later than December 31, 1986, and
   c. such application has not been denied by the Department, and
   d. the activity is in compliance with all applicable provisions of 310 CMR 7.00, except that specific approval by the Department to burn used oil fuel in the fossil fuel utilization facility shall not be required while such application is pending, and
   e. the activity is in compliance with all applicable provisions of 310 CMR 30.099(16) and 310 CMR 30.200, including but not limited to the conditions set forth in 310 CMR 30.205, except that a recycling permit shall not be required while the application referred to in 310 CMR 30.099(16) is pending, and

7.04: continued

f. a minimum combustion efficiency of 99.5% is achieved, and

g. the energy input capacity for each individual facility is equal to or greater than 3,000,000 Btu per hour.

(c) No person shall sell or distribute, or offer for sale or distribution, any used oil fuel fired space heater unless the energy input capacity of the space heater is equal to or less than 500,000 Btu per hour.

(d) No person shall cause, suffer, allow, or permit the burning of used oil fuel in any space heater unless:

1. the energy input capacity of the space heater is equal to or less than 500,000 Btu per hour,

2. the combustion gases are vented vertically to the ambient air so as to not cause or contribute to a condition of air pollution,

3. the used oil fired space heater is integrally connected to a tank that supplies the used oil fuel to the space heater,

4. the used oil fired space heater is operated and maintained in accordance with the manufacturers recommended operating and maintenance procedures, and the used oil fired space heater is not operated during the period from June 15$^{th}$ through September 15$^{th}$,

5. the used oil fuel is burned at the site of generation, or off the site of generation as a supplemental fuel source, which may include used oil fuel generated and transported by a very small quantity generator pursuant to 310 CMR 30.353, or used oil fuel generated by a household as described in 310 CMR 30.104(6);

6. the used oil fuel is hazardous waste only because it is waste oil pursuant to 310 CMR 30.131, and has a flash point of 100$^{o}$F or higher; and

7. the burning of the used oil fuel in the used oil fuel fired space heater is done in compliance with all other applicable regulations and requirements of the Department, the local fire department and the Office of the Massachusetts State Fire Marshall.

7.05: U Fuels All Districts

(1) Sulfur Content of Fuels. (except natural gas)

(a) Maximum Sulfur Content of Fuel.

1. No person owning, leasing or controlling the operation of a fossil fuel utilization facility shall cause, suffer, allow or permit the burning therein of any fossil fuel having a sulfur content in excess of that listed in 310 CMR 7.05: *Table 1*, except as provided in 310 CMR 7.05(1)(b) and 7.05(2).

7.05: continued

TABLE 1
310 CMR 7.05(1)

| District/Area | Maximum Sulfur Content of Fuel<br>Maximum Heat Release<br>Potential (lb./MMBtu) | Approximate Sulfur<br>Content Equivalent by Weight |
|---|---|---|
| Berkshire APCD | 1.21 | 2.2 % |
| City of Worcester | 0.55 | 1.0 % |
| Remainder of Central MAPCD* | 0.55 | 1.0 % |
| City of Lawrence<br>Towns of Andover,<br>North Andover, and Methuen | 0.55 | 1.0 % |
| Remainder of<br>Merrimack Valley APCD* | 1.21 | 2.2 % |
| Cities and Towns<br>of Arlington, Belmont, Boston, Brookline, Cambridge, Chelsea, Everett, Malden, Medford, Newton, Somerville, Waltham, and Watertown** | 0.28 | 0.5 % |
| Remainder of<br>Metropolitan Boston APCD* | 0.55 | 1.0 % |
| Pioneer Valley APCD* | 0.55 | 1.0 % |
| Southeastern MAPCD* | 0.55 | 1.0 % |

* See exception at 310 CMR 7.05(1)(b)1.
** See exception at 310 CMR 7.05(1)(b)2.

2. No person owning, leasing or controlling the operation of a fossil fuel utilization facility shall cause, suffer, allow or permit the burning therein of any No. 2 (distillate) fuel oil having a sulfur content in excess of 0.17 pounds of sulfur per million Btu heat release potential (approximately equal to 0.3% sulfur content fuel).

3. Stationary Engines and Turbines. On and after July 1, 2007, no person owning, leasing or controlling a stationary engine or turbine subject to the requirements of 310 CMR 7.02(8)(i), 310 CMR 7.03(10), or 310 CMR 7.26(40) through (44) shall accept for delivery for burning any diesel or other fuel unless said fuel complies with the applicable U.S. Environmental Protection Agency sulfur limits for fuel pursuant to 40 CFR 80.29, 40 CFR 80.500, and 40 CFR 80.520(a) and (b) as in effect January 18, 2001.

(b) Exceptions.

1. Any person owning, leasing or controlling the operation of a fossil fuel utilization facility located in districts or portion of a district specified in 310 CMR 7.05(1)(a) and having an energy input capacity rated by the Department of 100,000,000 Btu per hour or greater, may cause, suffer, allow or permit the burning therein of any fossil fuel having a sulfur content up to 1.21 pounds per million Btu heat release potential (approximately equivalent to 2.2% sulfur content fuel oil) provided that:

a. An application has been made to the Department, in writing, to use such fuel including any information the Department may require;

b. The use of such fuel would not cause other applicable air pollution regulations to be violated;

c. The facility has available for conversion within six hours of notice from the Department, a three day supply of fuel with a lower sulfur content ,as specified by the Department, which shall be utilized during periods of adverse meteorological conditions when directed by the Department;

d. The use of such fuel has been approved in writing by the Department; and

e. The conditions of approval have been agreed to by the applicant in writing.

7.05: continued

2. Any person owning, leasing or controlling the operation of an electric generating facility having an energy input capacity rated by the Department of 2.5 billion or greater Btu per hour and located in the cities and towns of Arlington, Belmont, Boston, Brookline, Cambridge, Chelsea, Everett, Malden, Medford, Newton, Somerville, Waltham, and Watertown, may cause, suffer, allow or permit the burning therein of any fossil fuel with a sulfur content up to 0.55 pounds per million Btu per hour heat release potential (approximately equivalent to 1% sulfur content fuel oil) provided that:

a. An application has been made to the Department in writing to use such fuel including any information as the Department may require;

b. The Department determines that the use of such fuel would not cause other applicable air pollution control regulations or ambient air quality standards to be violated;

c. The facility has available for conversion within three hours of any notice from the Department, a three day supply of fuel with a lower sulfur content, as specified by the Department, which shall be utilized during periods of adverse meteorological conditions when directed by the Department;

d. The use of such fuel has been approved in writing by the Department; and

e. The conditions of approval have been agreed to by the applicant in writing. Such conditions of approval may include the installation, operation and maintenance of ambient air monitoring equipment by the applicant in a manner specified by the Department.

3. 310 CMR 7.05(1)(a) shall not apply to facilities that have presented a plan whereby use of a higher sulfur fuel would cause no greater emissions of sulfur compounds into the ambient air than if lower sulfur content fuel were used. The plan must be approved by the Department, in writing, and any conditions attached to the Department's approval must be agreed to by the applicant, in writing.

4 Approval granted under the provisions of 310 CMR 7.05(1)(b) 1., 2. or 3. may be revoked by the Department for cause or when in its opinion revocation is necessary to prevent or abate a condition of air pollution.

(2) U Use of Residual Fuel Oil or Hazardous Waste Fuel. No person owning, leasing or controlling an individual fuel utilization emission unit rated by the Department as having an energy input capacity of less than to 3,000,000 Btu per hour shall cause, suffer, allow or permit the burning of any residual fuel oil or hazardous waste fuel therein.

(3) Ash Content of Fuels (except natural gas).

(a) No person shall cause, suffer, allow or permit the burning in the Commonwealth of any solid or solid/liquid mixture fossil fuel containing an ash content in excess of 4% by dry weight, except as provided in 310 CMR 7.05(3)(b) and (c).

(b) In CM, MV, and SM, fossil fuel utilization facilities having an energy input capacity rated by the Department of 250,000,000 or greater Btu per hour, may burn solid or solid/liquid mixture fossil fuel with an ash content in excess of 9% by dry weight, provided that:

1. An application is made to the Department in writing to use such fuel and any information as the Department may require is submitted;

2. The Department determines that the use of such fuel would not cause other applicable air pollution control regulations or ambient air quality standards to be violated; and

3. The use of such fuel has been approved, in writing, by the Department and the conditions of approval have been agreed to by the applicant, in writing. Such conditions of approval may include the installation, operation and maintenance of ambient air monitoring equipment by the applicant, in a manner specified by the Department.

(c) In MB, B and PV, all fossil fuel utilization facilities may burn solid or solid/liquid mixture fossil fuel with an ash content in excess of 9% by dry weight, provided that:

1. An application is made to the Department in writing to use such fuel and any information as the Department may require is submitted;

2. The Department determines that the use of such fuel would not cause other applicable air pollution control regulations or ambient air quality standards to be violated; and

7.05: continued

3. The use of such fuel has been approved, in writing, by the Department and the conditions of approval have been agreed to by the applicant, in writing. Such conditions of approval may include the installation, operation and maintenance of ambient air monitoring equipment by the applicant, in a manner specified by the Department.

(4) Fuel Additives. No person owning, leasing or controlling a fuel utilization facility shall cause, suffer, allow or permit the use therein of any fuel additive except in accordance with the manufacturer's recommended specifications.

(5) Fuel Suppliers.

(a) No person shall ship or deliver in intrastate commerce to any person for burning or reshipment for burning, any fuels with a sulfur content in excess of those specified in 310 CMR 7.05(1)(a)1. or 7.05(1)(a)2. except that such shipment may be provided when

1. use of such fuel has been approved by the Department in writing:
2. such approval has been verified by the shipper; and
3. record of such shipment will be retained for two years and the record shall be made available to the Department for its review and inspection during customary business hours.

(b) Any person responsible for sale or distribution of residual fuel oils or wholesale distribution or wholesale marketing of distillate fuel oils or coal for burning or reshipment for burning, shall register with the Department on a form to be supplied by the Department.

(c) Any person supplying in intrastate commerce for burning or for reshipment for burning, fuel oil of a grade No. 2 or greater or coal shall keep and maintain records showing the quantities of the fuels handled and analyses showing the Btu value, sulfur content, nitrogen content (required only for residual fuel oils), viscosity, and ash content of said fuels and make such records available to the Department for its review and inspection during customary business hours.

(d) Any person supplying in intrastate commerce for burning, fuel oil of a grade No. 2 or greater or coal or gas shall submit a list of its customers using more than 30,000 gallons per year of fuel oil or more than 150 tons of coal or more than 4,000,000 cubic feet of gas by May 1 of each year covering the period of January 1 to December 31 of the previous year, and showing each customer's address, fuel type, sulfur content and monthly fuel amount.

(e) Any person supplying residual fuel oil in intrastate commerce shall provide certification of the nitrogen content of the oil to his customers. Acceptable test methods for determining nitrogen content of the oil are ASTM methods D3228 and D4629 or any other method approved by the Department and EPA.

(f) Shippers and distributors of fossil fuels shall provide evidence, to the satisfaction of customer-users, of the ash content of fuels supplied.

(6) All fuel analyses to be performed by or for distributors or users of fuels, for purposes of 310 CMR 7.00, shall be performed in such manner and reported in such units as are approved by the Department.

(7) No person owning, leasing, or controlling the operation of a fossil fuel utilization facility shall cause, suffer, allow, or permit the burning therein of any quantity, batch, or lot of used oil fuel unless

(a) that quantity, batch, or lot of used oil fuel was generated and mixed at the site of said fossil fuel utilization facility by the person owning, leasing, or controlling the operation of said fossil fuel utilization facility in compliance with 310 CMR 30.201, or

(b) both of the following requirements are met:

1. said quantity, batch, or lot of used oil fuel was mixed in compliance with 310 CMR 30.201, and
2. the person owning, leasing, or controlling the operation of the fossil fuel utilization facility complied with 310 CMR 30.250.

(8) Except as provided in 310 CMR 7.05(9), no person owning, leasing, or controlling the operation of a fossil fuel utilization facility shall cause, suffer, allow, or permit the burning therein of any used oil fuel that does not meet the specifications set forth in Table 310 CMR 7.05(8).

7.05: continued

TABLE 310 CMR 7.05(8)
STANDARDS FOR USED OIL FUEL

| Constituent/Property | Allowable |
|---|---|
| Sulfur | As allowed pursuant to 310 CMR 7.05(1) for residual fuel oil |
| Total Halogens | 4000 ppm or less |
| PCBs | Less than 50 ppm* |
| Higher Heating Value | 120,000 or more Btu per gallon |
| Flash Point | 100°F or more |
| Lead ** | Less than 100 ppm |
| Arsenic ** | 5 ppm or less |
| Cadmium ** | 2 ppm or less |
| Chromium ** | 10 ppm or less |

* The burning of PCBs in concentrations of 50 or more parts per million is prohibited unless done in compliance with 310 CMR 30.000.

** Does not apply to any facility equipped with air pollution control equipment that the Department determines, in writing, (1) is Best Available Control Technology (BACT) and (2) reduces emissions to a level equal to or less than would be emitted if a used oil fuel meeting the standard set forth in 310 CMR 7.05(8): *Table* were to be burned in compliance with 310 CMR 7.00 in a facility without BACT.

(9) 310 CMR 7.05(8) shall not apply to the burning of used oil fuel in a used oil fuel fired space heater provided that the requirements set forth in 310 CMR 7.04(9), 7.05(7)(a), and 30.250 are complied with.

7.06: U Visible Emissions

(1) U Stationary Sources Other than Incinerators.

(a) Smoke. No person shall cause, suffer, allow, or permit the emission of smoke which has a shade, density, or appearance equal to or greater than No. 1 of the Chart for a period, or aggregate period of time in excess of six minutes during any one hour, provided that at no time during the said six minutes shall the shade, density, or appearance be equal to or greater than No. 2 of the Chart.

(b) Opacity. No person shall cause, suffer, allow or permit the operation of a facility so as to emit contaminant(s), exclusive of uncombined water or smoke subject to 310 CMR 7.06(1)(a) of such opacity which, in the opinion of the Department, could be reasonably controlled through the application of modern technology of control and a good Standard Operating Procedure, and in no case, shall exceed 20% opacity for a period or aggregate period of time in excess of two minutes during any one hour provided that, at no time during the said two minutes shall the opacity exceed 40%.

(c) Exception.

1. Visible Emission Limits. In *lieu* of the requirements of 310 CMR 7.06(1)(a) and 310 CMR 7.06(1)(b), a facility subject to 310 CMR 7.00: *Appendix C - Operating Permits* with boilers rated less than 500 million Btu per hour energy input capacity, may elect to comply with the following:

a. Except as provided in 310 CMR 7.06(1)(c)1.b.; 310 CMR 7.06(1)(c)1.c. and 310 CMR 7.06(1)(c)1.g., visible emissions shall not exceed 15 percent opacity during any six-minute block average.

7.06: continued

b. During periods of start-up, shutdown, soot blowing, and other specified operating conditions, visible emissions from any boiler shall not exceed 27% opacity during any six-minute block average except that visible emissions may exceed 27% opacity for up to two six-minute block averages during the calendar quarter.

c. For a boiler equipped with a visible emission monitor with a numeric data reduction system that can printout individual block averages or output individual block averages to an electronic file, the Department will make a determination to approve or deny visible emissions during periods of startup, shutdown, soot blowing and other specified operating conditions to exceed 27% opacity for one-tenth of one percent of the total six-minute block averages during any calendar quarter, or six block averages per boiler per quarter, whichever is greater, provided visible emissions do not exceed 60% opacity during any six-minute block average.

i. At no time can visible emissions exceed 27% opacity for more than two six-minute block averages during a one-hour period and the one-hour block average opacity shall not exceed 27% opacity during the one-hour block period when a six-minute block averages exceeds 27% opacity.

ii. The one-hour average shall be based on a clock hour.

iii. Boilers may be approved to operate in accordance with the visible emission limitations provided by 310 CMR 7.06(1)(c)1.b. and 310 CMR 7.06(1)(c)1.c. during the same calendar quarter.

d. Compliance with visible emission limits shall be based upon a six-minute block average determined either

i. by the procedures set forth in Method 9, (as described in 40 CFR Part 60, Appendix A-4), or

ii. by a visible emission monitor required under a Plan Approval issued by the Department under 310 CMR 7.02, or

iii. at the request of a facility, by a visible emission monitor required under the Operating Permit and specified as such in the Approval of the Plan of Good Operating Practices under 310 CMR 7.06(1)(c).

e. Before a facility may operate in accordance with 310 CMR 7.06(1)(c) the facility must notify the Department in writing of such intention, develop and submit to the Department a plan of good operating practices, and receive notification from the Department that the plan has been approved;

f. Any facility operating pursuant to 310 CMR 7.06(1)(c) shall comply with a good operating practices plan as approved; and

g. When notified in writing at least five business days prior to scheduled shakedown activities, testing, and calibrations for the purpose of improving boiler performance, the Department may allow exemptions to 310 CMR 7.06(1)(c)1.a., 310 CMR 7.06(1)(c)1.b. and 310 CMR 7.06(1)(c)1.c. Such notification shall include a brief description of the activity, and its start time and anticipated end time. The Department may allow a shorter notification period upon request. The Department may deny or limit the frequency of such activities.

2. Plan of Good Operating Practices. The plan of good operating practices shall, at a minimum:

a. Be developed with recommendations from third party combustion systems experts:

b. Describe how the application of modern technology of control, and practices for operating and maintaining the equipment, will minimize visible emissions;

c. Describe any operating conditions other than startup, shutdown and soot blowing during which the facility proposes to take advantage of the exception in 310 CMR 7.06(1)(c);

d. Propose the duration and frequency of startup, shutdown, soot blowing and any other specified conditions;

e. Document the need for visible emission limitations greater than 15% opacity during startup, shutdown, soot blowing and any other specified operating conditions;

f. Propose visible emission limitations that the facility will comply with during startup, shutdown, soot blowing and other specified operating conditions;

g. Describe all necessary corrective action procedures and include schedules for implementing such procedures; and

7.06: continued

h. Propose record keeping and monitoring procedures sufficient to enable the Department to determine that visible emissions comply with the plan.

7.06: continued

3. Department Action.
   a. Upon completion of review, the Department shall either approve or disapprove the plan of good operating practices.
   b. The terms and conditions of an approved plan shall be incorporated into the facility's Operating Permit.
   c. A Department approval shall specify the visible emission limitations for each operating condition, (*i.e.* startup, shutdown, soot blowing and other specified operating conditions approved by the Department); and specify corresponding monitoring, record keeping and reporting requirements, and other conditions necessary to ensure compliance with the visible emission limitations contained in the approval.
   d. Modifications to those portions of an approved plan that are not incorporated into the facility's Operating Permit shall be maintained on-site and made available to Department representatives upon request. Modifications to an approved plan shall be submitted to the Department for review with the facility's Operating Permit renewal application. The Department may require modification of an approved plan.
4. Notice of Exceedances. Any facility operating pursuant to a Department approval issued under this exception shall notify the Department of any exceedance of a visible emission limitation in the time and manner required by the relevant permit deviation provisions in the facility's Operating Permit. Opacity excursions greater than 27% that qualify as allowed under 310 CMR 7.06(1)(c)1.b. and 310 CMR 7.06(1)(c)1.c. shall not be considered deviations under the operating permit.

(2) From Incinerators.
(a) No person shall cause, suffer, allow, or permit the emission of smoke from any incinerator which has a shade, density, or appearance equal to or greater than No. 1 of the Chart or exceeding 20% opacity at any time.
(b) No person shall cause, suffer, allow or permit the operation of an incinerator so as to emit contaminant(s), exclusive of uncombined water or smoke subject to 310 CMR 7.06(2)(a) of such opacity which, in the opinion of the Department, could be reasonably controlled through the application of modern technology of control and a good Standard Operating Procedure.
(c) No person shall cause, suffer, allow, or permit emissions from any incinerator of any particles that have a dimension equal to or greater than 100 microns.

(3) From Marine Vessels. Marine vessels shall be subject to the provisions of 310 CMR 7.06(1)(a) and 7.06(1)(b). 310 CMR 7.06(3) shall apply only in the Merrimack Valley Air Pollution Control District, Metropolitan Boston Air Pollution Control District, and the Southeastern Massachusetts Air Pollution Control District.

(4) From Aircraft. After December 31, 1972, no person shall cause, suffer, allow, or permit the emission from an aircraft of smoke which has a shade, density, or appearance equal or greater than No. 2 of the Chart for a period of time in excess of ten seconds during landing, takeoff, or taxiing operations.

(5) From Spark-ignited Internal Combustion Engines.
(a) No person shall cause, suffer, allow, or permit emission of visible air contaminants, other than water, from internal combustion engines of:
1. portable or stationary equipment, other than motor vehicles, for longer than ten consecutive seconds; or
2. a motor vehicle after the vehicle has moved more than 100 feet from a place where the vehicle was stationary; or
3. a motor vehicle, for more than five consecutive seconds, under any condition of cruising or acceleration.

(6) From Non-stationary Source Diesel Engines. No person shall cause, suffer, allow, or permit excessive emission of visible air contaminants, other than water, from a diesel engine.

7.07: U Open Burning

(1) No person shall cause, suffer, allow or permit the open burning of any combustible material.

7.07: continued

(2) 310 CMR 7.07(1) shall not apply to:

(a) open burning for the purpose of combating or backfiring an existing fire by persons affiliated with an official fire fighting agency;

(b) open burning conducted primarily for cooking purposes, or

(c) open burning related to the operation of devices such as blowtorches and welding torches, for which no alternative source of heat can be used, provided that such devices do not cause a condition of air pollution.

(3) Except during periods of adverse meteorological conditions as may be determined by the Department when direct or public notice thereof has been made by the Department through the news media, 310 CMR 7.07(1) shall not apply to open burning conducted for:

(a) training or research in fire protection or prevention with specific approval by the Department;

(b) activities associated with the normal pursuit of agriculture which have been determined by the Department as necessary and which include but are not limited to, open burning of blueberry patches for pruning purposes, dead raspberry stalks, fruit tree prunings, and infected beehives for disease control;

(c) open burning of brush and trees resulting from agricultural land clearing operations;

7.07: continued

(d) the disposal of fungus-infected elm wood provided that no suitable alternative method of disposal is available;

(e) the disposal of brush, cane, driftwood, and forestry debris excluding grass, hay, leaves, and stumps from January 15th to May 1st of each year. All such open burning shall be conducted:

1. on land proximate to the place of generation,
2. at a location greater than 75 feet from any dwelling, and
3. between ten o'clock A.M. and four o'clock P.M.

No such open burning shall apply to commercial or institutional land clearing for non-agricultural purposes.

Open burning under 310 CMR 7.07(3)(e) shall not be permitted in the Cities and Towns of Arlington, Belmont, Boston, Brookline, Cambridge, Chelsea, Chicopee, Everett, Fall River, Holyoke, Lawrence, Lowell, Malden, Medford, New Bedford, Newton, Somerville, Springfield, Waltham, Watertown, West Springfield, and Worcester, or where the Department has notified a city or town that:

1. open burning under this provision may cause or contribute to non-attainment of federal or state ambient air quality standards for particulate matter,
2. open burning under this provision may cause or contribute to a condition of air pollution, or
3. open burning under this provision is not permitted due to continued violations of the provisions for the proper conduct of such open burning. (Such action shall be taken only after said city or town has been given written notification of such violations and has in the opinion of the Department failed to take appropriate actions to prevent the continuance of such violations.)

Upon request of the Department the permitting authority of any City or Town shall notify the Department of the number of permits issued during any burning period.

(f) the disposal of combustible material with the approval of the Department and after demonstration to the satisfaction of the Department that no alternative suitable method of disposal is available;

(g) open burning as described in 310 CMR 7.07(3)(a) through 310 CMR 7.07(3)(f) must be conducted:

1. during periods of good atmospheric ventilation,
2. without causing a nuisance,
3. with smoke minimizing starters if starters or starting aids are used, and
4. under the provisions of a properly executed permit issued under the provisions of M.G.L. c. 48, § 13*

(4) Except as may be incidental to compliance with the provisions contained in 310 CMR 7.07(2) and 310 CMR 7.07(3) no person shall stack, place, or store combustible material in such manner as to cause or allow presumption by the Department that such material may be subject to reduction by open burning.

(5) Notwithstanding the provisions of 310 CMR 7.07(3), no person shall cause, suffer, allow or permit open burning at any refuse disposal facility other than an incinerator as described in M.G.L. c. 111, § 150A.

(6) 310 CMR 7.07(1) through 7.07(5) are subject to the enforcement provisions specified in 310 CMR 7.52.

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* M.G.L. c. 48, § 13 provides in part:

1. such permits may not be granted for more than two days from the date of issue, and
2. a written record must be maintained for each permit including the date of permit issuance, name and address of the person receiving the permit including the location and type of materials to be burned, and
3. such records must be available for public inspection.

7.08: U Incinerators

(1) General.

(a) No person shall cause, suffer, allow, or permit the construction or substantial reconstruction or alteration of any incinerator for which:

1. the design for construction or substantial reconstruction or alteration thereof, and
2. the Standard Operating Procedure have not been approved by the Department in writing.

(b) No person shall sell or distribute for sale any special incinerator or modular incinerator, for installation or use within the District, the design and Standard Operating Procedure for which have not been approved in writing by the Department or certification of said approval has not been given by the person selling or distributing the incinerator to the person to whom the sale or distribution is made.

(c) No person shall cause, suffer, allow, or permit the burning of refuse or any other material in any incinerator in a manner that is not in conformance with a Standard Operating Procedure (for the incinerator) that has been approved by the Department in writing.

(d) No person shall cause, suffer, allow, or permit the burning of refuse or any other material in any incinerator, other than a municipal incinerator, which is of a design that has not been approved by the Department in writing.

(e) No person shall cause, suffer, allow, or permit the burning of refuse or any other material in an incinerator at a specific site location that, in the opinion of the Department, is likely to cause or contribute to a condition of air pollution and when the person responsible for the operation of the incinerator has been notified of said opinion.

(f) 310 CMR 7.08(1)(c) and 7.08(1)(d) are subject to the enforcement provisions specified in 310 CMR 7.52, insofar as they pertain to domestic incinerators.

(g) No person shall cause, suffer, allow, or permit emissions from any incinerator of any particles that have a dimension greater than 100 microns. (Be referred to 310 CMR 7.06(2))

(2) Municipal Waste Combustors.

(a) Site Assignment. No person shall, allow, or permit the construction, substantial reconstruction, alteration or operation of a municipal waste combustor unit on a site which has not received a site assignment in accordance with M.G.L. c.111, § 150A.

(b) Purpose. The purpose of 310 CMR 7.08(2) is to provide emission limitations and compliance schedules for the control of certain designated pollutants from Municipal Waste Combustors in accordance with sections 111(d) and 129 of the Clean Air Act.

(c) Definitions. The definitions found in 310 CMR 7.00 apply to 310 CMR 7.08(2) unless otherwise defined in 310 CMR 7.08(2). The following words and phrases shall have the following meanings as they appear in 310 CMR 7.08(2).

CALENDAR QUARTER means any consecutive three-month period (nonoverlapping) beginning on January 1, April 1, July 1 or October 1.

CALENDAR YEAR means any period starting January 1 and ending on December 31.

CHIEF FACILITY OPERATOR means the person in direct charge and control of the operation of a municipal waste combustor and who is responsible for daily onsite supervision, technical direction, management, and overall performance of the facility.

CLEAN WOOD means untreated wood or untreated wood products including clean untreated lumber, tree stumps (whole or chipped), and tree limbs (whole or chipped). Clean wood does not include yard waste, or construction, renovation, and demolition wastes (including but not limited to railroad ties and telephone poles).

CONTINUOUS BURNING means the continuous, semicontinuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate or hearth during a startup period, when municipal solid waste is not being fed to the grate, is not considered to be continuous burning.

CONTINUOUS EMISSION MONITORING SYSTEM means a monitoring system for continuously measuring the emissions of a pollutant from a municipal waste combustor unit.

7.08: continued

DIOXIN/FURAN means tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans.

dscm means dry standard cubic meter.

FIRST CALENDAR HALF means the period starting on January 1 and ending on June 30 in any year.

FOUR-HOUR BLOCK AVERAGE or 4-HOUR BLOCK AVERAGE means the average of all hourly emission concentrations when the affected facility is operating and combusting municipal solid waste, measured over a four-hour period of time from 12:00 midnight to 4:00 A.M., 4:00 A.M. to 8:00 A.M., 8:00 A.M. to 12:00 noon, 12:00 noon to 4:00 P.M., 4:00 P.M. to 8:00 P.M., or 8:00 P.M. to 12:00 midnight.

LARGE MUNICIPAL WASTE COMBUSTOR UNIT means a municipal waste combustor unit with a capacity greater than 250 tons/day of municipal solid waste.

MASS BURN REFRACTORY MUNICIPAL WASTE COMBUSTOR means a field-erected combustor that combusts municipal solid waste in a refractory wall furnace. Unless otherwise specified, this includes combustors with a cylindrical rotary refractory wall furnace.

MASS BURN WATERWALL MUNICIPAL WASTE COMBUSTOR means a field-erected combustor that combusts municipal solid waste in a waterwall furnace.

MATERIALS SEPARATION PLAN means a plan that identifies a program within a given service area, to separate mercury, other toxic components or toxic precursors from municipal solid waste prior to combustion in order to make the separated materials available for recycling and/or remove the toxic components or their toxic precursors for proper management. A materials separation plan shall include goals and timetables for attaining the goals. It may include, but is not limited to, such elements as: centralized drop-off facilities, buy-back or deposit-return incentives, curbside collection programs, financial incentives to municipalities in the service area for collection programs, technical assistance programs for municipalities, institutions and/or businesses within the service area, and personnel to support any such programs.

MAXIMUM DEMONSTRATED MUNICIPAL WASTE COMBUSTOR UNIT LOAD means the highest 4-hour arithmetic average municipal waste combustor unit load achieved during four consecutive hours during the most recent dioxin/furan stack test demonstrating compliance with the applicable limit for municipal waste combustor organics specified under 310 CMR 7.08(2)(f)(2): *Table 2*.

MAXIMUM DEMONSTRATED PARTICULATE MATTER CONTROL DEVICE TEMPERATURE means the highest four-hour arithmetic average flue gas temperature measured at the particulate matter control device inlet during four consecutive hours during the most recent dioxin/furan stack test demonstrating compliance with the applicable limit for municipal waste combustor organics specified under 310 CMR 7.08(2)(f)(2): *Table 2*.

MODIFICATION or MODIFIED MUNICIPAL WASTE COMBUSTOR UNIT means a municipal waste combustor unit to which changes have been made if the cumulative cost of the changes, over the life of the unit, exceed 50% of the original cost of construction and installation of the unit (not including the cost of any land purchased in connection with such construction or installation) updated to current costs; or any physical change in the municipal waste combustor unit or change in the method of operation of the municipal waste combustor unit which increases the amount of any air pollutant emitted by the unit for which standards have been established under the Clean Air Act, § 129 or § 11. Whether there is an increase in the amount of any air pollutant emitted by the municipal waste combustor unit shall be determined at 100% physical load capability and downstream of all air pollution control devices, with no consideration given for load restrictions based on permits or other nonphysical operational restrictions.

7.08: continued

MUNICIPAL SOLID WASTE or MUNICIPAL TYPE SOLID WASTE means household, commercial/retail, and/or institutional waste. Household waste includes material discarded by single and multiple residential dwellings, hotels, motels, and other similar permanent or temporary housing establishments or facilities. Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, nonmanufacturing activities at industrial facilities, and other similar establishments or facilities. Institutional waste includes material discarded by schools, nonmedical waste discarded by hospitals, material discarded by nonmanufacturing activities at prisons and government facilities, and material discarded by other similar establishments or facilities. Household, commercial/retail, and institutional waste does not include used oil; sewage sludge; wood pallets; construction, renovation, and demolition waste (which includes but is not limited to railroad ties and telephone poles); clean wood; industrial process or manufacturing waste; medical waste; or motor vehicles (including motor vehicle parts or vehicle fluff). Household, commercial/retail, and institutional waste includes:

(a) yard waste; and

(b) refuse-derived fuel.

MUNICIPAL WASTE COMBUSTOR or MUNICIPAL WASTE COMBUSTOR UNIT OR UNIT means any setting or equipment that combusts solid, liquid, or gasified municipal solid waste including, but not limited to, field-erected incinerators (with or without heat recovery), modular incinerators (starved-air or excess-air), boilers (*i.e.*, steam generating units), furnaces (whether suspension-fired, grate-fired, mass-fired, air curtain incinerators, or fluidized bed-fired), and pyrolysis/combustion units. Municipal waste combustors units do not include pyrolysis/combustion units located at a plastics/rubber recycling unit as specified in 310 CMR 7.08(2). Municipal waste combustors do not include internal combustion engines, gas turbines, or other combustion devices that combust landfill gases collected by landfill gas collection systems.

The boundaries of a municipal solid waste combustor are defined as follows. The municipal waste combustor unit includes, but is not limited to, the municipal solid waste fuel feed system, grate system, flue gas system, bottom ash system, and the combustor water system. The municipal waste combustor boundary starts at the municipal solid waste pit or hopper and extends through:

(a) The combustor flue gas system, which ends immediately following the heat recovery equipment or, if there is no heat recovery equipment, immediately following the combustion chamber;

(b) The combustor bottom ash system, which ends at the truck loading station or similar ash handling equipment that transfers the ash to final disposal, including all ash handling systems that are connected to the bottom ash handling system; and

(c) The combustor water system, which starts at the feed water pump and ends at the piping exiting the steam drum or superheater. The municipal waste combustor unit does not include air pollution control equipment, the stack, water treatment equipment, or the turbine-generator set.

MUNICIPAL WASTE COMBUSTOR ACID GASES means all acid gases emitted in the exhaust gases from municipal waste combustor units including, but not limited to, sulfur dioxide and hydrogen chloride gases.

MUNICIPAL WASTE COMBUSTOR METALS means metals and metal compounds emitted in the exhaust gases from municipal waste combustor units.

MUNICIPAL WASTE COMBUSTOR ORGANICS means organic compounds emitted in the exhaust gases from municipal waste combustor units and includes tetra-through octa- chlorinated dibenzo-p-dioxins and dibenzofurans.

MUNICIPAL WASTE COMBUSTOR PLANT means one or more municipal waste combustor units at the same facility for which construction was commenced on or before September 20, 1994.

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MUNICIPAL WASTE COMBUSTOR UNIT CAPACITY means the maximum charging rate of a municipal waste combustor unit expressed in tons per day of municipal solid waste combusted, calculated according to the procedures under 40 CFR 60.58b(j) effective December 19, 1995 and as amended October 24, 1997. 40 CFR 60.58b(j) includes procedures for determining municipal waste combustor unit capacity for continuous and batch feed municipal waste combustors.

MUNICIPAL WASTE COMBUSTOR UNIT LOAD means the steam load of the municipal waste combustor unit measured as specified in 40 CFR 60.58b(i)(6) December 19, 1995 and as amended October 24, 1997.

PARTICULATE MATTER means total particulate matter emitted from municipal waste combustor units measured as specified in 40 CFR, Part 60, Appendix A, Reference Method 5.

PLASTICS/RUBBER RECYCLING UNIT means an integrated processing unit where plastics, rubber, and/or rubber tires are the only feed materials (incidental contaminants may be included in the feed materials) and they are processed into a chemical plant feedstock or petroleum refinery feedstock, where the feedstock is marketed to and used by a chemical plant or petroleum refinery as input feedstock. The combined weight of the chemical plant feedstock and petroleum refinery feedstock produced by the plastics/rubber recycling unit on a calendar quarter basis shall be more than 70% of the combined weight of the plastics, rubber, and rubber tires processed by the plastics/rubber recycling unit on a calendar quarter basis. The plastics, rubber, and/or rubber tire feed materials to the plastics/rubber recycling unit may originate from the separation or diversion of plastics, rubber, or rubber tires from MSW or industrial solid waste, and may include manufacturing scraps trimmings, and off-specification plastics, rubber, and rubber tire discards. The plastics, rubber, and rubber tire feed materials to the plastics/rubber recycling unit may contain incidental contaminants (*e.g.*, paper labels on plastic bottles, metal rings on plastic bottle caps, *etc*.)

POTENTIAL HYDROGEN CHLORIDE EMISSION CONCENTRATION means the hydrogen chloride emission concentration that would occur from combustion of municipal solid waste in the absence of any emission controls for municipal waste combustor acid gases.

POTENTIAL MERCURY EMISSION CONCENTRATION means the mercury emission concentration that would occur from combustion of municipal solid waste in the absence of any mercury emissions control.

POTENTIAL SULFUR DIOXIDE EMISSIONS means the sulfur dioxide emission concentration that would occur from combustion of municipal solid waste in the absence of any emission controls for municipal waste combustor acid gases.

RECONSTRUCTION means rebuilding a municipal waste combustor unit for which the reconstruction commenced after June 19, 1996, and the cumulative costs of the construction over the life of the unit exceed 50% of the original cost of construction and installation of the unit (not including any cost of land purchased in connection with such construction or installation) updated to current costs (current dollars).

REFRACTORY UNIT or REFRACTORY WALL FURNACE means a combustion unit having no energy recovery (*e.g.*, via a waterwall) in the furnace (*i.e.*, radiant heat transfer section) of the combustor.

REFUSE-DERIVED FUEL means a type of municipal solid waste produced by processing municipal solid waste through shredding and size classification. This includes all classes of refuse-derived fuel including, but not limited to low-density fluff refuse-derived fuel, densified refuse-derived fuel and pelletized refuse-derived fuel.

REFUSE-DERIVED FUEL STOKER means a steam generating unit that combusts refuse-derived fuel in a semisuspension firing mode using air-fed distributors.

SECOND CALENDAR HALF means the period starting July 1 and ending on December 31 in any year.

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SHIFT SUPERVISOR means the person who is in direct charge and control of the operation of a municipal waste combustor and who is responsible for onsite supervision, technical direction, management, and overall performance of the facility during an assigned shift.

SMALL MUNICIPAL WASTE COMBUSTOR UNIT means a municipal waste combustor unit with a municipal waste combustor unit capacity greater than 39 tons per day but equal to or less than 250 tons per day of municipal solid waste.

STANDARD CONDITIONS means a temperature of 20°C and a pressure of 101.3 kilopascals.

TOTAL MASS DIOXIN/FURAN or TOTAL MASS means the total mass of tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans, as determined using 40 CFR, Part 60, Appendix A, Reference Method 23.

TWENTY-FOUR HOUR DAILY AVERAGE OR 24-HOUR DAILY AVERAGE means either the arithmetic mean or geometric mean (as specified) of all hourly emission concentrations when the affected unit is operating and combusting municipal solid waste measured over a 24-hour period between 12:00 midnight and the following midnight.

UNTREATED LUMBER means wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Untreated lumber does not include wood products that have been painted, pigment-stained, or "pressure-treated." Pressure treating compounds include, but are not limited to, chromate copper arsenate, pentachlorophenol, and creosote.

WATERWALL FURNACE means a combustion unit having energy (heat) recovery in the furnace (*i.e.*, radiant heat transfer section) of the combustor.

YARD WASTE means grass, grass clippings, bushes, and shrubs that are generated by residential, commercial/retail, institutional, and/or industrial sources as part of maintenance activities associated with yards or other private or public lands. Yard waste does not include construction, renovation, and demolition wastes. Yard waste does not include clean wood.

(d) Designated Pollutants and Operating Practices - 310 CMR 7.08(2) establishes requirements for the following municipal waste combustor operating practices, pollutants, opacity and fugitive ash:

1. Operating Practices (Carbon Monoxide (CO), Flue Gas Temp., Load Level)
2. Metals (Mercury (Hg), Lead (Pb), Cadmium (Cd))
3. Particulate Matter (PM)
4. Opacity
5. Organics (Dioxin/Furan)
6. Acid Gases (Sulfur Dioxide ($SO_2$), Hydrogen Chloride (HCl))
7. Nitrogen Oxides ($NO_x$)
8. Fugitive Ash Emissions

(e) Applicability

1. Large Municipal Waste Combustor Units. 310 CMR 7.08(2) applies in its entirety to any person who owns, leases, operates or controls a large municipal waste combustor unit. Applicable requirements and limitations contained in 310 CMR 7.08(2) shall not supersede, relax or eliminate any more stringent conditions or requirements (*e.g.* emission limitation(s), testing, recordkeeping, reporting, or monitoring requirements) established by regulation or contained in a facility's previously issued source specific plan approvals(s) or emission control plan(s).

2. Other Approvals or Permits - A plan approval under 310 CMR 7.02(2) is not required in order to implement the requirements for 310 CMR 7.08(2) unless construction, substantial reconstruction or alterations are planned at the facility which are not required under the requirements at 310 CMR 7.08(2). If the facility has a final operating permit pursuant to 310 CMR 7:00: *Appendix C*, the operating permit will be modified upon approval of the emission control plan, in accordance with the procedures in 310 CMR 7.00: *Appendix C*(8). No additional application or fee is necessary to modify the operating permit at the same time the emission control plan is approved. If the facility does not have a final operating permit, the facility must amend its operating permit application to include the approved emission control plan.

7.08: continued

(f) Applicable Requirements.

1. Operating Practices.

a. No person subject to 310 CMR 7.08(2) shall:

i. cause, suffer, allow or permit the discharge into the atmosphere from a municipal waste combustor unit any gases that contain carbon monoxide in excess of the emission limits specified in 310 CMR 7.08(2)(f)2.: *Table 1*;

ii. cause, suffer, allow or permit a municipal waste combustor unit to operate at a load level greater than 110% of the maximum demonstrated municipal waste combustor unit load calculated in four-hour block arithmetic averages, measured during the most recent dioxin/furan compliance test in which compliance is achieved; and

iii. cause, suffer, allow or permit a municipal waste combustor unit to operate at a temperature, measured at the particulate matter control device inlet, exceeding 17°C (30°F) above the maximum demonstrated particulate matter control device temperature, calculated in four-hour block arithmetic averages, measured during the most recent dioxin/furan compliance test in which compliance is achieved.

b. During any nine month dioxin/furan compliance test and the two weeks preceding each nine month dioxin/furan compliance test, municipal waste combustor unit load limit and particulate matter control device temperature limitations are not applicable.

c. The requirements of 310 CMR 7.08(2)(f)1.a.ii. and iii. may be waived, if prior approval is granted by the Department, for the purposes of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance provided that there is an improvement in controlling air pollution, or advancing the state-of-the-art technology for controlling facility emissions.

2. Metals, Organics and Acid Gases. No person subject to 310 CMR 7.08(2) shall cause, suffer, allow or permit the discharge into the atmosphere from a municipal waste combustor unit any gases that contain metals, opacity, organics, particulate matter or acid gases in excess of the emission limits specified in 310 CMR 7.08(2)(f)2.: *Table 2*.

TABLE 1. MUNICIPAL WASTE COMBUSTOR OPERATING PRACTICES

| Municipal Waste Combustor Technology | Carbon Monoxide Emissions Level (parts per million by volume)[a] | Averaging Time[b] |
|---|---|---|
| Mass Burn Waterwall | 100 | 4-hour |
| Mass Burn Refractory | 100 | 4-hour |
| Refuse-Derived Fuel Stoker | 200 | 24-hour |

[a] Measured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to 7% oxygen, dry basis. Calculated as an arithmetic average.

[b] Averaging times are 4-hour block or 24-hr daily arithmetic averages.

7.08: continued

TABLE 2. EMISSION LIMITS FOR MUNICIPAL WASTE COMBUSTOR UNITS

| | Emission Limits For Large MWC Units[a] |
|---|---|
| Particulate Matter (PM) | 27 mg/dscm |
| Opacity | 10% (6-minute average) |
| METALS: | |
| Cadmium (Cd) | 0.040 mg/dscm |
| Lead (Pb) | 0.440 mg/dscm |
| Mercury (Hg) | 0.028 mg/dscm |
| ACID GASES: | |
| Sulfur Dioxide ($SO_2$) | 29 ppmv or 75% reduction by weight or volume, whichever is less stringent. Compliance is based on a 24-hr geometric mean. |
| Hydrogen Chloride (HCl) | 29 ppmv or 95% reduction by weight or volume, whichever is less stringent. |
| ORGANICS: (Total Mass) | |
| Dioxin/Furan with Electrostatic precipitator (ESP) | 60 ng/dscm |
| Dioxin/Furan with Fabric Filter (FF) | 30 ng/dscm |

[a] Corrected to 7% oxygen (dry basis).

3. Nitrogen Oxides - No person subject to 310 CMR 7.08(2) shall cause, suffer, allow or permit the discharge into the atmosphere from a municipal waste combustor unit any gases that contain nitrogen oxides in excess of the emission limits specified in 310 CMR 7.08(2)(f)3.: *Table 3*. Emission Reduction Credits (ERCs) generated under 310 CMR *7.00: Appendix B*(3) may be used to comply with the requirements contained in Table 3.

TABLE 3. NITROGEN OXIDES EMISSION LIMITS FOR LARGE MUNICIPAL WASTE COMBUSTOR UNITS

| Municipal Waste Combustor Technology | NOx Emission Limit (Parts per million by volume)[a] | Averaging Time[b] |
|---|---|---|
| Mass Burn Waterwall | 205 | 24-hour |
| Mass Burn Refractory | 205 | 24-hour |
| Refuse-Derived Fuel Stoker | 250 | 24-hour |

[a] Corrected to 7% oxygen, dry basis.
[b] Averaging times are 24-hr daily arithmetic averages.

7.08: continued

4. Nitrogen Oxides Emission Averaging Plan - A person subject to 310 CMR 7.08(2) may elect to implement a nitrogen oxides emissions averaging plan for the units located at the same municipal waste combustor plant. Municipal waste combustor units subject to 40 CFR, Part 60, Subpart Ea or Eb shall not be included in the emissions averaging plan. The units included in the nitrogen oxides emissions averaging plan must be identified in the annual report specified in 310 CMR 7.08(2)(i), prior to implementing the averaging plan. The units at the plant included in the averaging plan may be redesignated each calendar year.

a. To implement an emissions averaging plan, the average daily (24-hour) nitrogen oxides emission concentration level for gases discharged from units included in the emissions averaging plan shall not exceed the limits specified in Table 4.

TABLE 4. NITROGEN OXIDES EMISSION LIMITS FOR UNITS INCLUDED IN AN EMISSIONS AVERAGING PLAN

| Municipal Waste Combustor Technology | NOx Emission Limit (Parts per million by volume)[a] | Averaging Time[b] |
|---|---|---|
| Mass Burn Waterwall | 185 | 24-hour |
| Refuse-Derived Fuel Stoker | 230 | 24-hour |

[a] Corrected to 7% oxygen, dry basis.
[b] Averaging times are 24-hr daily arithmetic averages.

b. Under an emissions averaging plan, the average daily nitrogen oxides emission limits specified in Table 4 shall be calculated using equation (1). Units that are offline shall not be included in calculating the average daily nitrogen oxides emission level.

$$No_{x24\text{-}hr} = \frac{\sum_{I=1}^{h} (NO_{xi})(S_i)}{\sum_{I=1}^{h} (S_i)} \qquad (1)$$

where:

$No_{x_{24\text{-}hr}}$ = 24-hr daily average nitrogen oxides emission concentration level for the emissions averaging plan (ppmv, corrected to 7% oxygen).

$No_{xi}$ = 24-hr daily average nitrogen oxides emission concentration level for unit i (ppmv, corrected to 7% oxygen).

$S_i$ = maximum demonstrated municipal waste combustor unit load for unit i (pounds per hour steam or feedwater flow as determined in the most recent dioxin/furan performance test).

h = total number of units included in the daily emissions average.

c. For any day in which any unit included in an emissions averaging plan is offline, the owner or operator of the municipal waste combustor plant must still demonstrate compliance with the applicable limits specified in Table 4 according to either 310 CMR 7.08(2)(f)4.d., or 310 CMR 7.08(2)(f)4.e., f. and g..

d. Compliance with the applicable limits specified in Table 4 shall be demonstrated using the averaging procedure specified in 310 CMR 7.08(2)(f)4.b.

7.08: continued

e. For each of the municipal waste combustor units included in an emissions averaging plan, the nitrogen oxides emissions shall be calculated on a daily average basis. The calculated average shall not exceed the maximum daily nitrogen oxides emission level achieved by that municipal waste combustor unit on any of the days during which the emissions averaging plan was achieved with all municipal waste combustor units online during the most recent calendar quarter. The requirements of this paragraph do not apply during the first quarter of operation, during the first year under an emissions averaging plan.

f. The average nitrogen oxides emissions (pounds per day) calculated according to 310 CMR 7.08(2)(f)4.g.iv. shall not exceed the average nitrogen oxides emissions (pounds per day) calculated according to 310 CMR 7.08(2)(f)4.g.

g. The average nitrogen oxides emissions shall be calculated for all days during which the emissions averaging plan was implemented and achieved and during which all municipal waste combustor units were online. The average nitrogen oxides emissions (pounds per day) shall be calculated on a calendar year basis according to 310 CMR 7.08(2)(f)4.g.i. through iii..

i. For each municipal waste combustor unit included in an emissions averaging plan, the daily amount of nitrogen oxides emitted (pounds per day) shall be calculated based on the hourly nitrogen oxides data required under 310 CMR 7.08(2)(f)4.g., on the flue gas flow rate determined using Table 19-1 of EPA Reference Method 19 in 40 CFR, Part 60, Appendix A or an alternative Department approved method, and on the hourly average steam or feedwater flow rate.

ii. The daily total nitrogen oxides emissions shall be calculated as the sum of the daily nitrogen oxides emissions from each municipal waste combustor unit calculated under 310 CMR 7.08(2)(f)4.g.i..

iii. The average nitrogen oxides emissions (pounds per day) on a calendar year basis shall be calculated as the sum of all daily total nitrogen oxides emissions calculated under 310 CMR 7.08(2)(f)4.g.ii. divided by the number of calendar days for which a daily total was calculated.

iv. The average nitrogen oxides emissions shall be calculated for all days during which one or more of the municipal waste combustor units under the emissions averaging plan was offline. The average nitrogen oxides emissions (pounds per day) shall be calculated on a calendar year basis according to 310 CMR 7.08(2)(f)4.g.i. through iii..

5. Fugitive Ash - No person subject to 310 CMR 7.08(2) shall cause, suffer, allow or permit the discharge into the atmosphere of any visible emissions of combustion ash from an ash conveying system (including transfer points) in excess of 5% of the observation period (nine minutes per three hour period). This emission limit does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however the emission limit does apply to visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems. 310 CMR 7.08(2)(f)5. does not apply during maintenance and repair of ash conveying systems. Maintenance and repair of the ash conveying systems must be done in accordance with best management practices.

6. Operator Training and Certification - Any person subject to 310 CMR 7.08(2) shall implement the following municipal waste combustor operator training and certification requirements.

a. shall have each chief facility operator and shift supervisor obtain and maintain an Operator Certificate issued by the American Society of Mechanical Engineers (ASME).

b. shall not allow the municipal waste combustor unit to be operated at any time unless one of the following persons is on duty: A chief facility operator or a shift supervisor who has obtained an Operator Certificate. (A Provisional Certificate is acceptable provided the supervisor is scheduled to obtain an Operator Certificate in accordance with 310 CMR 7.08(2)(f)). If one of the persons listed above must leave the municipal waste combustor plant during his or her operating shift, a provisionally certified control room operator who is onsite at the municipal waste combustor plant may fulfill these requirements.

7.08: continued

c. shall have all chief facility operators, shift supervisors, and control room operators who have not obtained an Operator Certificate from ASME complete the National Technical Information Service - "EPA Municipal Waste Combustor Operating Course."

d. shall establish a training program to review the operating manual with each person who has responsibilities affecting the operation of an affected municipal waste combustor unit, including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers. The operating manual shall address at a minimum the following:

i. A summary of the all applicable requirements in 310 CMR 7.08(2);

ii. Basic combustion theory applicable to a municipal waste combustor unit;

iii. Procedures for receiving, handling, and feeding municipal solid waste;

iv. Municipal waste combustor unit startup, shutdown, and malfunction procedures;

v. Procedures for maintaining proper combustion air supply levels;

vi. Procedures for operating the municipal waste combustor unit within the requirements established under 310 CMR 7.08(2);

vii. Procedures for responding to periodic upset or off-specification conditions;

viii. Procedures for minimizing particulate matter carryover;

ix. Procedures for handling ash;

x. Procedures for monitoring municipal waste combustor unit emissions; and

xi. Reporting and recordkeeping procedures.

e. shall make available to the Department for inspection upon request all the operating manual and records of training.

f. shall be in compliance with all training and certification requirements specified in 310 CMR 7.08(2)(f)6. by six months after the date of start up or August 21,1999 whichever is later.

7. Materials Separation Plan.

a. within six months from the date that a Material Separation Plan Guidance Document ("guidance document") is provided by the Department, any person subject to 310 CMR 7.08(2) shall submit a materials separation plan for the removal of mercury-bearing products or other specific toxic components or toxic precursors as designated by the Department pursuant to 310 CMR 7.08(2)(f)7.e. The material separation plan shall be developed in accordance with the guidance document and shall detail the minimum requirements for compliance with the materials separation plan.

b. Upon Department draft approval of the materials separation plan, the Department shall publish a notice of public comment in accordance with M.G.L. c. 30A detailing the proposed materials separation plan. The Department shall allow for a 30 day public comment period following the published notice. The Department will approve or deny the materials separation plan after the close of the public comment period. Following Department approval of the materials separation plan, the person subject to 310 CMR 7.08(2) must implement the materials separation plan.

c. Prior to the implementation of the materials separation plan, the person subject to 310 CMR 7.08(2) shall determine the uncontrolled mercury concentration in the flue gas for four consecutive quarters. The Department may require subsequent testing.

d. One year following the date of implementation of the materials separation plan and every year after, the person subject to 310 CMR 7.08(2) shall submit a progress report to the Department documenting the effective implementation of the materials separation plan. The Department may require modifications to the materials separation plan if necessary.

e. The Department may require that material separation plans address other specific toxic components or toxic precursors, provided that the Department first conducts a formal rulemaking pursuant to M.G.L. c. 30A to require persons subject to 310 CMR 7.08(2) to add such other toxic component or precursor to the material separation plan.

7.08: continued

(g) Compliance and Performance Testing. Each person subject to 310 CMR 7.08(2) shall comply with the provisions of 40 CFR 60.58b, "Compliance and Performance Testing," effective December 19, 1995 and as amended October 24, 1997, and November 16, 2001, the provisions of which are hereby incorporated by reference. Compliance with the applicable requirements as set forth in 310 CMR 7.08(2)(f) shall be determined in accordance with 40 CFR 60.58b, except as provided under 310 CMR 7.08(2)(g)1., 2., 3., 4., 5. and 6. The initial performance test must be completed within 180 days after the final compliance date.

1. Dioxin/Furan. Following the date of the initial performance test for dioxin/furans, any person subject to 310 CMR 7.08(2) shall conduct compliance tests for dioxin/furan emissions according to one of the schedules specified below:

a. Following the date of the initial performance test, compliance testing for dioxin/furan emissions shall be conducted on all municipal waste combustor unit(s) on a nine month basis, or

b. For municipal waste combustor unit(s) where all compliance tests for all unit(s) over a 27 month period indicate that dioxin/furan emissions are less than or equal to seven nanograms per dry standard cubic meter total mass (ng/dscm), corrected to 7% oxygen, the person subject to 310 CMR 7.08(2) may elect to conduct compliance tests for one unit every nine months. At a minimum, a compliance test for dioxin/furan emissions shall be conducted every nine months following the previous compliance test for one unit at the municipal waste combustor plant. Every nine months a different unit at the municipal waste combustor plant shall be tested, and the units at the plant shall be tested in sequence (*e.g.*, unit 1, unit 2, unit 3, as applicable). The person subject to 310 CMR 7.08(2) may continue to conduct compliance testing on only one unit per nine month basis so long as the dioxin/furan emission limits remain less than or equal to 7 ng/dscm @ 7% $O_2$. If any nine month compliance test indicates dioxin/furan emissions greater than the specified limit, compliance tests shall thereafter be conducted on all units at the plant every nine months until and unless all nine month compliance test for all units at the plant over a 27 month period indicate dioxin/furan emissions less than or equal to the 7 ng/dscm @ 7% $O_2$.

c. Any person subject to 310 CMR 7.08(2) who elects to follow the compliance testing schedule specified in 310 CMR 7.08(2)(g)1.b., shall follow the procedures specified in 310 CMR 7.08(2)(i) 1. for reporting the selection of this schedule.

d. Municipal waste combustor units where carbon injection (or equivalent) is used to comply with the dioxin/furan emission limits specified in section 310 CMR 7.08(2)(f)2. or the dioxin/furan emission limit specified in 310 CMR 7.08(2)(g)1.b shall follow the procedures specified in 40 CFR 60.58b(m) effective December 19, 1995 and as amended October 25, 1997, for measuring and calculating the carbon (or equivalent) usage rate.

2. Mercury. Following the date that the initial performance test for mercury is completed, compliance testing for mercury shall be conducted on all municipal waste combustor unit(s)on a quarterly basis. Compliance with the emissions limit specified in 310 CMR 7.08(2)(f) 2. shall be based on the average of four quarterly compliance tests per rolling 12 months but shall not exceed 0.080 mg/dscm in any quarterly test. If compliance with the mercury emission limit has been achieved in each quarter for eight consecutive quarters, then the person subject to 310 CMR 7.08(2) may elect to perform compliance testing on a nine month basis. Any municipal waste combustor unit(s) which cannot achieve compliance with the emission limitation in 310 CMR 7.08(2)(f) 2. during the nine month compliance test shall resume quarterly compliance testing as specified above.

3. Optimization Testing. Municipal waste combustor unit(s) which employ a carbon injection (or equivalent) mercury emission control system shall conduct optimization tests. These tests will determine the optimum feed rate for the mercury emissions control apparatus by determining the carbon (or equivalent) feed rate at which the emissions of mercury are equal to or less than the applicable limit at 310 CMR 7.08(2)(f)2. The optimization test shall be conducted as follows:

a. The optimization tests shall be performed during the initial performance test, after a change in carbon (or equivalent), upon request by the Department, upon request by the person subject to 310 CMR 7.08(2) or annually if required under 310 CMR 7.08(2)(g)4.

7.08: continued

b. If there are identical municipal waste combustor units at the municipal waste combustor plant, then optimization tests may be performed on one unit, and the resulting parameters applied to the other unit(s) which are identical to that unit at that plant.

c. Within 30 calendar days of the conclusion of any optimization test, any person subject to 310 CMR 7.08(2) shall submit to the Department for approval a proposed optimized carbon (or equivalent) feed rate which minimizes mercury emissions. An approvable feed rate is the feed rate such that a higher feed rate achieves insignificant additional reductions in mercury emissions compared to the amount of carbon (or equivalent) added. The carbon (or equivalent) feed rate approved by the Department shall be used to operate the carbon injection (or equivalent) mercury control system until the next optimization test is performed and the feed rate approved.

4. Limited Waiver From Mercury Limit.

a. After a municipal waste combustor plant has been retrofitted with air pollution controls to satisfy the requirements of 310 CMR 7.00 and if, upon the completion of the optimization test or prior to December 31, 2003 a municipal waste combustor unit(s) employing electrostatic precipitators as the primary particulate matter control device and/or unit(s) employing innovative technology with respect to air pollution control devices cannot achieve the mercury emission limits specified in 310 CMR 7.08(2)(f)2., the person subject to 310 CMR 7.08(2) may request a limited waiver from said emission limits.

b. The person shall submit with the request for the limited waiver information indicating detailed site specific technical reasons for the limited waiver, including but not limited to, optimization test results and the progress of the materials separation plan, as well as any additional information requested by the Department as a result of its review of the request. In no circumstance will the Department grant a limited waiver if the mercury emission limit exceeds 0.065 mg/dscm @ 7% $O_2$. Upon review of the information submitted, the Department will approve or deny a limited waiver. A limited waiver will expire on December 31, 2003 unless an extension is requested and granted pursuant to 310 CMR 7.08(2)(g)4.e.

c. Approval of a limited waiver is considered a modification to the emission control plan and must comply with the requirements contained at 310 CMR 7.08(2)(j)7. prior to incorporation into the emission control plan.

d. If a limited waiver is approved, the person subject to 310 CMR 7.08(2) must comply with the following requirements during the term of the waiver:

i. A mercury emission limit of 0.065mg/dscm @7% $O_2$.

ii. A person subject to 310 CMR 7.08(2) must submit to the Department an evaluation of its material separation plan, identifying whether or not (1) existing activities have contributed to the accomplishment of the material separation plan's stated goals and/or diversion or reduction of mercury in the municipal solid waste prior to combustion; (2) existing activities have failed such stated goals and/or diversion or reduction of mercury (in such case, explaining why such activities failed); and (3) new activities may contribute to the accomplishment of the material separation plan's stated goals or diversion or reduction of mercury. If new activities are so identified, a material separation plan may be modified; and

iii. Perform and submit optimization testing annually until compliance with 310 CMR 7.08(2)(f)2. is achieved; and

iv. All unit(s) subject to 310 CMR 7.08(2) shall be in compliance with the mercury emission limit at 310 CMR 7.08(2)(f)2. on or before December 31, 2003.

e. Extension of the Mercury Waiver. A petition to the Department for the extension of a limited waiver beyond the December 31, 2003 deadline may be submitted by plants using electrostatic precipitators no later than August 1, 2003. The Department may grant a maximum two year extension. If such an extension is granted, the person subject to 310 CMR 7.08(2) shall comply with the following:

i. Continue to adhere to the provision at 310 CMR 7.08(2)(g)4.d.i. through iii.

ii. Submit a plan to achieve the 0.028 mg/dscm @ 7% $O_2$ emission limit by the end of the extended waiver period.

7.08: continued

f. If a person subject to 310 CMR 7.08(2)(f)2. has submitted a request for a limited waiver, or an extension of the limited waiver from the mercury emission limit specified in 310 CMR 7.08(2)(f)2., which includes detailed site specific technical reasons for the limited waiver, compliance test results, if available, optimization test results, and the progress of the material separation plan, for a facility, but approval or denial of the request has not been issued, the facility shall not be deemed in noncompliance with the mercury emission limit specified in 310 CMR 7.08(2)(f)2. from the date the mercury emission limit was first exceeded until the final approval of the request by the Regional Director of the Department or until 180 days after the denial of such a request by the Regional Director. However, the facility must comply with the 0.065 mg/dscm mercury emission limit, all other applicable requirements of 310 CMR 7.08(2) and the facility's Emission Control Plan during the request process and the 180 days period after a denial of the request.

5. Continuous Emissions Monitoring Systems Data.

a. Continuous Emissions Monitoring Systems (CEMS) which monitor nitrogen oxides, sulfur dioxide, and operating practices parameters (*e.g.*, carbon monoxide, unit load and particulate matter control device inlet temperature) shall obtain at a minimum valid continuous emissions monitoring system data for 75% of the hours per day, 75% of the days per month, and 90% of the hours per quarter that the municipal waste combustor unit is combusting municipal solid waste.

b. Carbon monoxide CEMS in accordance with Performance Specification 4 of 40 CFR Part 60, Appendix B, will satisfy the requirements in 310 CMR 7.08(2)(g).

6. Compliance Testing Schedule. Any person subject to 310 CMR 7.08(2) shall conduct compliance testing for all designated pollutants every nine months for each municipal waste combustor unit(s). Compliance testing for dioxin/furan and mercury shall be as specified in 310 CMR 7.08(2)(g)1. and 2.

(h) Recordkeeping - Any person subject to 310 CMR 7.08(2) shall maintain records of the information specified in 310 CMR 7.08(2)(h), as applicable, for each municipal waste combustor unit. All records shall be retained at the facility for at least five years.

1. The calendar date of each record.

2. The emission concentrations and operating parameters measured using continuous monitoring systems. The measurements specified below shall be recorded and shall be available for submittal to the Department or for onsite review by an inspector:

a. All six-minute average opacity levels as specified under 40 CFR 60.58b(c) effective December 19, 1995 and as amended October 24, 1997, including the highest level measured.

b. All one-hour average sulfur dioxide emission concentrations as specified under 40 CFR 60.58b(e) effective December 19, 1995 and as amended October 24, 1997.

c. All one-hour average nitrogen oxides emission concentrations as specified under 40 CFR 60.58b(h) effective December 19, 1995 and as amended October 24, 1997.

d. All one-hour average carbon monoxide emission concentrations, municipal waste combustor unit load measurements, and particulate matter control device inlet temperatures as specified under 40 CFR 60.58b(i) effective December 19, 1995 and as amended October 24, 1997.

e. All 24-hour daily geometric average sulfur dioxide emission concentrations and all 24-hour daily geometric average percent reductions in sulfur dioxide emissions as applicable, as specified under 40 CFR 60.58b(e) effective December 19, 1995 and as amended October 24, 1997 including the highest level recorded.

f. All 24-hour daily arithmetic average nitrogen oxides emission concentrations as specified under 40 CFR 60.58b(h) effective December 19, 1995 and as amended October 24, 1997, including the highest level recorded.

g. All four-hour block or 24-hour daily arithmetic average carbon monoxide emission concentrations, as applicable, as specified under 40 CFR 60.58b(i) effective December 19, 1995 and as amended October 24, 1997, including the highest level recorded.

h. All four-hour block arithmetic average municipal waste combustor unit load levels and particulate matter control device inlet temperature as specified under 40 CFR 60.58b(i) effective December 19, 1995 and as amended October 24, 1997, including the highest level recorded.

7.08: continued

3. Identification of the calendar dates when any of the average emissions concentrations or percent reductions, or operating parameters recorded under 310 CMR 7.08(2)(h)2., exceed the applicable limits, with detailed specific reasons for such exceedances and a description of corrective actions taken.

4. For municipal waste combustor unit(s) that apply carbon (or equivalent) for mercury or dioxin/furan control, the following records:

a. The average carbon (or equivalent) mass feed rate (in lbs/hr) estimated as required under 40 CFR 60.58b(m)(1)(i) effective December 19, 1995 and as amended October 24, 1997, during the initial mercury performance test and all subsequent mercury compliance tests, with supporting calculations.

b. The average carbon (or equivalent) mass feed rate (in lbs/hr) estimated for each hour of operation as required under 40 CFR 60.58b(m)(1)(ii) effective December 19, 1995 and as amended October 24, 1997, during the initial dioxin/furan performance test and all subsequent dioxin/furan compliance tests, with supporting calculations.

c. The average carbon (or equivalent) mass feed rate (in lbs/hr) estimated for each hour of operation as required under 40 CFR 60.58b(m)(3)(ii) effective December 19, 1995 and as amended October 24, 1997, with supporting calculations.

d. The total carbon (or equivalent) usage for each calendar quarter estimated as specified under 40 CFR 60.58b(m)(3) effective December 19, 1995 and as amended October 24, 1997, with supporting calculations.

e. The carbon (or equivalent) injection system operating parameter data for the parameter(s) that are the primary indicator(s) of carbon (or equivalent) feed rate.

5. Identification of the calendar dates and time periods for which the minimum number of hours of any of the data specified below have not been obtained including reasons for not obtaining sufficient data and a description of corrective actions taken:

a. Sulfur dioxide emissions data.

b. Nitrogen oxides emissions data.

c. Carbon monoxide emissions data.

d. Municipal waste combustor unit load data, including particulate matter control device inlet temperature data.

6. Identification of each occurrence that sulfur dioxide emissions data, nitrogen oxides emissions data, or operational data (*e.g*. carbon monoxide emissions, unit load, and particulate matter control device temperature) have been excluded from the calculation of average emission concentrations or parameters, along with detailed and specific reasons for excluding the data.

7. The results of daily drift tests and quarterly accuracy determinations for sulfur dioxide, nitrogen oxides, and carbon monoxide continuous emission monitoring systems, as required under 40 CFR, Part 60, Appendix F, Procedure 1.

8. Identification of each occurrence of a start-up, shut-down or malfunction, including the specific reasons for each occurrence, date, time, and unit involved. Average emissions concentrations or percent reductions, or operating parameters recorded under 310 CMR 7.08(2)(h)2., shall be recorded during start-up, shut-down or malfunction.

9. The results of the initial performance tests and all subsequent compliance tests conducted to determine compliance with the particulate matter, opacity, cadmium, lead, mercury, dioxin/furan, hydrogen chloride, and fugitive ash emission limits shall be recorded along with supporting calculations and submitted to the Department within 90 days after each such test.

10. For the initial dioxin/furan performance test and all subsequent dioxin/furan compliance tests recorded under 310 CMR 7.08(2)(h)9., the maximum demonstrated municipal waste combustor load and maximum particulate matter control device temperature (for each particulate matter control device) shall be recorded along with supporting calculations.

11. Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who are certified by ASME (Operator Certification and Provisional Certification), including the dates of initial and renewal certifications and documentation of current certification. Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have completed the EPA municipal waste combustor operator training course if required.

7.08: continued

12. Records showing the names of the persons who have completed a review of the operating manual as required by 310 CMR 7.08(2)(f)6.d. including the date of the initial review and subsequent annual reviews.

13. For municipal waste combustor units that apply carbon (or equivalent) for mercury or dioxin/furan control:

a. Identification of the calendar dates when the average carbon (or equivalent) mass feed rates recorded under 310 CMR 7.08(2)(h)4.c. were less than either of the hourly carbon feed rates estimated during compliance tests for mercury or dioxin/furan emissions and recorded under paragraphs 310 CMR 7.08(2)(h)4.a. or b. of this section, respectively, with reasons for such feed rates and a description of corrective actions taken.

b. Identification of the calendar dates when the carbon injection (or equivalent) system operating parameter(s) that are the primary indicator(s) of carbon mass feed rate (or equivalent) recorded under 310 CMR 7.08(2)(h)4.e., are below the level(s) estimated during the compliance tests as specified in 40 CFR 60.58b(m)(1)(i) and 60.58b(m)(1)(ii)effective December 19, 1995 and as amended October 24, 1997, with reasons for such occurrences and a description of corrective actions taken.

(i) Reporting Requirements - Any person subject to 310 CMR 7.08(2) shall submit an initial performance report as well as an annual report of the information specified in 310 CMR 7.08(2)(i)1., as applicable. Any person subject to 310 CMR 7.08(2) shall submit a semiannual report that includes the information specified in 310 CMR 7.08(2)(i)2. for any recorded pollutant or parameter that does not comply with the emission limits as set forth in 310 CMR 7.08(2). In meeting the reporting requirements of 310 CMR 7.08(2)(i)1. and 310 CMR 7.08(2)(i)2., any person subject to 310 CMR 7.08(2) shall report the information in a format determined by the Department that is designed to be understandable and informative to the public. The information shall be submitted in written format and electronic format.

1. Annual Reporting Requirements[a] - The information specified in 310 CMR 7.08(2)(i)1.a. through g. shall be reported:

a. 310 CMR 7.08(2)(h)2.a., e. through h. for the highest emission levels recorded.
b. 310 CMR 7.08(2)(h)4.a. and b.
c. 310 CMR 7.08(2)(h)5. - 6.
d. 310 CMR 7.08(2)(h)8. - 10.
e. Summary of 310 CMR 7.08(2)(i)1.a. through d. for the previous year.
f. The performance evaluation of the continuous emission monitoring system using the applicable performance specifications in appendix B of 40 CFR, Part 60.
g. A notification of intent to begin the reduced dioxin/furan compliance testing schedule specified in 310 CMR 7.08(2)(g)1.b. during the following calendar year.

2. Semi-Annual Reporting Requirements[b] - The information specified in a. through e. below shall be reported:

a. 310 CMR 7.08(2)(h)2.a., e. through h. for each date recorded in 310 CMR 7.08(2)(h)3.
b. 310 CMR 7.08(2)(h)3.
c. 310 CMR 7.08(2)(h)4. c.
d. 310 CMR 7.08(2)(h)9.[c]
e. 310 CMR 7.08(2)(h)13.

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[a] Annual reports shall be submitted no later than February 15 of each year following the calendar year in which the data were collected.

[b] Semiannual reports shall be submitted according to the schedule specified: (1) If data reported in accordance with section 310 CMR 7.08(2)(i)2 were collected during the first calendar half, then the report shall be submitted on or before August 1 following the first calendar half; (2) If data reported in section 310 CMR 7.08(2)(i)2 were collected during the second calendar half, then the report shall be submitted on or before February 15 following the second calendar half.

[c] Include only the reports which document emission levels that were above the applicable requirements and the corrective actions taken.

7.08: continued

(j) Emission Control Plan.

1. General Applicability - Any person subject to 310 CMR 7.08(2) shall submit an emission control plan (ECP) application to the Department on or before 90 days from August 21, 1998 on a form provided by the Department. All emission control plan applications are subject to the fee regulations and approval timelines contained in 310 CMR 4.00.

2. Emission Control Plan Requirements. The requirements of the emission control plan are contained in the emission control plan application but at a minimum, the ECP shall contain sufficient information (*e.g.*, control efficiency, specifications, standard operating and maintenance procedures) for any control equipment used to comply with 310 MR 7.08.

3. Compliance Demonstration. Any person subject to 310 CMR 7.08(2) must include in the emission control plan application an affirmative demonstration that any facility(ies) in Massachusetts, owned and operated by such persons (or by an entity controlling, controlled by or under common control with such person) that is subject to 310 CMR 7.00 and 310 CMR 19.00 is in compliance with, or on a Department approved compliance schedule to meet, all provisions of 310 CMR 7.00 and 310 CMR 19.00 and any plan approval, order, notice of noncompliance or permit issued thereunder;

4. Public Comment On Emission Control Plans.

a. Upon receipt of an emission control plan application, the Department will publish a notice of public hearing in accordance with M.G.L. c. 30A. The public hearing will be held 30 days after the publication of the hearing notice. The Department shall allow for a 30 day public comment period following the published notice.

b. After the public hearing and the close of the public comment period, the Department will review all of the information submitted and shall issue either a disapproval of the application or issue a draft emission control plan approval.

c. Upon issuance of the draft emission control plan approval, the Department shall publish a notice of public comment in accordance with M.G.L. c. 30A. The Department shall allow for a 30 day public comment period following the published notice.

d. After the close of public comment period, the Department will issue a final approval or disapproval of the emission control plan.

5. Additional Requirements. Additional requirements may be included in the emission control plan approval if the Department determines that the emissions from a municipal waste combustor plant's unit(s) alone or cumulatively with other municipal waste combustor plant's unit(s) cause or contribute to a condition of air pollution or a violation of any other regulation. Such requirements include but are not limited to emissions limits on air contaminants, and additional stack testing or emission monitoring requirements.

The Department may modify the emission control plan at any time if the Department determines that a municipal waste combustor plant's unit(s) alone or cumulatively with other municipal waste combustor plant's unit(s) cause or contribute to a condition of air pollution or a violation of any other regulation. Such modification must comply with the requirements in 310 CMR 7.08(2)(j)7.

6. Compliance Schedule. The emission control plan shall incorporate a compliance schedule that at a minimum contains the requirements in 310 CMR 7.08(2)(k)1.

7. Modification to the ECP. If the Department proposes to modify a municipal waste combustor plant's emission control plan, the Department shall publish a notice of public comment in accordance with M.G.L. c. 30A detailing the proposed modification. The Department shall allow for a 30 day public comment period following the published notice. The Department will modify the emission control plan after the close of the public comment period.

(k) Schedule. Municipal waste combustor unit(s) subject to 310 CMR 7.08 shall be in full compliance with the applicable requirements of 310 CMR 7.08(2) or cease operations by [one year from date of EPA approval of the state plan, or February 21, 2000, whichever is earlier], except:

7.08: continued

1. If a municipal waste combustor unit(s) cannot comply within the deadline above, the person subject to 310 CMR 7.08(2) shall notify the Department in writing of reasons why the unit(s) cannot comply. Such notification shall include a compliance schedule for each activity described in 310 CMR 7.08(2)(k)1.a.i. through iii.. The compliance schedule for each activity described in 310 CMR 7.08(2)(k)1.a.i. through iii. shall be incorporated into the emission control plan.

a. The ECP shall include the following dates:

i. Dates of all existing contract awards involving air pollution control systems or for process modifications, and dates for issuance of any additional orders for the purchase of air pollution control equipment. This date shall not exceed August 21, 1999.

ii. Date initiating on-site construction or installation of air pollution control equipment or process modification, as necessary. This date shall not be later than August 21, 2000.

iii. Date of the completion of on-site construction or installation of air pollution control equipment, or process modification will be achieved. This date shall be no later than November 19, 2000.

b. In no case shall compliance timelines be later than December 19, 2000.

2. If a municipal waste combustor unit(s) within a large municipal waste combustor plant is to permanently cease operations, it must do so by August 21, 1999. If permanent shutdown of operations is not possible within one year, then the person subject to 310 CMR 7.08(2) shall provide:

a. Justification to the Department six months prior to the compliance date why operation must extend beyond August 21, 199, and

b. The person subject to 310 CMR 7.08(2) shall enter into an Administrative Consent Order with the Department which contains enforceable milestones and commitments towards closure.

In no case shall operations extend two years beyond August 21, 1998.

3. Large municipal waste combustor unit(s) which commenced construction, modification, or reconstruction after June 26, 1987 shall comply with the emission limits for mercury and dioxin/furan as contained in 40 CFR, Subpart Ca of Part 60 by one year following the approval by EPA of the state plan or one year following the promulgation of 40 CFR, Subpart FFF of Part 62, whichever is earlier.

(3) Commercial, Industrial, and Special Incinerators. No person shall cause, suffer, allow, or permit the construction or substantial reconstruction or alteration or thereafter the operation of a commercial, industrial, or special incinerator for which the site location has not been approved by the Department in writing.

(4) Hazardous Waste Incinerators.

(a) No person shall construct, reconstruct, alter, or modify or operate, or cause, suffer, allow or permit the construction, reconstruction alteration, modification, or operation of, any hazardous waste incinerator unless such construction, reconstruction, alteration, modification, or operation is in compliance with:

1. 310 CMR 7.01, 7.08(4), and all other provisions of 310 CMR 7.00.
2. the terms of a Department approval granted pursuant to 310 CMR 7.00.
3. all applicable provisions of 310 CMR 30.000 and/or 314 CMR 8.00, and
4. the terms of a license or permit granted by the Department pursuant to 310 CMR 30.000 and/or 314 CMR 8.00.
5. In addition, 310 CMR 7.08(2) is adopted pursuant to the authority granted by M.G.L. c. 111, § 150A.

7.08: continued

Noncompliance with any provision of 310 CMR 30.000, or of a license granted pursuant to 310 CMR 30.000, shall be deemed noncompliance with, and shall be subject to all applicable provisions, of M.G.L. c. 21C. Noncompliance with any provision of 314 CMR 8.00, or of a permit granted pursuant to 314 CMR 8.00, shall be deemed noncompliance with, and shall be subject to all applicable provisions of, M.G.L. c. 21, §§ 26 through 53. No approval granted by the Department shall affect the responsibility of the owner or operator to comply with all other applicable laws and regulations.

(b) No person shall construct, reconstruct, alter, modify, or operate or cause, suffer, allow or permit the construction, reconstruction, alteration, modification, or operation of, any hazardous waste incinerator unless the plans, specifications, proposed Standard Operating Procedure, and the Proposed Maintenance Procedure for such hazardous waste incinerator have been submitted to the Department for approval, and the Department has granted such approval in writing. The Department may prescribe a form and/or other application methods which shall be used by each person applying for such approval from the Department.

(c) Each application for approval to construct, reconstruct, alter, modify or operate a hazardous waste incinerator shall be in compliance with the requirements set forth in 310 CMR 30.001 through 30.099 (General Provisions, *e.g.*, Definitions; Requirements for Accurate, Timely and Complete Monitoring, Recordkeeping and Submittals to the Department; Notification Procedures; and Transition Provisions) and 30.800 (Licensing Requirements and Procedures) and shall:

1. be signed by the owner or operator of the hazardous waste incinerator;
2. be accompanied by site information, plans, descriptions, specifications, and drawings showing the design of the hazardous waste incinerator, the nature and amount of emissions, and the manner in which the hazardous waste incinerator will be operated and controlled;
3. specify waste feed(s), including, for each, the anticipated heating value, viscosity, description of the physical form of the waste, and identification and quantification of hazardous waste constituents listed in 310 CMR 30.160 by the use of analytical techniques specified in "Test Methods for Evaluating Solid Waste", United States Environmental Protection Agency SW-846, 1980;
4. include a detailed description of the hazardous waste incinerator, including at least the following:
    a. the incinerator's model number and type, and the name of its manufacturer;
    b. the linear dimensions of the incinerator unit and the cross sectional area of the combustion chamber(s);
    c. the auxiliary fuel system (type/feed);
    d. the capacity of the prime mover;
    e. the automatic cutoff system(s);
    f. the stack gas monitoring and pollution control equipment;
    g. the design of the nozzle and burner;
    h. the construction materials; and
    i. each device for indicating and/or controlling temperature, pressure, and/or flow, including the location of each such device;
5. include the applicant's proposed standard operating procedure and proposed maintenance procedure, which shall include, but not be limited to, procedures for:
    a. incinerator startup and operation prior to, during, and immediately following emission testing, and
    b. long term incinerator operation, and
    c. sampling and analysis of waste feeds, including the frequency thereof.

Such procedures shall include procedures for rapidly shutting down the waste feed and the incinerator, and controlling emissions, in the event of equipment malfunction. Such procedures shall, to the satisfaction of the Department, indicate that the incinerator will operate in compliance with the emission limitations set forth in 310 CMR 7.08(4);

7.08: continued

6. include a proposed emission test protocol for demonstrating compliance with 310 CMR 7.00 in general and in particular with the emission limitations set forth in 310 CMR 7.08(4)(h). This protocol shall include at least the following: sampling and analysis procedures and equipment, sample locations, frequency and duration of sampling, anticipated test dates, duration of testing, quantity of waste to be burned, range(s) of temperature(s), waste feed rate, combustion gas velocity, auxiliary fuel use, and all other parameters which may affect the performance of the incinerator;

7. include whatever other information, plans, specifications, evidence, or documentation the Department may request; and

8. bear the seal and signature of a professional engineer, registered in the Commonwealth pursuant to M.G.L. c. 112, on all engineering plans, specifications, and other material submitted in or with the application.

(d) The Department may approve the construction, reconstruction, alteration, modification or operation of a hazardous waste incinerator only if the Department is persuaded that:**

1. emissions from the incinerator would not result in air quality exceeding the Massachusetts or National Ambient Air Quality Standards;

2. emissions from the incinerator would not result in noncompliance with 310 CMR 7.01 or any other provision of 310 CMR 7.00.

3. a proposed incinerator to be constructed in a non-attainment area would not have a potential to emit equal to or greater than 100 tons per year of the contaminant upon which the non-attainment status is based (*e.g.*, particulate matter, sulfur oxides, nitrogen oxides, volatile organic compounds, or carbon monoxide), unless the incinerator is in compliance with the requirements of 310 CMR 7.00: *Appendix A*(1) through (6), Emission Offsets and Non-attainment Review;

4. a proposed modification of an incinerator in a non-attainment would not produce a significant increase in emissions of the contaminant upon which the non-attainment status is based (*e.g.*, particulate matter, sulfur oxides, nitrogen oxides, volatile organic compounds, or carbon monoxide), unless the incinerator is in compliance with the requirements of 310 CMR 7.00: *Appendix A*(1) through (6), Emissions Offsets and Non-attainment Review; and

5. a proposed incinerator subject to 310 CMR 7.00: *Appendix A*(1) through (6) (a major source or major modification) would not have total allowable emissions which, when added to allowable emissions from:

a. existing facilities in the pertinent regions, and

b. new or modified sources in the pertinent region, which sources are

not major emitting facilities, would, by the time that the incinerator is to commence operation, exceed the total emissions from existing sources allowed under the applicable SIP (prior to the application for such permit to construct or modify) by such an amount as to be inconsistent with "reasonable further progress" as defined in the Massachusetts State Implementation Plan (SIP).

(e) The Department may impose any reasonable condition upon an approval, including, but not limited to:

1. compliance with record-keeping requirements set forth in 310 CMR 30.542;
2. limitations on waste feed;
3. waste feed rates;
4. operating conditions during start-up, prior to, and during emissions testing;
5. long term operating conditions;

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** In addition to the requirements contained herein, major new sources of air contaminants and major modifications of existing sources located in attainment areas may be subject to Prevention of Significant Deterioration (PSD) regulations at 40 CFR 52.21. Effective July 1, 1982, the Department implemented the PSD program in accordance with the Department's "Procedures for Implementing Federal Prevention of Significant Deterioration Regulations". As of March 3, 2003, the federal PSD regulations are administered by the U.S. Environmental Protection Agency.

7.08: continued

6. requiring the hazardous waste incinerator to be provided with:
   a. sampling ports of such size, number, and location as the Department may require, and safe access to each port, and
   b. instrumentation to monitor and record emission data;
7. quantitative analysis of the scrubber water, if any, the ash residues, and other residues, if any, for the purpose of estimating the fate of the trial POHCs; and
8. any other sampling and/or testing equipment.

(f) The Department may revoke an approval if:
1. construction is not begun within four years from the date of issuance of the approval; or
2. during construction, work is suspended for two years; or
3. there is any other lawful cause.

(g) For each hazardous waste incinerator whose construction was not completed prior to October 15, 1983, all provisions of 310 CMR 7.08(4) shall take effect on October 15, 1983. For each hazardous waste incinerator whose construction was completed prior to October 15, 1983:
1. all provisions of 310 CMR 7.08(4)(a) through (g) shall take effect on October 15, 1983; and
2. within nine calendar months after the date on which a license application is required to be submitted to the Department pursuant to 310 CMR 30.099(6), either:
   a. comply with 310 CMR 7.08(4)(b), (c), and (h) through (l), or
   b. persuade the Department that more time is needed to comply with 310 CMR 7.08(4)(h) through (l), and submit to the Department a proposed plan and schedule for such compliance. Said plan and schedule are subject to review and approval by the Department and shall provide for compliance with 310 CMR 7.08(4)(b), (c) and (h) through (l) as expeditiously as practicable, and in any event no later than 24 months after the date on which a license application is required to be submitted to the Department pursuant to 310 CMR 30.099(6). Such proposed plan and schedule shall be submitted in compliance with all applicable requirements set forth in 310 CMR 7.08 and in 310 CMR 30.000 and/or 314 CMR 8.00.

(h) Except as provided in 310 CMR 7.08(4)(g), no person owning, leasing, or controlling the operation of any hazardous waste incinerator shall cause, suffer, allow, or permit emissions therefrom in excess of the following emission limitations:
1. for each waste feed, a hazardous waste incinerator shall achieve a destruction and removal efficiency (DRE) of 99.99% for each Principal Organic Hazardous Constituent (POHC) designated in the Department's approval. DRE shall be determined for each POHC from the following equation:

$$DRE = \frac{(W\ in - W\ out)}{W\ in} \times 100\%$$

Where:

W in = Mass feed rate of one POHC in the waste stream feeding the incinerator, and

W out = Mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere;

2. For a hazardous waste incinerator with the potential to emit hydrogen chloride (HCl) at a rate equal to or greater than four pounds per hour, such HCl emissions shall be limited to no greater than the larger of either four pounds per hour or 1% of the HCl in the combustion gas prior to entering any air pollution control equipment;
3. Particulate emissions form a hazardous waste incinerator shall not exceed 0.08 grains per dry standard cubic foot when corrected for the amount of oxygen in the stack gas according to the formula:

7.08: continued

$$Pc = PM \times \frac{14}{21-Y}$$

Where:

Pc = the corrected concentration of particulate matter.

Pm = the measured concentration of particulate matter, and

Y = the measured concentration (percent by volume, dry) of oxygen in the stack gas.

4. Emissions of products of incomplete combustion (PICs) shall be limited to the degree necessary to comply with 310 CMR 7.01.

(i) For the purposes of demonstrating compliance with the emission limitations contained in 310 CMR 7.08(4)(h), compliance with other requirements of 310 CMR 7.00, or compliance with the terms of any approval granted pursuant to 310 CMR 7.00, each person owning, leasing, or controlling the operation of a hazardous waste incinerator shall conduct or have conducted performance tests, including, without limitation, sampling and analysis of waste and exhaust emissions, in accordance with the requirements set forth in 310 CMR 7.00, including, without limitation, the following requirements:

1. For a newly constructed, substantially reconstructed, or altered incinerator, such performance tests shall be conducted as soon as possible as determined by the Department, but in no case latter than 720 hours of operation or 120 calendar days, whichever comes first, after the initial introduction into the incinerator of each waste feed specified in a Department approval.

2. For a hazardous waste incinerator for which the Department is of the opinion that performance tests are necessary, such performance tests shall be conducted within 90 days of written notification from the Department that such tests are required, or within such other deadline as the Department may specify in said written notification, and

3. shall include an analysis demonstrating that the emissions of products of incomplete combustion (PICs) are in compliance with 310 CMR 7.01. Such analysis of PICs shall include the identification and quantification of no less than the five PICs that occur in the highest concentration in the flue gas stream. The Department may require that additional analysis be performed including, but not limited to, specifying particular compounds to be identified and quantified.

(j) Performance tests in compliance with 310 CMR 7.08(4)(i) shall be conducted in accordance with methods as approved by the Department and in conformance with 310 CMR 7.13. The sampling and analysis of waste shall in all cases be done by a person knowledgeable therein, and shall be done in the presence of a representative of the Department whenever such is deemed necessary by the Department. The results of all such tests shall:

1. be recorded and the records placed in the operating log in compliance with 310 CMR 30.542, and

2. be submitted to the Department in accordance with 310 CMR 30.807 no later than 90 days after completion of the actual testing or within such other deadline as the Department may prescribe in writing.

(k) No person shall cause, suffer, allow, or permit the operation of any hazardous waste incinerator that is not equipped with instrumentation which is properly maintained in an accurate operating condition and operated continuously to indicate and record the:

1. carbon monoxide and oxygen levels in the stack exhaust gas,
2. waste feed and supplementary fuel rates,
3. combustion temperature, and
4. combustion gas velocity.

The instrumentation and its installation shall be as approved by the Department in accordance with 310 CMR 7.08(4).

7.08: continued

(l) No person shall cause, suffer, allow, or permit the operation of any hazardous waste incinerator unless said operation is in conformance with the following:

1. During start-up and shutdown, hazardous waste shall not be fed into the incinerator unless the incinerator is operating within the conditions of operation as specified in the Department's approval; and
2. Fugitive emissions from the combustion zone shall be controlled by:
   a. keeping the combustion zone totally sealed against fugitive emissions; or
   b. maintaining a combustion zone pressure lower than atmospheric pressure; or
   c. an alternative means of fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure as approved by the Department; and
3. Each hazardous waste incinerator shall be equipped with a functioning system to automatically cease operation of the incinerator when change(s) in waste feed, incinerator design, or operating conditions exceed limits as designated in a Department approval. Each such systems, and each alarm associated therewith, shall be tested at least weekly to verify operability; and
4. At least once each day during which it is operated, each hazardous waste incinerator and associated equipment (*e.g.* pumps, valves, conveyors, and pipes) shall be subjected to thorough visual inspection for leaks, spills, fugitive emissions, and signs of tampering; and
5. All monitoring and inspection data shall be recorded and the records shall be placed in the operating log required by 310 CMR 30.542.

(m) No incinerator for the burning of polyhalogenated aromatic hydrocarbons shall be constructed, substantially reconstructed, altered, or operated except in compliance with the following requirements:

1. Polyhalogenated aromatic hydrocarbons may be burned only after the Department has expressly and in writing approved the burning of such material, and only to the extent and only while such approval is in effect. The application to the Department for such approval shall expressly state that approval is sought to burn polyhalogenated aromatic hydrocarbons.
2. The burning of polyhalogenated aromatic hydrocarbons shall achieve a destruction and removal efficiency, as determined pursuant to 310 CMR 7.08(4)(h)1., of 99.9999% for each POHC, based on burning materials more difficult to burn than tetra-, penta-, and hexachlo- rodibenzo-p-dioxin and dibenzofurans.

7.09: U Dust, Odor, Construction, and Demolition

(1) No person having control of any dust or odor generating operations such as, but not limited to asphalt batching plants, asphalt roofing materials manufacturing plants, asphalt blowing plants, foundries, chemical products manufacturing plants, incinerators, fuel utilization facilities, petroleum products manufacturing plants, aggregate manufacturing plants, food preparation or processing facilities, wood products plants, dry cleaning establishments, paint and varnish manufacturing plants, paper manufacturing plants, leather manufacturing plants, concrete batching plants, metal coating and treating plants, land clearing operations, construction work, dump operations, agricultural operations and street sweeping shall permit emissions therefrom which cause or contribute to a condition of air pollution.

(2) No person responsible for any construction or demolition of an industrial, commercial, or institutional building or residential building with 20 or more dwelling units, shall cause, suffer, allow, or permit emissions therefrom which cause or contribute to a condition of air pollution. Said person shall notify the Department in writing ten working days prior to the initiation of said construction or demolition operation. The ten working day advance notice period will be waived in the event of emergency demolition necessary to prevent a public health or safety hazard.

7.09: continued

(3) No person responsible for an area where construction or demolition has taken place shall cause, suffer, allow, or permit particulate emissions therefrom to cause or contribute to a condition of air pollution by failure to seed, pave, cover, wet, or otherwise treat said area to prevent excessive emissions of particulate matter.

(4) No person shall cause, suffer, allow, or permit the handling, transportation, or storage of any material in a manner that results or may result in emissions therefrom which cause or contribute to a condition of air pollution.

(5) No persons responsible for any construction or demolition of a structure that contains friable asbestos material shall fail to comply with 310 CMR 7.09(2) and 310 CMR 7.02. (National Emission Standards for Hazardous Pollutants)

(6) No person shall cause, suffer, allow, or permit the operation of mechanized street sweeping equipment that is not equipped with a suitable dust collection or dust suppression system which is maintained in good operating condition and is operated continuously while the street sweeping equipment is in use to prevent conditions of air pollution.

(7) 310 CMR 7.09(1) through 7.09(4) and 7.09(6) are subject to the enforcement provisions specified in 310 CMR 7.52.

7.10: U Noise

(1) No person owning, leasing, or controlling a source of sound shall willfully, negligently, or through failure to provide necessary equipment, service, or maintenance or to take necessary precautions cause, suffer, allow, or permit unnecessary emissions from said source of sound that may cause noise.

(2) 310 CMR 7.10(1) shall pertain to, but shall not be limited to, prolonged unattended sounding of burglar alarms, construction and demolition equipment which characteristically emit sound but which may be fitted and accommodated with equipment such as enclosures to suppress sound or may be operated in a manner so as to suppress sound, suppressible and preventable industrial and commercial sources of sound, and other man-made sounds that cause noise.

(3) 310 CMR 7.10(1) shall not apply to sounds emitted during and associated with:
(a) parades, public gatherings, or sporting events, for which permits have been issued provided that said parades, public gatherings, or sporting events in one city or town do not cause noise in another city or town;
(b) emergency police, fire, and ambulance vehicles;
(c) police, fire, and civil and national defense activities;
(d) domestic equipment such as lawn mowers and power saws between the hours of 7:00 A.M. and 9:00 P.M.

(4) 310 CMR 7.10(1) is subject to the enforcement provisions specified in 310 CMR 7.52.

7.11: U Transportation Media

(1) Motor Vehicles.
(a) All motor vehicles registered in the Commonwealth shall comply with pertinent regulations of the Registry of Motor Vehicles relative to exhaust and sound emissions.
(b) No person shall cause, suffer, allow, or permit the unnecessary operation of the engine of a motor vehicle while said vehicle is stopped for a foreseeable period of time in excess of five minutes. 310 CMR 17.11 shall not apply to:
1. vehicles being serviced, provided that operation of the engine is essential to the proper repair thereof, or

7.11: continued

2. vehicles engaged in the delivery or acceptance of goods, wares, or merchandise for which engine assisted power is necessary and substitute alternate means cannot be made available, or

3. vehicles engaged in an operation for which the engine power is necessary for an associated power need other than movement and substitute alternate power means cannot be made available provided that such operation does not cause or contribute to a condition of air pollution.

(c) 310 CMR 7.11(1)(b) is subject to the enforcement provisions specified in 310 CMR 7.52.

(2) Diesel Trains.

(a) No person owning or operating a diesel powered locomotive shall cause, suffer, allow, or permit said locomotive to be operated in a manner such as to cause or contribute to a condition of air pollution.

(b) No person shall cause, suffer, allow, or permit the unnecessary foreseeable idling of a diesel locomotive for a continuous period of time longer than 30 minutes. 310 CMR 7.00 shall not apply to diesel locomotives being serviced provided that idling is essential to the proper repair of said locomotive and that such idling does not cause or contribute to a condition of air pollution.

(c) 310 CMR 7.11(2)(a) and 7.11(2)(b) are subject to the enforcement provisions specified in 310 CMR 7.52.

(3) Aircraft. No person owning or operating an airport shall cause, suffer, allow, or permit routine warmups, testing, or other operation of aircraft while on the ground, in such a manner as to cause or contribute to a condition of air pollution, outside of the property lines of the airport, that in the opinion of the Department are unreasonable and feasibly preventable.

(4) Marine Vessels. No person owning, operating, or having control of a seagoing vessel while it is in the District shall cause, suffer, allow, or permit, aboard said vessel, tube blowing or soot removal activities that cause or contribute to a condition of air pollution. 310 CMR 7.11 shall apply only in the Merrimack Valley Air Pollution Control District, Metropolitan Boston Air Pollution Control District, and the Southeastern Massachusetts Air Pollution Control District.

7.12: U Source Registration

(1) Applicability.

(a) Source Registration is required of any person owning, operating or controlling a facility if said facility:

1. Is or contains a fuel utilization facility with an energy input capacity equal to or greater than the following size thresholds:

| Fuel Type | Maximum Energy Input Capacity (Btu/hour) |
|---|---|
| Natural Gas | 10,000,000 |
| Distillate Oil | 10,000,000 |
| Residual Oil | 10,000,000 |
| Solid Fuel | 3,000,000 |
| Used Oil Fuel | 3,000,000 |
| Landfill Gas | 3,000,000; |

7.12: continued

2. Has non-combustion federal potential[1] to emit (facility-wide) equal to or greater than:

| Contaminant | Threshold |
|---|---|
| Particulate Matter | two tons per year |
| Oxides of Sulfur | 2.5 tons per year |
| Organic Material | ten tons per year |
| Nitrogen Dioxide | 4.4 tons per year |
| Lead | five tons per year |
| Hazardous Air Pollutants | ten tons of any individual HAP<br>25 tons of total HAPs ; |

3. Is or contains a hazardous waste incinerator, regardless of size;

4. Is or contains an incinerator with the capacity to reduce 50 pounds per hour or more of waste;

5. Is or contains an emission unit or process that is subject to a National Emission Standard for Hazardous Air Pollutants (NESHAP) or subject to a Maximum Achievable Control Technology (MACT) standard defined at 40 CFR Part 61 and Part 63, for which the Department has received delegation from EPA;

6. Is or contains a stationary reciprocating internal combustion engine (except for emergency or standby engines) with a maximum energy input capacity of 3,000,000 Btu or greater (burning any fuel);

7. Is required to file Source Registration as a condition of a plan approval or operates under a Restricted Emission Status (RES) pursuant to 310 CMR 7.02(9) or 7.02(10) issued since January 1, 1990. The owner/operator of a facility required by a plan approval, issued prior to January 1, 1990, to submit annual source registration is no longer required to do so unless said facility meets one of the other conditions for registration in 310 CMR 7.12; or a more recent Department approval requires Source Registration;

8. Who receives a request for Source Registration from the Department; or

9. Any person owning, operating or controlling a facility subject to 310 CMR 7.00*: Appendix C*.

(b) Any person owning, operating or controlling a facility that becomes subject to reporting by meeting one of the criteria in 310 CMR 7.12(1)(a) and that was not previously subject to Source Registration reporting shall contact the Department by January 31st.

(c) Any person owning, operating , leasing or controlling a facility subject to 310 CMR 7.26 shall report emissions in a manner described by that regulation unless otherwise required to report pursuant to 310 CMR 7.12(1)(a)8 or 310 CMR 7.12(2)(a)4.

(2) Schedule.

(a) By April 15th of each year, Source Registration shall be signed and submitted to the Department by the Responsible Official of:

1. A facility required to obtain an operating permit pursuant to 310 CMR 7.00: *Appendix C*;

2. A facility having a RES pursuant to 310 CMR 7.02(9);

3. [Reserved];

4. A facility with actual emissions of $NO_x$ or VOC equal to or greater than 25 tons per year;

5. A facility that emits an air contaminant subject to a NESHAP or a Maximum Achievable Control Technology (MACT) standard defined at 40 CFR Part 61 and Part 63, for which the Department has received delegation from EPA; or

6. A facility that is required, as a condition of a plan approval issued since January 1,1990, to file Source Registration annually.

(b) Source Registration shall be submitted to the Department once every three years where the facility is not subject to the annual reporting requirements of 310 CMR 7.12(2)(a). Source Registration shall be due to the Department by April 15 or another date approved by the Department.

[1] Non-combustion potential emissions excludes emissions from motor vehicles, incinerators and products of combustion from fuel utilization facilities.

7.12: continued

(c) Any person who has requested Source Registration forms under 310 CMR 7.12(1)(b) shall complete and submit Source Registration by the date specified by the Department.

(3) Source Registration Contents.

(a) An owner or operator shall, if requested, provide information about the facility as is specified in forms obtained from the Department, including, but not limited to:

1. A complete description of the facility including a description of process and combustion equipment, a description of facility operating hours and operating schedule, a description of all raw materials and fuels used at the facility. Once a facility is subject to Source Registration, all emission units and processes at the facility must be included in the submittal even if, individually, certain emission units and processes may not meet the applicability thresholds of 310 CMR 7.00. Emission units identified as "insignificant" under 310 CMR 7.00: *Appendix C*(5)(i) need not be included.

2. Detailed emission estimates for all criteria and hazardous air pollutants emitted at the facility;

3. An Emission Statement summarizing and certifying actual annual emissions and peak ozone season day emissions of volatile organic compounds and oxides of nitrogen;

4. A description of air pollution control equipment and control efficiencies of said equipment;

5. Calculations and assumptions used to support calculations of emissions such as annual fuel process rate, and peak ozone season daily process rate; and

6. Certification of accuracy to ensure that the information contained in the Source Registration is accurate and complete to the best knowledge of the individual signing the submittal pursuant to 310 CMR 7.01.

(b) Copies of Source Registration and other information supplied to the Department to comply with 310 CMR 7.12, shall be retained by the facility owner or operator for five years from the date of submittal.

(4) Verification and Availability of Information.

(a) Upon receipt of the Source Registration, the Department may review the submitted information for accuracy and completeness. The Department may inspect a facility at any time for the purpose of verifying information contained in Source Registration.

(b) Information submitted pursuant to 310 CMR 7.12 shall be available to the public during normal working hours at locations as the Department may specify.

7.13: U Stack Testing

(1) Any person owning, leasing, operating or controlling a facility for which the Department has determined that stack testing is necessary to ascertain compliance with the Department's regulations or design approval provisos shall cause such stack testing:

(a) to be conducted by a person knowledgeable in stack testing,

(b) to be conducted in accordance with procedures contained in a test protocol which has been approved by the Department,

(c) to be conducted in the presence of a representative of the Department when such is deemed necessary, and

NON-TEXT PAGE

7.13: continued

(d) to be summarized and submitted to the Department with analyses and report within such time as agreed to in the approved test protocol.

(2) Any person having control of a facility, relative to which the Department determines that stack testing (to ascertain the mass emission rates of air contaminants emitted under various operating conditions) is necessary for the purposes of regulation enforcement or determination of regulation compliance shall cooperate with the Department to provide:

(a) entrance to a location suitable for stack sampling,

(b) sampling ports at locations where representative samples may be obtained,

(c) staging and ladders to support personnel and equipment for performing the tests,

(d) a suitable power source at the sampling location for the operation of sampling equipment, and

(e) such other reasonable facilities as may be requested by the Department.

7.14: U Monitoring Devices and Reports

(1) Upon request by the Department through direct communication or public notice, any person who owns or operates a stationary emission source of a category and class specified by the Department:

(a) shall install, maintain, and use emission monitoring devices, of a design and installation approved by the Department, and

(b) shall make periodic reports to the Department on the nature and amounts of emissions from said source which the Department shall review and correlate for its use in emissions control and exhibit for public in- formation.

(2) Any person who owns or operates an emission source as described in 40 CFR, Part, 51, Appendix P, as amended, shall comply with the minimum requirements for continuous emission monitoring, recording, and reporting as set forth therein for opacity, nitrogen oxides emissions, sulfur dioxide emissions, and oxygen or carbon dioxide.

(3) The monitoring and recording required in 310 CMR 7.14(2) shall begin by August 6, 1988.

7.15: U Asbestos

(1) Standards for Demolition/Renovation

(a) Applicability. No person shall cause, suffer, allow, or permit the demolition/renovation, installation, reinstallation, handling, transporting, storage, or disposal of a facility or facility component that contains asbestos, asbestos-containing material, or asbestos-containing waste material in a manner which causes or contributes to a condition of air pollution.

(b) Notification. Each owner/operator of a demolition/renovation operation involving asbestos-containing material shall:

1. Provide the Department with all information required on a Department-approved form with respect to the intended demolition/ renovation operation of a facility or facility component. A waiver to the notification provisions contained in 310 CMR 7.15(1)(b)2.a. and b., may be granted by the Department in the case of an emergency.

2. Postmark or deliver all required information to the applicable Department regional office:

a. at least ten working days before a demolition/renovation operation begins, or

b. within one working day prior to the beginning of an emergency demolition/renovation operation unless a waiver is granted by the Department, or if less than one working day, notification shall be made initially by telephone with written follow-up, or

7.15: continued

c. where an owner/operator receives written Department approval of a planned demolition/renovation operation occurring during a 12 month period, provide revised information as required by the Department in writing, and a monthly report of updated information for actual work performed.

3. Include but not be limited to the following information on the Department-approved form:

a. Name, address, and telephone number of the facility owner, operation manager, if any, contractor, and subcontractor, if any, contractor's or subcontractor's Massachusetts asbestos removal certification and licensing number, if any;

b. Description of the facility being demolished and renovated, including the address, worksite location or locations as described in 7.15(1)(b)2.c., size, age, and prior and current use of the facility;

c. Estimate (in linear feet or square feet) of the approximate amount of asbestos-containing materials to be handled under this application with a description of the techniques used for the estimation;

d. Scheduled start-up and completion dates of the demolition/renovation operation, transportation, storage at a refuse transfer station facility (if applicable), and disposal at a sanitary landfill site of the asbestos-containing waste material; if the demolition/renovation start-up or completion date changes or is cancelled ensure that notification is made in writing at least one working day prior to the originally-scheduled start date of the operation;

e. Description of proposed demolition/renovation operation and procedures to be used;

f. Name, address, and telephone number of the transporter company(s) responsible for transporting asbestos-containing waste material from the demolition/renovation site to storage site, if any, and to final disposal site;

g. Name, address, and telephone number of the refuse transfer station facility and owner responsible for storing the asbestos-containing waste material prior to final transport and disposal at a sanitary landfill site;

h. Name, address, and telephone number of the sanitary landfill facility and owner where the asbestos-containing waste material will be disposed;

i. For a facility described as an emergency demolition/renovation operation, the name, title, and authority of the state or local government official who evaluated the emergency and ordered the operation;

j. Date and signature of the facility owner/operator or facility owner's designee and date and signature of the contractor.

4. Separate notification will be required, except as to 310 CMR 7.15(1)(b)2.c., when:

a. demolition/renovations are scheduled for widely-spaced geographical locations on the same facility;

b. demolition/renovations are scheduled for a single facility, but are separated by a time period of greater than one week; or

c. when a demolition/renovation is postponed more than 30 days from the date on the initial notification.

(c) Procedures for Asbestos Emission Control. Each owner/operator shall comply with the following procedures to prevent visible or particulate emissions to the ambient air space:

1. Remove any asbestos-containing material from a facility or facility component prior to demolition/renovation operations if such operations will cause asbestos emissions, or will render the asbestos-containing material friable, or will prevent access to the asbestos-containing material for subsequent containment and removal;

2. When a facility component covered or coated with asbestos-containing material is being removed as units or in sections:

a. Adequately wet asbestos-containing material exposed during the removal operations;

b. Lower the units or sections to the ground level so as to not cause airborne emissions of asbestos; and

c. Ensure no release of asbestos to the ambient air space during removal of asbestos from these units or sections handled so as to ensure:

7.15: continued

i. maintaining adequate wetness of the asbestos-containing material, and

ii. sealing the work area and using a local exhaust ventilation and collection system designed and operated to capture particulate asbestos material. This system must exhibit no visible or particulate emissions to the outside air and be designed and operated in accordance with the requirements of 7.15(1)(d), Air Cleaning;

3. When asbestos-containing material is being removed from a facility component the following procedures shall be performed:

a. Ensure that such material is adequately wet;

b. Contain the material *in situ* of the facility component;

c. Lower the contained material carefully to the ground so as to prevent emissions;

d. Ensure no release of asbestos emissions by methods of capture and containment of fugitive dust such as work area seal and air cleaning, as described in 310 CMR 7.15.

4. Once the asbestos-containing material have been removed and wetted, ensure that the material remains wet until and after it is sealed into a container for disposal.

(d) Air Cleaning. The owner/operator using air cleaning at a facility shall properly install, use, operate, and maintain all air-cleaning equipment authorized by 310 CMR 7.15(1)(d). Bypass devices may be used only during upset or emergency conditions and then only for so long as it takes to shut down the operation generating the particulate asbestos-containing material. Each owner/operator shall use one of the following air cleaning systems or their equal:

1. Use fabric filter collection devices and perform the following:

a. operate the fabric filter collection devices at a pressure drop of no more than four inches water gauge, as measured across the filter fabric;

b. ensure that the air flow permeability, as determined by ASTM Method D737-75, does not exceed 350 $ft^3/min/ft^2$ for felted fabrics;

c. ensure that felted fabric weighs at least 14 ounces per square yard and is at least 1/16 inch thick throughout; and

d. avoid the use of synthetic fabrics that contain fill yarn other than that which is spun; or

2. Use portable, high efficiency particulate air (HEPA) filtered power exhaust units equipped with negative air pressure systems with operational alarm system capable of indicating the unit is working properly, and utilizing a clean filter specified for the unit and capable of filtering 0.3 micron particles with 99.97% efficiency; or

3. In the event that the use of an air cleaning system causes a fire or explosion hazard, the Department may authorize as a substitute

a. the use of wet collectors designed to operate with a unit contracting energy of at least 40 inches water gauge pressure; or

b. the use of filtering equipment other than that described in 310 CMR 7.15, if the owner/operator demonstrates to the Department's satisfaction that it is as efficient in filtering particulate asbestos material.

(e) Waste Disposal. Each owner/operator shall:

1. Discharge no visible or particulate emissions to the ambient air during the collection, processing, packaging, transporting, transferring, or disposing of any asbestos-containing waste material, and use the disposal methods specified in 310 CMR 7.15(1)(e) such that the asbestos-containing material is non-friable;

a. adequately wet asbestos-containing waste material obtained from air cleaning equipment or from removal operations and, while wet, containerize and seal the asbestos-containing waste material in leak-tight containers, labeled

7.15: continued

CAUTION
Contains Asbestos
Avoid Opening or
Breaking Container
Breathing Asbestos is Hazardous
to your Health

or, use warning labels specified by Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA), or

b. process asbestos-containing waste material into non-friable form such as pellets or other shapes; or

c. use an alternative processing method that has received prior approval by the Department.

2. Store at a refuse transfer station facility permitted to manage asbestos waste in accordance with 310 CMR 19.061: *Special Waste*.

3. Dispose of asbestos-containing waste material at an approved sanitary landfill special waste site. If within Massachusetts, such sites must be operated in accordance with 310 CMR 19.000. Outside Massachusetts, such sites must be operated in accordance with applicable state and federal asbestos laws.

(f) Spraying. No owner/operator of a facility shall spray on any facility or facility component any asbestos-containing material.

(g) Insulating Material. No owner/operator of a facility may install or reinstall on a facility or facility component asbestos-containing insulating materia1.

(2) Enforcement Provisions. 310 CMR 7.15 is subject to the enforcement provisions in 310 CMR 7.52, except as to 310 CMR 7.15(1)(b).

7.16: U Reduction of Single Occupant Commuter Vehicle Use

(1) Commencing with the effective date of 310 CMR 7.16 each affected facility (except as provided below) shall diligently and expeditiously implement and thereafter continuously maintain the following mandatory measures which are designed to achieve a goal of reducing the number of single occupant commuter vehicles customarily commuting daily to each employment facility as of its base date by 25% or as adjusted pursuant to 310 CMR 7.16(7):

(a) making available to commuters any pass program offered by the area transit authority, if any commuter to the facility uses the public transit facilities of such Authority as part of his daily commuting trip, including making all administrative arrangements for commuters to purchase the pass and thereby participate in the pass program and encouraging commuters to participate by such means as publicizing the availability of the pass program and the cost advantages thereof.

(b) posting in a conspicuous place or places the schedules, rates and routes of every bus which serves the facility including the services offered by the area transit authority and any privately or publicly operated services which may exist in the immediate vicinity of the employer.

(c) providing incentives for bicycle commuting such as secure locking facilities and removal of restrictive rules against bicycle usage at the facility.

(d) negotiating with authorities in charge of bus lines serving the facility for improved service to the facility including providing information on the location and density of employees' residences and commuting times to be used for route planning by local transit authorities.

(e) conducting a carpooling program (either alone or in cooperation with neighboring facilities) which:

1. matches on a regularly recurring basis (not less often than once every 12 months) the names, addresses, and suitable contact information of all commuters who commute in single-occupant commuter vehicles or carpool to a facility or group of neighboring facilities and who express interest in carpooling, so that such commuters with similar daily travel patterns are informed and aware of each other for the purpose of forming carpools;

7.16: continued

2. continuously publicizes the advantages of carpooling, both in terms of savings of fuel and money and any incentive in effect at the facility;

3. creates incentives for carpool formation by providing persons who carpool with first call on available parking space or spaces which are closest to entrances to the facility; and,

4. provides information for carpooling program to prospective and new employees, and offers new employees the opportunity to participate in such program.

(f) In the case of an employment facility with 1,000 or more employees, implementing a vanpool program which shall include the following elements:

1. The employer shall:

a. cooperate with a non-profit third-party vanpool program and offer their employees the opportunity to participate in such a program; or

b. post in a conspicuous place and regularly notify all employees of an outstanding offer to acquire (by purchase, lease or otherwise), insure and make available to any group of at least ten employees a van for their use as a vanpool. Such offer, a copy of which shall be sent to the Secretary at the time of the employer's first updated report, shall include the procedures by which vanpools are offered and the conditions upon which the offer is contingent, including acceptance by the prospective driver of the responsibility for providing regular service, training backup drivers, and arranging vehicle maintenance, and acceptance by each other member of the prospective group of responsibility for payment of a *pro rata* share of all direct costs (such as rental charge, licensing costs, insurance, tolls, fuel and repair) and indirect costs (such as depreciation and interest on borrowed funds) of the operation and maintenance of the vehicle.

c. notify the Secretary when it is learned that ten or more employees are interested in forming a vanpool.

2. The employer shall analyze and continuously publicize the advantages of vanpooling, including any resulting cost savings, convenience and any incentives in effect at the facility. Such incentives shall include providing persons who vanpool with first call on available parking spaces or spaces which are closest to entrances to the facility.

3. Matching for the vanpool program should be coordinated with the carpool matching program, to facilitate the formation of vanpools.

Upon reaching such a 25% goal, as stated at the beginning of 310 CMR 7.16, such employer shall thereafter continue such a program in such a manner as to aim at maintaining the ratio of single-occupant commuter vehicles to total commuters customarily arriving at its facility at or below the ratio referred to in 310 CMR 7.16(4)(e). If an employer or educational institution reaches and thereafter maintains said goal by implementing less than all the measures in 310 CMR 7.16(1), it shall not be subject to a requirement to implement the remainder of such measures.

Commencing with the effective date of 301 CMR 7.00 smaller employers shall also cooperate with MASSPOOL in its efforts to promote and organize mulit-employer ridesharing activities.

7.16: continued

(2) MB. The base date and the date for submittal of the base date report for all existing affected facilities shall be as provided in 40 CFR 52.1161, June 12, 1975. 310 CMR 7.00 established the base date for all existing affected facilities as October 1, 1975, except as provided below, and required a facility with more than 250 commuters to submit at least a base date report to the Secretary on October 15, 1975. The base date for an affected facility which becomes subject to the requirements of 310 CMR 7.16 upon its effective date shall be October 15, 1979, except as provided below. Each employer with a base date of October 15, 1979 shall submit to the Secretary their base data report for each affected facility by November 15, 1979. The base date for an affected facility which attains an employment level of 250 or more employees after the effective date of 310 CMR 7.16 shall be the date six months after it reaches such a level, except as provided below, and its base date report shall be due on the next date not more than six months later than is specified for any report or updated report by any existing facility. Where an employer or educational institution can establish to the satisfaction of the Secretary that a facility had commenced measures to reduce the number of single-occupant commuter vehicles customarily arriving daily at an earlier date, the Secretary may approve the use of such earlier date as the base date for such facility. In lieu of establishing the actual number of such vehicles on such earlier date, an employer or educational institution may assume for the purpose of 310 CMR 7.16(2) that prior to such earlier date 20% of all commuters to such facility who arrived by motor vehicle other than mass transit customarily arrived by means other than single-occupant commuter vehicles.

(3) PV. The base date for all existing affected facilities shall be June 15, 1977, except as provided below. By June 30, 1977 each employer with a base date of June 15, 1977 shall submit to the Secretary their base date report for each affected facility. The base date for an affected facility which becomes subject to the requirements of 310 CMR 7.16 upon its effective date shall be October 15, 1979, except as provided below. Each employer with a base date of October 15, 1979 shall submit to the Secretary their base date report for each affected facility by November 15, 1979. The base date for an affected facility which attains an employment level of 250 or more employees after the effective date of 310 CMR 7.00 shall be the date six months after it reaches such a level, except as provided below, and its base date report shall be due on the next date not more than six months later than is specified for any report or updated report by an existing facility. Where an employer or educational institution can establish to the satisfaction of the Secretary that a facility had commenced measures to reduce the number of single-occupant commuter vehicles customarily arriving daily at an earlier date, the Secretary may approve the use of such earlier date as the base date for such facility. In lieu of establishing the actual number of such vehicles on such earlier date, an employer or educational institution may assume for the purpose of 310 CMR 7.16(3) that prior to such earlier date 20% of all commuters to such facility who arrived by motor vehicle other than mass transit customarily arrived by means other than single-occupant commuter vehicles.

(4) B, CM, MV, SM. The base date for all existing affected facilities shall be October 15, 1979, except as provided below. By November 15, 1979, each employer shall submit to the Secretary their base date report for each affected facility. The base date for an employment facility which attains an employment level of 150 or more employees after the effective date of 310 CMR 7.16 shall be the date six months after it reaches such a level, except as provided below, and its base date report shall be due on the next date not more than six months later than is specified for any report or updated report by an existing facility. Where an employer or educational institution can establish to the satisfaction of the Secretary that a facility had commenced measures to reduce the number of single-occupant commuter vehicles customarily arriving daily at an earlier date, the Secretary may approve the use of such earlier date as the base date for such facility. In lieu of establishing the actual number of such vehicles on such earlier date, an employer or educational institution may assume for the purpose of 310 CMR 7.16(4) that prior to such earlier date 20% of all commuters to such facility who arrived by motor vehicle other than mass transit customarily arrived by means other than single-occupant commuter vehicles.

7.16: continued

Each base date report shall be current and include:

(a) The number of commuters who take any means of transportation to such facility as of its base date.

(b) The number of single-occupant commuter vehicles customarily used daily by commuters to the facility, the number of commuters who customarily carpool in a private vehicle carrying two or more occupants, the number of commuters who customarily vanpool in a vehicle carrying eight or more occupants, the number of commuters who customarily commute by any means of public transportation, the number of employees who customarily commute by any other means of travel (taxi, bicycle, *etc*.).

(c) The total number of vehicles customarily used daily by commuters to the facility as of the base date.

(d) The percentage which the current number of daily commuters in single-occupant vehicles is of all daily commuters to the facility.

(e) The percentage derived by taking ¾ of the percentage calculated in 310 CMR 7.16(4)(d). This percentage will serve as the program goal for individual employers defined as the ratio of single-occupant commuter vehicles to total daily commuters to the facility.

(f) The number of van type vehicles with eight or more commuters customarily arriving at the facility.

(g) The type of carpool matching program with a description of materials currently being used.

(h) The level of participation achieved in the most recent program, including the number of data cards distributed, and returned, the number of matching lists distributed and the number of commuters in newly formed carpools.

(i) The type of incentives offered, including parking, flexi-hours and others.

(j) The promotional strategies used to encourage ridesharing with copies of relevant materials excluding those supplied by MASSPOOL.

(k) The number of vans sponsored.

(l) The number of participants currently enrolled in a prepaid transit pass program, if applicable.

(5) U. Each affected employer shall annually update its base date report by means of a report containing:

(a) Updated information called for in 310 CMR 7.16(2) through 7.16(4).

(b) The net change in percentage points between the percentage reported under 310 CMR 7.16(4)(e) as of the base date and that under 310 CMR 7.16(4)(d) as of the date of the current report.

(c) The net change in percentage points between the percentage reported under 310 CMR 7.16(4)(d) as of the last reporting period and the date of the current report.

(d) A detailed description of all measures which have been taken to reduce the number of single-occupant commuter vehicles to the facility and the commuter response to such measures.

The first such annual updated report for affected employers in the Metropolitan Boston Air Pollution Control District and the Pioneer Valley Air Pollution Control District shall be due on November 15, 1979, and successively each 12 months. The first such annual updated report for affected employers in the Berkshire Air Pollution Control District, Central Massachusetts Air Pollution Control District, Merrimack Valley Air Pollution Control District, and Southeastern Massachusetts Air Pollution Control District shall be due on November 15, 1980, and successively each 12 months.

(6) U. Each employer submitting reports required by 310 CMR 7.16(5) shall cause such reports to be signed as follows:

(a) In the case of a corporation, by a principal executive officer of at least the level of vice president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility covered by the reports.

(b) In the case of a partnership, by a general partner.

(c) In the case of a sole proprietorship, by the proprietor.

(d) In the case of an unincorporated association, by the president or the chairman thereof.

7.16: continued

(e) In the case of municipal, state, or other public facility, by either a principal executive officer, ranking elected official, or other fully authorized employee.

Each employer submitting reports required by 310 CMR 7.16(5) shall retain for at least three years all supporting documents and data upon which each such report was based. Each report submitted pursuant to 310 CMR 7.16(5) shall be accompanied by an adequate explanation of the methodology used to gather, complete and analyze the data, the assumptions used in that analysis, and samples of the forms used to elicit the underlying information from commuters at the facility.

(7) U. Where the total number of commuters to a particular facility is changed due to fluctuation in employment between the base date and the date of any report under 310 CMR 7.16(5) such fact shall be reported at the time of the submission of such report. The goal of the employer having such a change is to attain and maintain the ratio of commuters customarily arriving at facility daily in single-occupant commuter vehicles to total commuters indicated by 310 CMR 7.16(4)(e).

(8) U. If an employer does not meet and thereafter at all times maintain the reduction specified under 310 CMR 7.16(2) through 7.16(4) in connection with each report under 310 CMR 7.16(5) it shall, upon written notification of the Secretary, submit a description of any remedial actions which it intends to take to meet the requirements of 310 CMR 7.16(2) through 7.16(4).

(9) U. If an employer in good faith diligently and expeditiously implements and thereafter continuously maintains those measures set forth in 310 CMR 7.16(2) through 7.16(4) as are applicable to it, it shall not be subject to any enforcement action even though it may fail to achieve the 25% goal referred to in 310 CMR 7.16(1).

(10) U. Within 60 days after the receipt of the periodic reports required under 310 CMR 7.16(5), the Secretary shall submit to the Department a summary of the information contained in such reports, including:

(a) A list of all employers in the order of the percentage reduction achieved between the base dates and the date of the required report.

(b) The total reduction between the respective base dates and the date of the required reports of the number of single-occupant vehicles customarily used to arrive at all facilities for which reports were filed.

(c) A list of employers that have not complied with the provisions of 310 CMR 7.16.

7.17: U Conversions to Coal

(1) Sulphur Content, Emission Limitations and Control Thereof. Notwithstanding the provisions of 310 CMR 7.02(8)(d) Table 4 or 5 and 310 CMR 7.05(1), facilities specified in 310 CMR 7.17(2) may utilize solid fossil fuel (coal) as the fuel of use, provided that the following general conditions are met:

(a) Application for approval to utilize such fuel has been made to the Department under the provisions of 310 CMR 7.02 and said application has been approved by the Department in writing.

(b) All solid fuel burning shall be conducted strictly in accordance with the application as approved by the Department and in conformance with applicable laws and regulations not specifically excepted.

(2) Facilities Allowed to Utilize Solid Fossil Fuel (Coal Facilities named herein may use coal as the fuel of use, provided that the following specific conditions are met:

(a) New England Power Company, Brayton Point Station, Somerset, Massachusetts: on and after November 1, 1978 and prior to November 1, 1988, Units 1, 2 and 3 provided that:

1. Such fuel shall have an average sulfur content not in excess of 1.21 pounds per million Btu heat release potential for any monthly period, nor exceed 2.31 pounds per million Btu heat release potential in any day, as measured in accordance with procedures prescribed by the Department.

7.17: continued

2. Emissions of particulate matter from the facility shall be limited to a maximum of 0.08 pounds per million Btu input as measured by testing conducted under isokinetic sampling conditions and in accordance with Environmental Protection Agency test methods 1 through 5 as specified in the CFR, Title 40, Part 60, Appendix A - Standards of Performance for New Stationary Sources or by another method correlated to the above method to the satisfaction of the Department.

(b) Holyoke Water Power Company, Mt. Tom Power Plant, Holyoke, Massachusetts:

1. Such fuel shall comply with the requirements contained in 310 CMR 7.05(1)(b).

2. Emissions of particulate matter from the facility shall be limited to a maximum of 0.08 pounds per million Btu input as measured by testing conducted under isokinetic sampling conditions and in accordance with Environmental Protection Agency test methods 1 through 5 as specified in the CFR, Title 40, Part 60, Appendix A - Standards of Performance for New Stationary Sources or by another method correlated to the above method to the satisfaction of the Department.

7.18: U Volatile and Halogenated Organic Compounds

(1) U Applicability and Handling Requirements.

(a) 310 CMR 7.18 shall apply in its entirety to persons who own, lease, operate or control any facility which emits volatile organic compounds (VOC).

(b) For purposes of 310 CMR 7.18, VOC shall include both VOC as defined in 310 CMR 7.00 and Halogenated Organic Compounds (HOC) as defined in 310 CMR 7.00.

(c) On or after July 1, 1980 any person owning, leasing, operating, or controlling a facility regulated under 310 CMR 7.18, shall store and dispose of volatile organic compounds in a manner which will minimize evaporation to the atmosphere. Proper storage shall be in a container with a tight fitting cover. Proper disposal shall include incineration in an incinerator approved by the Department, transfer to another person licensed by the Department to handle VOC, or any other equivalent method approved by the Department.

(d) Any person who owns, leases, operates, or controls a facility which is or becomes subject to 310 CMR 7.18, shall continue to comply with all requirements of 310 CMR 7.18, even if emissions from the subject facility no longer exceed applicability requirements of 310 CMR 7.18.

(e) Any person not regulated by 310 CMR 7.18, prior to August 15, 1989 shall achieve compliance with the applicable section(s) of 310 CMR 7.18 by August 15, 1990.

(f) Any person who, since January 1, 1990, obtains plan approval for an emission unit under 310 CMR 7.02 where said approval establishes BACT or LAER to be no less stringent than RACT for a facility size and type as defined in 310 CMR 7.18, shall comply with BACT or LAER as defined in the plan approval, and is not subject to RACT standards of this section as may otherwise be applicable.

(2) U Compliance with Emission Limitations.

(a) Any person subject to 310 CMR 7.18, shall maintain continuous compliance with all requirements of 310 CMR 7.18. Except as provided for in 310 CMR 7.18(2)(b) and (g), compliance averaging times are based on the control method selected to meet the applicable emission limitations and EPA test methods as codified in 40 CFR Part 60, or other methods approved by the Department and EPA, and are as follows:

| Compliance Method | EPA Reference Test Method | Test Method Averaging Time |
|---|---|---|
| Coating Reformulation | 24[1] | instantaneous |
| Solvent destruction or solvent recovery except carbon adsorption | 25 | 3 hours |
| Carbon adsorption | 25 or other as appropriate | the length on the adsorption cycle or 24-hours, which ever is less. |

[1] Reference Method 24 shall use a 60 minute bake time at 110°C ± 5°C.

7.18: continued

(b) Persons owning, leasing, or controlling the operation at a specific site location of any individual or combination of coating lines described in 310 CMR 7.18(3) through (7), (10) through (12), (14) through (16) and (21) through (24) may for compliance with dates specified in 310 CMR 7.18(2)(a), (10) through (12), (14), (15), (16), (21) through (24) and the emissions limitations contained in 310 CMR 7.18(3) through (7), (10) through (12), (14) through (16) and (21) through (24) submit a proposed plan containing a mix of emission limits for such coating lines such that the total emissions from all coating lines is less than or equal to the sum of emissions that would result from each individual coating line complying with the applicable emission limitation contained in 310 CMR 7.18(3) through (7), (10) through (12), (14) through (16) and (21) through (24).

Submittal of such a proposed plan is subject to review and approval by the Department and must provide for compliance consistent with 310 CMR 7.18(2)(a), (7), (10) through (12), (14), (15), (16), (21), (22), (23) or (24).

Any source complying with the requirements of 310 CMR 7.18 by emissions averaging under 310 CMR 7.18(2)(b), is also subject to the requirements of 310 CMR 7.00: Appendix B(4).

(c) Any person regulated under 310 CMR 7.18(14), 7.18(15), or 7.18(16), who cannot comply with the emission limitations contained therein through the use of add-on controls and/or low/no solvent coatings, shall apply to the Department by January 1, 1987 for an alternative emission limitation which reflects the application of source specific Reasonably Available Control Technology. Any alternative emission limitation provided for by 310 CMR 7.18 must also be approved by EPA. An applicant for an alternative RACT shall:

1. demonstrate to the Department that it is not technologically and economically feasible for that person to comply with the applicable emission limitation; and
2. determine an emission limitation which reflects the application of Reasonably Available Control Technology;

Any person granted such an emission limitation shall:

3. re-evaluate, on a biennial basis (every two years), the emission limitation to reflect current application of Reasonably Available Control Technology and to confirm that the RACT emission limitation contained in 310 CMR 7.18(14) through (16) is still technologically and economically infeasible.

(d) The Department encourages any person owning, leasing, operating, or controlling a facility regulated under 310 CMR 7.18 to reduce the emissions of volatile organic compounds through the use of compounds which present less of a burden to the air, water and land, and which do not increase public health impacts.

(e) Any person owning, leasing, operating, or controlling a facility subject to 310 CMR 7.18(3) through (7), (10) through (12) and (14) through (16), shall demonstrate compliance with the recordkeeping requirements for emissions capture and control equipment by continuously monitoring and maintaining records on the following parameters:

1. for a thermal incinerator; the combustion temperature measured in °F;
2. for a catalytic incinerator: the exhaust gas temperature (°F), the temperature rise across the catalyst bed (°F), and the date the catalyst was most recently replaced or changed;
3. for a condenser or refrigeration system; the inlet temperature of the cooling medium (°F), and the exhaust gas temperature (°F);
4. for a carbon adsorbers; the pressure drop across the adsorber, and the exhaust gas VOC concentration;
5. for emissions capture and control equipment not otherwise listed; any requirements specified by the Department in any approval(s) or order(s).

(f) Exemption for Coatings Used in Small Amounts. For any person who owns, leases, operates or controls a facility with coating line(s) subject to 310 CMR 7.18, the emissions of VOC from any coatings used in small amounts at that facility are exempt from the emission limitations of the particular section, provided the person satisfies the following conditions:

1. the total amount of all coatings exempted does not exceed 55 gallons on a rolling 12 month period at the facility; and,
2. the person notifies the Department that this exemption is being used 30 days prior to its first use; and,

7.18: continued

3. the person identifies the coatings which will be covered by this exemption; and,
4. the person complies with the recordkeeping and testing requirements of the particular section.

(g) Daily Weighted Averaging. Any person who owns, leases, operates or controls a coating line subject to 310 CMR 7.18, with the exception of coating lines subject to 310 CMR 7.18(24): *Flat Wood Paneling Surface Coating*, or 310 CMR 7.18(28): *Automotive Refinishing*, may comply with the VOC emission limitations of the applicable section of 310 CMR 7.18 through the use of a daily-weighted average on an individual coating line, provided the person meets the following conditions:

1. the daily-weighted average for each coating line, each day, complies with the applicable emission limitation in 310 CMR 7.18 with no cross-line averaging allowed; and,
2. the coating line using a daily-weighted average to determine compliance does not use any emissions capture and control equipment for the compliance determination; and,
3. prior to being used, the exact method of measuring and determining compliance on a daily-weighted average basis is approved by the Department in an emissions control plan submitted under 310 CMR 7.18(20); and,
4. records kept to determine compliance on a daily-weighted average basis are kept at the facility for a period of five years, and made available to the Department or EPA on request; and,
5. the daily-weighted average for each coating line, with the exception of coating lines subject to 310 CMR 7.18(26): *Textile Finishing*, is calculated according to the following equation:

$$VOC_W = \frac{\sum_{i-1}^{n} V_i C_i}{V_T}$$

where:

$VOC_w$ = the daily-weighted average VOC content of the coatings used each day on each coating line in units of pounds of VOC per gallon of solids as applied;
n = the number of different coatings applied, each day on a coating line;
$V_i$ = the volume of solids as applied for each coating, each day, on each coating line, in units of gallons of solids as applied;
$C_i$ = the VOC content for each coating, each day, on each coating line in units of pounds of VOC per gallons of solids as applied; and
$V_T$ = the total volume of solids as applied, each day on each coating line.

6. For coating lines subject to 310 CMR 7.18(26): *Textile Finishing*, the daily weighted average for each coating line is calculated according to the following equation:

$$VOC_{WM} = \frac{\sum_{i-1}^{n} M_i C_i}{M_T}$$

where:

$VOC_{WM}$ = the daily-weighted average VOC content of the coatings used each day on each coating line in units of pounds of VOC per pound of solids, as applied;
n = the number of different coatings applied each day on a coating line;
$M_i$ = the mass of solids as applied for each coating, each day, on each coating line, in units of pounds of solids as applied;
$C_i$ = the VOC content of the coatings used, each day, on each coating line in units of pounds of VOC per pounds of solids, as applied;
$M_T$ = the total mass of solids as applied, each day on each coating line.

Coating usage may be averaged, providing the units in the equation are the same as the units that are used in the section of 310 CMR 7.18 that applies to the coatings included in the daily average. Only coatings subject to the same emissions standard may be averaged together.

7.18: continued

(h) Emission Reduction Credits (ERCs). Any facility may comply, either in part or entirely, with the applicable emission standard contained in 310 CMR 7.18 through the use of emission reduction credits (ERCs) certified by the Department pursuant to 310 CMR 7.00: *Appendix B*(3), provided that the requirements of 310 CMR 7.00: *Appendix B*(3)(e) are met prior to use of said ERCs.

(3) U Metal Furniture Surface Coating.

(a) On or after January 1, 1980, no person who owns, leases, operates, or controls a metal furniture coating line, which emits, before any application of air pollution control equipment, in excess of 15 pounds per day of volatile organic compounds (VOC), shall cause, suffer, allow or permit emissions therefrom in excess of 5.1 pounds of VOC per gallon of solids applied.

(b) Any person subject to 310 CMR 7.18(3)(a) shall maintain continuous compliance at all times. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a). Demonstrations of compliance shall not include any considerations of transfer efficiency.

(c) Any person subject to 310 CMR 7.18(3)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for three years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved compliance plan or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of coating(s) used;
2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;
3. solids content of any coating(s) used;
4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;
5. quantity of product processed;
6. any other requirements specified by the Department in any approval(s) and/or order(s) issued to the person.

(d) Persons subject to 310 CMR 7.18(3)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(4) U Metal Can Surface Coating.

(a) On or after January 1, 1980, no person who owns, leases, operates, or controls a metal can coating line, which emits, before any application of air pollution control equipment, in excess of 15 pounds per day of volatile organic compounds (VOC), shall cause, suffer, allow or permit emissions therefrom in excess of the emission limitations set forth in 310 CMR 7.18(4)(b).

(b) Emission Limitations Metal Can Surface Coating.

| Emission Source | Emission Limitation in pounds of volatile organic compounds per gallon of solids applied |
|---|---|
| Sheet base coat (exterior and interior and exterior overvarnish) | 4.5 |
| Two-piece can exterior (basecoat and overvarnish) | 4.5 |
| Two and Three-piece can (interior body spray) | 9.8 |
| Two-piece can exterior end (spray or roll coat) | 9.8 |
| Three-piece can side seam spray | 21.8 |
| End sealing compound | 7.4 |

7.18: continued

(c) Any person subject to 310 CMR 7.18(4)(a) shall maintain continuous compliance at all times. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a). Demonstrations of compliance shall not include any considerations of transfer efficiency.

(d) Any person subject to 310 CMR 7.18(4)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for three years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved compliance plan or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of coating(s) used;
2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;
3. solids content of any coating(s) used;
4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;

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5. quantity of product processed;
6. any other requirements specified by the Department in any approval(s) and/or order(s) issued to the person.

(e) Persons subject to 310 CMR 7.18(4)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(5) U Large Appliance Surface Coating.

(a) On or after January 1, 1980, no person who owns, leases, operates, or controls a large appliance coating line, which emits, before any application of air pollution control equipment, in excess of 15 pounds per day of volatile organic compounds, shall cause, suffer, allow or permit emissions therefrom in excess of 4.5 pounds of volatile organic compounds per gallon of solids applied.

(b) Any person subject to 310 CMR 7.18(5)(a) shall maintain continuous compliance at all times. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a). Demonstrations of compliance shall not include any considerations of transfer efficiency.

(c) Any person subject to 310 CMR 7.18(5)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for three years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved compliance plan or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of coating(s) used;
2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;
3. solids content of any coating(s) used;
4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;
5. quantity of product processed;
6. any other requirements specified by the Department in any approval(s) and/or order(s) issued to the person.

(d) Persons subject to 310 CMR 7.18(5)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(6) U Magnet Wire Insulation Surface Coating.

(a) On or after January 1, 1980, no person who owns, leases, operates, or controls a magnet wire insulation coating line, which emits, before any application of air pollution control equipment, in excess of 15 pounds per day of volatile organic compounds, shall cause, suffer, allow or permit emissions therefrom in excess of 2.2 pounds of volatile organic compounds per gallon of solids applied.

(b) Any person subject to 310 CMR 7.18(6)(a) shall maintain continuous compliance at all times. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a). Demonstrations of compliance shall not include any considerations of transfer efficiency.

(c) Any person subject to 310 CMR 7.18(6)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for three years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved compliance plan or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of coating(s) used;
2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;
3. solids content of any coating(s) used;

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4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;
5. quantity of product processed;
6. any other requirements specified by the Department in any approval(s) and/or order(s) issued to the person.

(d) Persons subject to 310 CMR 7.18(6)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(7) U Automobile Surface Coating.

(a) No person who owns, leases, operates, or controls an automobile and/or light duty truck manufacturing plant, which emits in excess of 15 pounds per day of volatile organic compounds (VOC), shall cause, suffer, allow or permit emissions therefrom in excess of the emission limitations, on a daily weighted average basis, and within the schedule contained in 310 CMR 7.18(7)(b).

(b)

Emissions Limitations
Automotive Surface Coating

| Coating Line | Emission Limitation (*) | Compliance Date |
|---|---|---|
| Primer Application | 1.4 lbs. of VOC/gallon of solids applied | December 31, 1982 |
| Primer-surfacer Application | 4.5 lbs. of VOC/gallon of solids applied | December 31, 1985 |
| Topcoat Application | 15 lbs. of VOC/gallon of solids deposited (**) | December 31, 1985 |
| Final Repair Application | 13.8 lbs. of VOC/gallon of solids applied | December 31, 1985 |

* Compliance is determined on a line-by-line basis through the daily weighted average of the coatings used in each category for each separate line.

** The emission limitation for topcoat application is equivalent to 4.5 lbs of VOC/gallon of solids applied at a transfer efficiency of 30%.

(c) Any person subject to 310 CMR 7.18(7)(a) shall maintain continuous compliance at all times, and is subject to a daily compliance averaging time. Demonstrations of compliance may include considerations of transfer efficiency provided that the baseline transfer efficiency and the transfer efficiency test method are approved by the Department and EPA.

(d) Any person subject to 310 CMR 7.18(7)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for three years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved compliance plan or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of coating(s) used;
2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;
3. solids content of any coating(s) used;
4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;
5. quantity of product processed; and,
6. any other requirements specified by the Department in any approval(s) and/or order(s) issued to the person.

7.18: continued

(e) Persons subject to 310 CMR 7.18(7)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA. Testing to determine topcoat emission rates, transfer efficiency, and other relevant criteria shall be conducted in accordance with the protocols described in EPA document 450/3-88-018, or by other methods approved by the Department and EPA.

(8) U Solvent Metal Degreasing.

(a) Cold Cleaning Degreasing. On or after September 6, 2009, no person owning, operating, leasing or controlling any solvent metal degreasing facility which utilizes a cold cleaning degreaser (that is able to contain more than one liter of solvent) shall cause, suffer, allow or permit emissions of volatile organic compounds therefrom unless they comply with the requirements in 310 CMR 7.18(8)(a)1. through 310 CMR 7.18(8)(a)3.

1. The solvent used in a cold cleaning degreaser shall have a vapor pressure that does not exceed 1.0 mm Hg measured at 20˚C. This requirement shall not apply to the following:
   a. cold cleaning degreasers used in special and extreme solvent metal cleaning;
   b. cold cleaning degreasers for which the owner or operator has received Department approval of a demonstration that compliance with the requirement to use a solvent with a vapor pressure of 1.0 mm Hg or less at 20˚C will result in unsafe operating conditions; and
   c. cold cleaning degreasers that are located in a permanent total enclosure having control equipment that is designed and operated with an overall VOC control efficiency of 90% or greater.
2. Any leaks shall be repaired immediately, or the degreaser shall be shut down.
3. The following requirements shall apply unless the cold cleaning degreaser is a sink-like work area with a remote solvent reservoir with an open drain area less than 100 square centimeters:
   a. Each cold cleaning degreaser is equipped with a cover that is designed to be easily operated with one hand;
   b. Each cold cleaning degreaser is equipped to drain clean parts so that, while draining, the cleaned parts are enclosed for 15 seconds or until dripping ceases, whichever is longer;
   c. Each cold cleaning degreaser is designed with:
      i. a freeboard ratio of 0.75 or greater; or
      ii. a water blanket (only if the solvent used is insoluble in and heavier than water); or
      iii. an equivalent system of air pollution control which has been approved by the Department and EPA;
   d. The covers of each cold cleaning degreaser are closed whenever parts are not being handled in the degreaser, or when the degreaser is not in use; and
   e. The drafts across the top of each cold cleaning degreaser are minimized such that when the cover is open the degreaser is not exposed to drafts greater than 40 meters per minute (1.5 miles per hour), as measured between one and two meters upwind at the same elevation as the tank lip.

(b) Vapor Degreasing. On or after December 31, 1980 no person owning, leasing operating or controlling a solvent metal degreasing facility which utilizes a vapor degreaser shall cause, suffer, allow or permit emissions therefrom unless:

1. each vapor degreaser is equipped with a cover designed to be easily operated in manner which will not disturb the vapor zone; and
2. each vapor degreaser is covered except when work loads are being loaded, unloaded or degreased in the degreaser; and
3. each vapor degreaser is equipped with the following safety switches which are maintained and operated in accordance with the recommendations of the manufacturer:
   a. a switch designed to shut off the heating source for the sump if the condenser coolant is either not circulating, or the solvent vapor level has risen above the primary coil; and
   b. a switch designed to shut off the spray pump if the solvent vapor level drops more than ten centimeters (four inches) below the lowest condensing coil; and

7.18: continued

4. at least one of the following devices has been installed on each vapor degreaser, and that device is maintained and operated in accordance with the recommendations of the manufacturer:

a. a freeboard ratio equal to or greater than 0.75 and, a power cover, if the degreaser opening is greater than one square meter (ten square feet); or,

b. a refrigerated chiller; or,

c. an enclosed design whereby the cover is open only when the dry part is entering or exiting the vapor degreaser; or,

d. an adsorption system with ventilation greater than or equal to 15 cubic meters per minute per square meter (50 cubic feet per minute per square foot) of air/vapor area (determined when the degreaser's cover is open) which exhausts less than 25 parts per million of solvent by volume averaged over one complete adsorption cycle or 24 hours whichever is less; or,

e. any other device, demonstrated to have a control efficiency equal to or greater than any of the above, approved by the Department and EPA; and,

5. solvent carry out from each vapor degreaser is minimized by:

a. racking parts to allow for complete drainage; and,

b. moving parts in and out of the degreaser at less than 3.3 meters per minute (11 feet per minute); and,

c. holding the parts in the vapor zone for 30 seconds or until condensation ceases, whichever is longer; and,

d. tipping out any pools of solvent on the cleaned parts before removal from the vapor zone; and,

e. allowing parts to dry within the degreaser for 15 seconds or until visually dry, whichever is longer; and,

6. no porous or absorbent material, such as, but not limited to cloth, leather, wood or rope is placed in the vapor degreaser; and,

7. less than half of the degreaser's open top area is occupied with a workload; and,

8. each degreaser is operated so that the vapor level does not drop more than ten centimeters (four inches) when the workload is removed from the vapor zone; and,

9. operators always spray within the vapor zone; and,

10. liquid leaks in each vapor degreaser are repaired immediately, or the degreaser is shut down; and,

11. each degreaser is operated so as to prevent water from being visually detected in the solvent exiting the water separator; and,

12. each degreaser is located and operated in such a manner that it is not exposed to drafts greater than 40 meters per minute (131 feet per minute) as measured between one and two meters upwind at the same elevation as the tank lip, nor is it provided with an exhaust ventilation system which exceeds 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) of vapor degreaser open area, unless such an exhaust ventilation system is necessary to meet OSHA requirements; and,

13. the cover is located below the lip exhaust, if the vapor degreaser is equipped with a lip exhaust.

(c) Conveyorized Degreasing. On or after December 31, 1980 no person who owns, leases, operates or controls a solvent metal degreasing facility which utilizes a conveyorized degreaser shall cause, suffer, allow or permit emissions therefrom, unless:

1. at least one of the following devices has been installed on each conveyorized degreaser with an air/vapor interface greater than 21.5 square feet, and that device is maintained and operated in accordance with the recommendations of the manufacturer:

a. a refrigerated chiller; or,

b. an adsorption system with ventilation greater than or equal to 15 cubic meters per minute per square meter (50 cubic feet per minute per square foot) of air/vapor area (determined when the degreaser's downtime covers are open) which exhausts less than 25 parts per million of solvent by volume averaged over one complete adsorption cycle or 24 hours whichever is less; or,

c. any other device, demonstrated to have a control efficiency equal to or greater than any of the above, approved by the Department and EPA; and,

2. each conveyorized degreaser is designed and operated to prevent cleaned parts from carrying out the solvent liquid or vapor, for example equipping the degreaser with a drying tunnel or rotating (tumbling) basket; and

7.18: continued

3. each conveyorized degreaser is equipped with the following safety switches which are maintained and operated in accordance with the recommendations of the manufacturer:

a. a switch designed to shut off the heating source for the sump if the condenser coolant is either not circulating, or if the solvent vapor level has risen above the primary coil; and

b. a switch designed to shut off the spray pump or the conveyor if the solvent vapor level drops more than ten centimeters (four inches) below the lowest condensing coil; and

4. the openings of each conveyorized degreaser are minimized during operation such that average clearance at the entrances and exits of the degreaser between the workloads and the edge of the degreaser opening is less than ten centimeters (four inches) or 10% of the width of the opening; and,

5. covers are placed over the entrances and exits of each conveyorized degreaser immediately after the conveyors and exhausts are shut down, and the covers are left in place until just prior to start-up; and,

6. solvent carry out from each conveyorized degreaser is minimized by:

a. racking parts to allow for complete drainage; and,

b. maintaining the vertical conveyor speed at less than 3.3 meters per minute (11 feet per minute); and,

7. leaks in each conveyorized degreaser are repaired immediately, or the degreaser is shutdown; and,

8. each conveyorized degreaser is operated so as to prevent water from being visually detected in solvent exiting the water separator; and,

9. no conveyorized degreaser is provided with an exhaust ventilation system which exceeds 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) of vapor degreaser open area, unless such an exhaust ventilation system is necessary to meet OSHA requirements; and,

(d) Aqueous Cleaning: any aqueous cleaner in which all the following conditions are satisfied is exempt from the requirements of 310 CMR 7.18(8)(a), (b), and (c):

1. 1. All organic material in the cleaning fluid is water soluble; and

2. The cleaning fluid contains no more than 5% by weight organic material, excluding soaps.

(e) On or after December 31, 1980 any person subject to 310 CMR 7.18(8)(a), (b), (c) or (d) shall operate any solvent metal degreaser using procedures which minimize evaporative emissions and prohibit spills from the use of said degreaser. Such procedures include but are not limited to:

1. notification to operators of the performance requirements that must be practiced in the operation of the degreaser, including the permanent and conspicuous posting of labels in the vicinity of the degreaser detailing performance requirements; and

2. storage of waste degreasing solvent in closed containers, and disposal or transfer of waste degreasing solvent to another party, in a manner such that less than 20% of the waste degreasing solvent by weight can evaporate into the atmosphere; and

3. where applicable, supplying a degreasing solvent spray which is a continuous fluid stream (not a fine, atomized or shower type spray) at a pressure which does not exceed ten pounds per square inch as measured at the pump outlet, and use any such spray within the confines of the degreaser.

(f) Any person subject to 310 CMR 7.18(8)(a), (b), (c) or (d) shall maintain instantaneous and continuous compliance at all times.

(g) Any person subject to 310 CMR 7.18(8)(a), (b), (c) or (d) shall prepare and maintain daily records sufficient to demonstrate continuous compliance. Records kept to demonstrate compliance shall be kept on site for three years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved compliance plan or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of solvent(s) used;

2. quantity, formulation and density of all waste solvent(s) generated;

3. actual operational and performance characteristics of the degreaser and any appurtenant emissions capture and control equipment, if applicable; and

4. any other requirements specified by the Department in any approval(s) and/or order(s) issued to the person.

7.18: continued

(h) Persons subject to 310 CMR 7.18(8) shall, upon request by the Department, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with a method approved by the Department and EPA.

(9) U Cutback Asphalt.

(a) On or after May 1, 1982, no person using asphalt shall cause, suffer, allow or permit the use or application of cutback asphalt for paving purposes.

(b) 310 CMR 7.18(9)(a) shall not apply to any of the following:

1. Cutback asphalt usage from October 1 through April 30.
2. Cutback asphalt used as a penetrating prime coat.
3. Storage or stockpiling of patching mixes used in pavement maintenance for a time period greater than one month.
4. Cutback asphalt of which less than 5% by weight of the total solvent evaporates at a temperature up to and including 500°F as determined by ASTM Method D402, Distillation of Cutback Asphalt Products.

(c) Any person subject to 310 CMR 7.18(9)(a) shall demonstrate continuous compliance consistent with an instantaneous averaging period.

(d) Persons using cutback asphalt shall keep records to satisfy the requirements of 310 CMR 7.18(9)(c) and said records shall be made available to representatives of the Department and EPA upon request. Such records shall include, but are not limited to:

1. quantity and formulation of any cutback asphalt used;
2. name and address of the supplier, date of purchase and date of use of any cutback asphalt; and
3. any other requirements specified by the Department in any order(s) issued to the person, if applicable.

(e) Persons subject to 310 CMR 7.18(9)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with ASTM Method D-244, or by other methods approved by the Department and EPA.

(10) U Metal Coil Coating.

(a) On or after July 1, 1980, no person who owns, leases, operates, or controls a metal coil coating line, which emits, before any application of air pollution control equipment, in excess of 15 pounds per day of volatile organic compounds, shall cause, suffer, allow or permit emissions therefrom in excess of 4.0 pounds of volatile organic compounds per gallon of solids.

(b) Any person subject to 310 CMR 7.18(10)(a) shall maintain continuous compliance at all times. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a). Demonstrations of compliance shall not include any considerations of transfer efficiency.

(c) Any person subject to 310 CMR 7.18(10)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for three years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved compliance plan or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of coating(s) used;
2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;
3. solids content of any coating(s) used;
4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;
5. quantity of product processed; and
6. any other requirements specified by the Department in any approval(s) and/or order(s) issued to the person.

(d) Persons subject to 310 CMR 7.18(10)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

7.18: continued

(11) U Surface Coating of Miscellaneous Metal Parts and Products.

(a) On or after December 31, 1982 unless granted an extension by the Department to December 31, 1985, no person who owns, leases, operates, or controls a miscellaneous metal parts and products coating lines, which has the potential to emit equal to or greater than ten tons per year of volatile organic compounds, shall cause, suffer or permit emissions of volatile organic compounds in excess of the emission limitations set forth in 310 CMR 7.18(11)(b).

1. Emissions of volatile organic compounds from coatings used in small amounts are exempt from the emissions limitations of 310 CMR 7.18(11)(b). The sum of all coatings exempted from the emission limitations of 310 CMR 7.18(11)(b) shall not exceed 55 gallons per year at any facility. Usage of exempt coatings shall be reported to the Department in accordance with 310 CMR 7.12.

2. Any facility which has not, since January 1, 1991 emitted, before the application of any air pollution control equipment, one ton or more of volatile organic compounds in any one calendar month, or ten or more tons of volatile organic compounds in any consecutive 12 month time period is exempt from the emissions limitations of 310 CMR 7.18(11)(b).

3. Any facility subject to 310 CMR 7.18(11) as of July 1, 1991, which was not subject to 310 CMR 7.18(11) prior to July 1, 1991, shall achieve compliance with the applicable sections of 310 CMR 7.18(11) by July 1, 1992.

(b) If more than one emission limitation applies to any specific coating, then the coating shall comply with the least stringent.

Emission Limitations
Surface Coating of Miscellaneous Metal Parts and Products

| Emission Source | Emission Limitation* Pounds of VOC per gallon of solids applied |
|---|---|
| Clear Coatings | 10.3 |
| Coating line that is air-dried or forced warm-air dried at temperatures up to 90°C | 6.7 |
| Extreme Performance Coating | 6.7 |
| All other coatings and coating lines | 5.1 |

* If more than one emission limitation above applies to a specific coating, then the least stringent emission limitation shall be applied.

(c) Any person subject to 310 CMR 7.18(11)(a) shall maintain continuous compliance at all times. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a). Demonstrations of compliance shall not include any considerations of transfer efficiency.

(d) Any person subject to 310 CMR 7.18(11)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for three years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved compliance plan or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of coating(s) used;

2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;

3. solids content of any coating(s) used;

4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;

7.18: continued

5. quantity of product processed; and

6. any other requirements specified by the Department in any approval(s) and/or order(s) issued to the person.

(e) Persons subject to 310 CMR 7.18(11)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(12) U Graphic Arts.

(a) On or after January 1, 1994, no person who owns, leases, operates or controls packaging rotogravure or publication rotogravure printing lines (except such printing presses or operations at a facility subject to 310 CMR 7.26(20) through (29)), which have the potential to emit equal to or greater than 50 tons per year of VOC shall cause, suffer, allow or permit the operation of said lines unless:

1. The volatile portion of the ink, as applied to the substrate contains 25.0% or less by volume of volatile organic compounds and 75.0% or more by volume of water; or,

2. The ink (less water) as it is applied to the substrate contains 60.0% by volume or more non-volatile materials; or,

3. The owner or operator installs and operates:

a. A carbon adsorption system which reduces the volatile organic emissions by at least 90.0% by weight; or,

b. an incinerator system which oxidizes at least 90.0% by weight of the volatile organic compounds emitted; or,

c. an alternative volatile organic compound emission reduction system demonstrated to have at least 90.0% reduction efficiency by weight; and,

d. a capture system must be used in conjunction with any emission control systems installed pursuant to 310 CMR 7.18(12)(a)3.a. through 3.c. inclusive. The design and operation of said capture system must be consistent with good engineering practice and is required to provide for an overall reduction in volatile organic compound emissions of at least: 75.0% where publication rotogravure process is employed; 65.0% where packaging rotogravure process is employed.

(b) Any person subject to 310 CMR 7.18(12)(a) shall maintain continuous compliance at all times. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a). Demonstrations of compliance shall not include any considerations of transfer efficiency.

(c) Any person subject to 310 CMR 7.18(12)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for three years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved compliance plan or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of ink(s) used;

2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;

3. solids content of any ink(s) used;

4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;

5. quantity of product processed; and

6. any other requirements specified by the Department in any approval(s) and/or order(s) issued to the person.

(d) Persons subject to 310 CMR 7.18(12)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with EPA Method 24, Method 24A and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(e) The Department reserves the right to initiate enforcement action against any person who failed to meet the previous requirements of 310 CMR 7.18(12) in effect from January 1, 1983 until January 1, 1994, where the facility size cutoff in 310 CMR 7.18(12)(a) was 100 tons per year.

7.18: continued

((13) Reserved)

(14) U Paper Surface Coating.

(a) On or after December 31, 1982, unless granted an extension by the Department until January 1, 1987, or unless the facility is subject to 310 CMR 7.26(20) through (29), no person who owns, leases, operates, or controls a paper surface coating line, which emits, before any application of air pollution control equipment, in excess of 15 pounds per day of volatile organic compounds shall cause, suffer, allow or permit emissions therefrom in excess of 4.8 pounds of volatile organic compounds per gallon of solids applied.

(b) Any person subject to 310 CMR 7.18(14)(a) shall maintain continuous compliance at all times. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a). Demonstrations of compliance shall not include any considerations of transfer efficiency.

7.18: continued

(c) Any person subject to 310 CMR 7.18(14)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for three years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved compliance plan or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of coating(s) used;
2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;
3. solids content of any coating(s) used;
4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;
5. quantity of product processed; and
6. any other requirements specified by the Department in any approval(s) and/or order(s) issued to the person.

(d) Persons subject to 310 CMR 7.18(14)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(15) U Fabric Surface Coating.

(a) On or after December 31, 1982, unless granted an extension by the Department until January 1, 1987, no person who owns, leases, operates, or controls a fabric surface coating line, which emits, before any application of air pollution control equipment, in excess of 15 pounds per day of volatile organic compounds, shall cause, suffer, allow or permit emissions therefrom in excess of 4.8 pounds of volatile organic compounds per gallon of solids applied.

(b) Any person subject to 310 CMR 7.18(15)(a) shall maintain continuous compliance at all times. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a). Demonstrations of compliance shall not include any considerations of transfer efficiency.

(c) Any person subject to 310 CMR 7.18(15)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for three years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved compliance plan or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of coating(s) used;
2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;
3. solids content of any coating(s) used;
4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;
5. quantity of product processed; and
6. any other requirements specified by the Department in any approval(s) and/or order(s) issued to the person.

(d) Persons subject to 310 CMR 7.18(15)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(16) U Vinyl Surface Coating.

(a) On or after December 31, 1982, unless granted an extension by the Department until January 1, 1987, no person who owns, leases, operates, or controls a vinyl coating line, which emits, before any application of air pollution control equipment, in excess of 15 pounds per day of volatile organic compounds shall cause allow or permit emissions therefrom in excess of 7.8 pounds of volatile organic compounds per gallon of solids applied.

7.18: continued

(b) Any person subject to 310 CMR 7.18(16)(a) shall maintain continuous compliance at all times. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a). Demonstrations of compliance shall not include any considerations of transfer efficiency.

(c) Any person subject to 310 CMR 7.18(16)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for three years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved compliance plan or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of coating(s) used;
2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;
3. solids content of any coating(s) used;
4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;
5. quantity of product processed; and
6. any other requirements specified by the Department in any approval(s) and/or order(s) issued to the person.

(d) Persons subject to 310 CMR 7.18(16)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(17) Reasonable Available Control Technology.

(a) Applicability. 310 CMR 7.18(17) applies to any person who owns, leases, operates or controls any facility which has the potential to emit, before the application of air pollution control equipment, equal to or greater than 25 tons per year of volatile organic compounds, not including VOC emissions exempted under 310 CMR 7.18(17)(b).

(b) Emissions Exemptions. Emissions of volatile organic compounds from any facility which are subject to any of the following requirements are not included when determining the potential to emit, before application of air pollution control equipment, for purposes of 310 CMR 7.18(17)(a):

1. emissions of volatile organic compounds which are subject to regulation by other sections of 310 CMR 7.18, excluding 310 CMR 7.18(1), 310 CMR 7.18(2) and 310 CMR 7.18(20); or,
2. emissions of volatile organic compounds for which standards have been issued by EPA pursuant to Section 112 of the Act, from equipment subject to regulation under 40 CFR Part 61 (NESHAPS); or,
3. emissions of volatile organic compounds from equipment which, since January 1, 1990, have been reviewed and approved as Best Available Control Technology or Lowest Achievable Emission Rate imposed in an approval containing specific emission limits or work practice standards issued under a federally-enforceable regulation; or,
4. emissions of volatile organic compounds from the incomplete combustion of any material, except where the material is heated, burned, combusted or otherwise chemically changed under oxygen deficient conditions by design.
5. emissions of volatile organic compounds resulting from operations which are subject to regulation under 310 CMR 7.24.
6. emissions of volatile organic compounds from operations which since 1990 have been constructed and operated in accordance with the exemptions in 310 CMR 7.03.

(c) Reasonably Available Control Technology Requirements.

1. Unless granted a non-renewable extension by the Department under 310 CMR 7.18(17)(e), no person subject to 310 CMR 7.18(17)(a) shall cause, suffer, allow or permit emissions from the facility in excess of an emission rate achievable through the implementation of reasonably available control technology as required in an emission control plan approved under 310 CMR 7.18(20)(e), according to the following schedule:
   a. On or after December 31, 1986 for any facility with the potential to emit equal to or greater than 100 tons per year of VOC, before the application of air pollution control equipment;

7.18: continued

b. On or after January 1, 1994 for any facility with the potential to emit before application of air pollution control equipment, equal to or greater than 50 tpy, but less than 100 tpy, and which, since 1/1/90 has had actual emissions, before the application of air pollution control equipment, greater than 50 tons per year in any one calendar year;

c. On or after May 31, 1995 for any facility with the potential to emit, before application of air pollution control equipment, equal to or greater than 50 tpy, but less than 100 tpy, and which since 1/1/90 has had actual emissions, before the application of air pollution control equipment, less than or equal to 50 tons per year in any one calendar year;

d. If the Administrator makes a determination under Section 182(g)(3) of the Clean Air Act (CAA) that Massachusetts has failed to meet a milestone, then by May 31, 1997 or two years after the determination, whichever is later, for any facility with the potential to emit, before application of air pollution control equipment equal to or greater than 25 tpy, but less than 50 tpy, and which since 1/1/90 have had actual emissions, before the application of air pollution control equipment, greater than or equal to 25 tons per year in any one calendar year;

e. If the Administrator makes a determination under Section 182(g)(3) of the Clean Air Act (CAA) that Massachusetts has failed to meet a milestone, then by May 31, 1999 or four years after the determination, whichever is later, for any facility with the potential to emit, before application of air pollution control equipment equal to or greater than 25 tpy, but less than 50 tpy, and which since 1/1/90 have had actual emissions, before the application of air pollution control equipment, less than 25 tons per year in any one calendar year;

(d) Plan Submittal Requirements. Any person subject to 310 CMR 7.18(17)(a) must have the RACT emission limit approved by the Department in an emissions control plan approved under 310 CMR 7.18(20), and must submit such plan 180 days prior to the applicable implementation deadline in 310 CMR 7.18(17)(c). The Department must also submit the plan to the EPA for approval as a revision to the Massachusetts State Implementation Plan. However, any person subject to 310 CMR 7.18(17)(a) only if HOC emissions are included in the applicability determination (i.e. the facility's VOC emissions are less than the applicability threshold) is not required to have their emission control plan approved as a revision to the Massachusetts State Implementation Plan.

(e) Extensions.

1. Any person required to implement RACT according to the schedule in 310 CMR 7.18(17)(c) may apply in writing to the Department for a non-renewable extension of the implementation deadline in 310 CMR 7.18(17)(c). The person must apply to the Department for the non-renewable extension at the same time the person submits the emission control plan required by 310 CMR 7.18(20).

2. The Department will consider allowing a non-renewable extension from the original implementation deadline in 310 CMR 7.18(17)(c) which extension will not exceed one calendar year, provided the emission control plan submitted for approval under 7.18(20), meets the following criteria in addition to those of 310 CMR 7.18(20):

a. the emission control plan proposes to reduce emissions through toxics use reduction techniques defined in M.G.L. c. 21I; and,

b. the toxics use reduction techniques contained in the emission control plan are approved by a Toxics Use Reduction Planner certified under M.G.L. c. 21I; (this may be an employee at the facility who is certified as Toxics Use Reduction Planner); and,

c. implementation of the plan will achieve a minimum emission reduction of 85% from the actual emissions reported under 310 CMR 7.18(20)(c)4 through toxics use reduction techniques, as calculated on a mass of VOC emitted per gallon of solids as applied or per unit of production basis; and,

7.18: continued

d. the emission control plan also contains contingency measures to reduce emissions by 90%, as calculated on a mass of VOC emitted per gallon of solids as applied or per unit of production basis, which measures automatically take effect if the emissions reductions achieved through toxics use reduction techniques do not equal 85%, as calculated on a mass of VOC emitted per gallon of solids as applied or per unit of production basis.

3. Notwithstanding the above, no facility subject to the requirements of 310 CMR 7.18(17) prior to February 1, 1993, shall be eligible for any extension of the compliance deadline set forth in 310 CMR 7.18(17)(c)1.a.

(f) Continuous Compliance. Any person required to implement RACT according to the schedule in 310 CMR 7.18(17)(c) shall maintain continuous compliance at all times. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a). Demonstrations of compliance may include considerations of transfer efficiency provided that the baseline transfer efficiency and transfer efficiency test method are detailed in the emission control plan as approved by the Department and EPA.

(g) Recordkeeping Requirements. Any person required to implement RACT according to the schedule in 310 CMR 7.18(17)(c) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for five years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved emission control plan (310 CMR 7.18(20) or upon request. Such records shall include, but not be limited to:

1. identity, quantity, formulation and density of coating(s) used;
2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;
3. solids content of any coating(s) used;
4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;
5. quantity of product processed;
6. any other requirements specified by the Department in any approval(s) issued under 310 CMR 7.18(20) or any order(s) issued to the person.

(h) Testing Requirements. Any person required to implement RACT according to the schedule in 310 CMR 7.18(17)(c) shall, upon request of the Department, perform or have performed tests to demonstrate compliance with 310 CMR 7.18(17). Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(18) U Polystyrene Resin Manufacture.

(a) On or after December 31, 1986, no person who owns, leases, operates, or controls a continuous process polystyrene resin manufacturing plant or facility which emits, before any application of air pollution control equipment, in excess of 15 pounds per day of volatile organic compounds, shall cause, suffer, allow or permit emissions from the material recovery section in excess of 0.12 pounds of volatile organic compounds per 1,000 pounds of product.

(b) Any person subject to 310 CMR 7.18(18)(a) shall maintain continuous compliance at all times. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a).

(c) Any person subject to 310 CMR 7.18(18)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for three years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved compliance plan or upon request. Such records shall include, but are not limited to:

1. properties of the inlet emission stream including temperature, pressure, flow rate and composition;

7.18: continued

2. properties of the inlet coolant including type, temperature and pressure;
3. quantity of product produced;
4. actual operational and emission characteristics of the manufacturing process and any appurtenant emissions capture and control equipment; and
5. any other requirements specified by the Department in any approval(s) and/or order(s) issued to the person.

(d) Persons subject to 310 CMR 7.18(18)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with EPA Method 2 and Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(19) Synthetic Organic Chemical Manufacture.

(a) Each person owning, leasing, or controlling the operation of a synthetic organic chemical manufacturing facility shall monitor quarterly the following components in VOC service with an organic detection instrument: each pump in light liquid service; each compressor; each valve in both gas and light liquid service; and each pressure relief valve in gas service.

(b) Each owner or operator shall monitor:

1. each pressure relief valve within 24 hours after it has vented to the atmosphere;
2. within 24 hours of discovery a component which sight, smell, or sound indicates might be leaking;
3. any component that appears to be leaking, on the basis of sight, smell, or sound, including flanges, connections, and equipment in heavy liquid service should be repaired with 15 days of the date the leak is detected.

(c) Each owner or operator shall use a VOC detection instrument and monitoring method in accordance with EPA Reference Method 21, as described in: 40 CFR part 60 Appendix A.

(d) From the date a leaking component is detected, each owner or operator shall:

1. affix within one hour a weatherproof and readily visible tag to the component, bearing an identification number and the date. This tag shall remain in place until the component is repaired.
2. repair the leaking component within 15 days; or
3. repair the leaking component at or before the next scheduled unit turnaround if not able to do so within 15 days.

(e) Each owner or operator shall visually inspect all pumps in light liquid service weekly.

(f) Except for pressure relief valves, an owner or operator shall seal all open-ended valves which are in contact with process fluid on one side of the seat and open to the atmosphere on the other side of the seat. The open-ended valves shall be sealed with one of the following: a second valve, blind flange, cap, or plug. The sealing device may be removed only when a sample is being taken or during maintenance operations.

(g) Each owner or operator shall record in an inspection log the following information for each leaking component found:

1. the tag identification number;
2. the type of component;
3. the date on which the leak was detected for the component;
4. the date on which the component was repaired;
5. identification of those leaking components which cannot be repaired until unit turnaround and the reason why repair must be delayed;
6. the test methods;
7. the result of inspection or monitoring;
8. the type of repair;
9. chemical name used in component;
10. name of individual responsible for repairs;
11. date of next unit turnaround if there is a delay in repair;
12. results of weekly visual leak inspections.

A copy of the inspection log shall be retained at the plant for a minimum of two years after the date on which the report for the inspection period was prepared and shall make the log available to the Department upon request.

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(h) Each owner or operator shall submit to the Department a quarterly report describing the results of the monitoring program required by 310 CMR 7.18(19). As a minimum, this report should include:

1. the number and types of components that were located during the previous monitoring period but were not repaired.

2. the number and types of components inspected, the number and types of leaking components found, the number and types of components repaired, and the time elapsed before each repair was effected.

3. the number of components not repaired within 15 days and the reason why there was a delay.

(i) Any owner or operator of a facility subject to 310 CMR 7.18(19) shall:

1. submit to the Department, a leak detection and repair program by June 1, 1987. This program shall contain, as a minimum, a list of process components, a copy of the log book format, and a description of the proposed monitoring equipment.

2. submit the first quarterly report required by 310 CMR 7.18(19)(i) by December 1, 1987 or within 120 days of the date the owner or operator first becomes subject to 310 CMR 7.18(19).

(j) The Department shall receive notice in writing ten days prior to the scheduled monitoring so that the Department has the opportunity to observe the monitoring procedure as described in 310 CMR 7.18(19)(a) and (b).

(k) The Department will review and make determination on requests for exemptions to 310 CMR 7.18(19) in the following categories:

1. components that are considered unsafe to monitor because of extreme temperatures, pressures, at a height of more than two meters above a permanent support surface, or for other reasons are exempt from quarterly monitoring if the owner requests a waiver from the Department and monitors at least once a year.

2. SOCMI facilities handling less than 980 tons per year (890 Mg/yr) of VOC.

3. To implement a skip period monitoring program the owner or operator will begin with a quarterly leak detection and repair program for valves. If the desired "good performance level" of 2% or less of valves leaking was attained for valves in gas service and light liquid service for five consecutive quarters, then three of the subsequent quarterly leak detection and repair periods for these valves could be skipped. All valves would be monitored again during the fourth quarter. This would permit a process unit which has consistently demonstrated it is meeting the "good performance level" to monitor valves in gas service and valves in light liquid service annually instead of quarterly. If an inspection showed that the "good performance level" was not being achieved, then quarterly inspections of valves would be reinstituted until a "good performance level" was being achieved for five consecutive quarters. At that time the skip period inspection would be resumed. Only valves are allowed to be monitored at skip period intervals; all other equipment components would not skip monitoring intervals and would be subject to their required quarterly monitoring.

(20) Emission Control Plans for Implementation of Reasonably Available Control Technology.

(a) General Applicability and Submittal Requirements. Any person who owns, leases, operates or controls a facility, which becomes subject to 310 CMR 7.18 after January 1, 1992, shall submit an emission control plan to the Department for review and approval by the Department prior to implementation of RACT.

1. The plan must be submitted to the Department within 180 days of the date the facility or part of a facility first meets the applicability requirements of 310 CMR 7.18, or the date of promulgation for that section of 310 CMR 7.18, whichever is latest.

2. An emission control plan is not required if all operations at the facility for which an approval under 310 CMR 7.18(20) would otherwise be required were installed in accordance with an approval issued pursuant to 310 CMR 7.02(4) or (5) that meets the standards/limits of 310 CMR 7.18 and/or the requirements contained in 310 CMR 7.03.

(b) Other Applicability and Submittal Requirements. Any person subject to 310 CMR 7.18, when so required by the Department in writing, shall submit an emission control plan to the Department for review and approval by the Department.

7.18: continued

(c) Emission Control Plan Requirements. The emission control plan must detail how RACT will be implemented at the facility which is subject to 310 CMR 7.18. Each plan submitted under 310 CMR 7.18(20) shall, at a minimum, include the following:

1. a list and description of all the equipment at the facility which has the potential to emit VOC, including any associated plan approvals, dates of installation, any subsequent alterations, etc.;
2. a list of all the VOC emitting equipment at the facility for which the emission control plan is being submitted;
3. the potential to emit, before application of air pollution control equipment, before implementation of RACT, on a daily and annual basis, of all VOC emitting equipment for which the emission control plan is being submitted;
4. the actual emissions before implementation of RACT on a daily and annual basis of all VOC emitting equipment for which the emission control plan is being submitted;
5. if applicable, the designs, specifications and standard operating and maintenance procedures for any VOC emissions capture and control system used to implement RACT;
6. if applicable, the designs and specifications of any low-VOC emitting processes or reformulations used to implement RACT;
7. the testing, monitoring, recordkeeping and reporting procedures used to demonstrate compliance with the applicable sections of 310 CMR 7.18;
8. a schedule for the implementation of RACT at the facility by the deadline contained in the applicable section of 310 CMR 7.18, including provisions for demonstrating to the Department periodic increments of progress;
9. any other information required by the Department, and;
10. the signature of a responsible official.

(d) Additional Requirements for Demonstration of RACT. An emission control plan submitted by any person who owns, leases, operates or controls a facility or part of a facility subject to 310 CMR 7.18(2)(c) or 310 CMR 7.18(17), must meet the following requirements, in addition to those of 310 CMR 7.18(20)(c).

1. The plan must contain a demonstration and description of the RACT emission limit(s) for this facility or part of a facility; and,
2. any information necessary to support the demonstration made in 310 CMR 7.18(20)(d)1., such as technological and economic considerations, industry surveys, customer considerations, etc.

(e) Approval of an Emission Control Plan by the Department.

1. For persons not subject to 310 CMR 7.18(2)(b), (c), or 310 CMR 7.18(17) the Department will, within the timetables established in 310 CMR 4.10, issue a final approval or disapproval of the plan.
2. For persons subject to 310 CMR 7.18(2)(b), (c), or 310 CMR 7.18(17) where the information submitted in the emission control plan is sufficient to support both the determination of RACT and the proposed schedule; the Department will, within timetables established in 310 CMR 4.10, publish a notice of public hearing in accordance with M.G.L. c. 30A. After the public hearing and the close of the public comment period, the Department will, within the timetables established in 310 CMR 4.10, issue a final approval or disapproval of the emission control plan.

(f) Prohibition. No emissions reductions or any other actions taken at any facility or part of a facility will constitute implementation of RACT at that facility unless those emission reductions or other actions are part of an emission control plan approved by the Department.

(g) Additional requirements may be included in the emission control plan approval to ensure that emissions from the unit(s) subject to RACT will not cause or contribute to a condition of air pollution or a violation of any other regulation. Such requirements include, but are not limited to, emissions limits on other air contaminants, and additional stack testing or emissions monitoring requirements.

(21) Surface Coating of Plastic Parts.

(a) Applicability. 310 CMR 7.18(21) applies in its entirety to any person who owns, leases, operates or controls plastic parts surface coating line(s) which in total have the potential to emit, before the application of air pollution control equipment, equal to or greater than 50 tons per year of volatile organic compounds.

7.18: continued

(b) Reasonably Available Control Technology Requirements. On or after January 1, 1994, unless exempted under 310 CMR 7.18(21)(c), or granted a non-renewable extension by the Department under 310 CMR 7.18(21)(d), no person subject to 310 CMR 7.18(21)(a) shall cause, suffer, allow or permit emissions from any plastic parts coating line in excess of the emission limitations set forth in 310 CMR 7.18(21)(e).

(c) Exemptions. The requirements of 310 CMR 7.18(21)(b) do not apply to:

1. a. any person subject to 310 CMR 7.18(21)(a) who is able to demonstrate to the Department that, since January 1, 1990, the plastic parts coating line(s) have not, in total, emitted, before the application of air pollution control equipment, greater than or equal to 50 tons per year of volatile organic compounds; and

b. provided the person obtains and complies with a federally enforceable emission limit which restricts the potential emissions to below 50 tons per year; and

c. provided the person complies with of 310 CMR 7.18(21)(i).

2. any person subject to 310 CMR 7.18(21)(a) who, according to the Department, has complied with 310 CMR 7.18(17) prior to January 1, 1993.

(d) Extensions.

1. Any person subject to 310 CMR 7.18(21)(b) may apply in writing to the Department for a non-renewable extension of the implementation deadline in 310 CMR 7.18(21)(b). The person must apply to the Department for the non-renewable extension at the same time the person submits the emission control plan required by 310 CMR 7.18(20) and 310 CMR 7.18(21)(f).

2. The Department will consider a non-renewable extension of the deadline in 310 CMR 7.18(21)(b) until no later than January 1, 1995, provided the emission control plan submitted for approval under 310 CMR 7.18(20), meets the following criteria in addition to those of 310 CMR 7.18(20):

a. the emission control plan proposes to reduce emissions through toxics use reduction techniques as defined in M.G.L. c. 21I; and,

b. the toxics use reduction techniques contained in the emission control plan are approved by a Toxics Use Reduction Planner certified under M.G.L. c. 21I; (this may be an employee at the facility who is certified as Toxics Use Reduction Planner); and,

c. implementation of the plan must meet the emission limitations of 310 CMR 7.18(21)(e)2. through toxics use reduction techniques; and,

d. the emission control plan must also contain contingency measures to meet the RACT emission limits of 310 CMR 7.18(21)(e)1.; such measures must automatically take effect if the emissions reductions achieved by toxics use reduction techniques do not satisfy 310 CMR 7.18(21)(e)2.

(e) RACT Emissions Limitations

1. If a person subject to 310 CMR 7.18(21)(b) does not use add-on air pollution control equipment to implement RACT, then the person shall comply with the emissions limitations in Table 310 CMR 7.18(21)(e)1. If more than one emission limitation applies to any one coating, then that coating must comply with the least stringent emission limitation.

7.18: continued

Table 310 CMR 7.18(21)(e)1.
RACT Emission Limitation for Surface Coating of Plastic Parts
using Low/no VOC Coatings

| Emission Source | Emission Limitation (lbs VOC/gal solids as applied) |
|---|---|
| Business Machines/Miscellaneous Plastic Parts | |
| Color coating | 3.4 |
| Color/texture coating | 3.4 |
| Primer Coating | 1.4 |
| EMI/RFI | 8.8 |
| Automotive Interior Parts Coating | |
| Colorcoat | 5.7 |
| Primer | 6.7 |
| Automotive Exterior Flexible Parts Coating | |
| Colorcoat | 9.3 |
| Clearcoat | 6.7 |
| Primer | 11.6 |
| Automotive Exterior Rigid (non-flexible) Parts Coating | |
| Colorcoat | 9.3 |
| Clearcoat | 6.7 |
| Primer | 6.7 |

2. If a person subject to 310 CMR 7.18(21)(b) does use add-on air pollution control equipment to implement RACT, then the person shall comply with the emissions limitations in Table 310 CMR 7.18(21)(e)2. If more than one emission limitation applies to any one coating, then that coating must comply with the least stringent emission limitation.

Table 310 CMR 7.18(21)(e)2.
RACT Emission Limitations for Surface Coating of Plastic Parts
Using Add-on Air Pollution Controls

| Emission Source | Emission Limitation (lbs VOC/gal solids as applied) |
|---|---|
| Business Machines/Miscellaneous Plastic Parts | |
| Color coating | 1.7 |
| Color/texture coating | 1.7 |
| Primer Coating | 1.4 |
| EMI/RFI | 1.9 |
| Automotive Interior Parts Coating | |
| Colorcoat | 3.6 |
| Primer | 1.4 |
| Automotive Exterior Flexible Parts Coating | |
| Colorcoat | 2.8 |
| Clearcoat | 2.4 |
| Primer | 4.8 |
| Automotive Exterior Rigid (non-flexible) Parts Coating | |
| Colorcoat | 2.8 |
| Clearcoat | 2.4 |
| Primer | 3.6 |

7.18: continued

(f) Plan Submittal Requirements. Any person who owns, leases, operates or controls a plastic parts coating line(s) subject to 310 CMR 7.18(21)(a) must submit an emissions control plan, and have the plan approved by the Department under 310 CMR 7.18(20).

(g) Continuous Compliance. Any person who owns, leases, operates or controls a coating line(s) subject to 310 CMR 7.18(21)(a) shall maintain continuous compliance at all times with their approved emissions control plan. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a). Demonstrations of compliance may include considerations of transfer efficiency provided that the baseline transfer efficiency is equal to or greater than 65%, and the transfer efficiency test method is detailed in the emission control plan approved by the Department.

(h) Recordkeeping Requirements. Any person who owns, leases, operates or controls a coating line(s) subject to 310 CMR 7.18(21)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for five years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved emission control plan (310 CMR 7.18(20)) or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of coating(s) used;
2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;
3. solids content of any coating(s) used;
4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;
5. quantity of product processed;
6. any other requirements specified by the Department in any approval(s) issued under 310 CMR 7.18(20) or any order(s) issued to the person.

(i) Testing Requirements. Any person who owns, leases, operates or controls a coating line(s) subject to 310 CMR 7.18(21)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance with 310 CMR 7.18(21). Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(22) Leather Surface Coating.

(a) Applicability. 310 CMR 7.18(22) applies in its entirety to any person who owns, leases, operates or controls leather surface coating line(s) which in total have the potential to emit, before the application of air pollution control equipment, equal to or greater than 50 tons per year of volatile organic compounds.

(b) Reasonably Available Control Technology Requirements. On or after January 1, 1994, unless exempted by 310 CMR 7.18(22)(c) or granted a non-renewable extension by the Department under 310 CMR 7.18(22)(d), no person subject to 310 CMR 7.18(22)(a) shall cause, suffer, allow or permit emissions from any leather surface coating line in excess of 27.4 lbs VOC/gallon of solids as applied.

(c) Exemptions. The requirements of 310 CMR 7.18(22)(b) do not apply to:

1. a. any person subject to 310 CMR 7.18(22)(a) who is able to demonstrate to the Department that, since January 1, 1990, the leather surface coating line(s) have not, in total, emitted, before the application of air pollution control equipment, greater than or equal to 50 tons per year of volatile organic compounds; and
   b. provided the person obtains and complies with a federally enforceable emission limit which restricts the potential emissions to below 50 tons per year; and
   c. provided the person complies with of 310 CMR 7.18(22)(h).
2. any person subject to 310 CMR 7.18(22)(a) who, according to the Department, has complied with 310 CMR 7.18(17) prior to January 1, 1993.

7.18: continued

(d) Extensions.

1. Any person subject to 310 CMR 7.18(22)(b) may apply in writing to the Department for a non-renewable extension of the implementation deadline. The person must apply to the Department for the non-renewable extension at the same time the person submits the emission control plan required by 310 CMR 7.18(20).

a. the emission control plan proposes to reduce emissions through toxics use reduction techniques as defined in M.G.L. c. 21I; and,

b. the toxics use reduction techniques contained in the emission control plan are approved by a Toxics Use Reduction Planner certified under M.G.L. c. 21I; (this may be an employee at the facility who is certified as Toxics Use Reduction Planner); and,

c. implementation of the plan must meet the emission limitations of 310 CMR 7.18(22)(b) or achieve a 85% emissions reduction, whichever is greater, through toxics use reduction techniques, as calculated on a mass of VOC emitted per gallons of solids as applied or per unit of production; and,

d. the emission control plan must also contain contingency measures to meet the RACT emission limitation in 310 CMR 7.18(22)(b); such measures must automatically take effect if the emissions reductions through toxics use reduction techniques do not satisfy 310 CMR 7.18(22)(b).

(e) Plan Submittal Requirements. Any person who owns, leases, operates or controls a leather surface coating line(s) subject to 310 CMR 7.18(22)(a) must submit an emissions control plan, and have the plan approved by the Department under 310 CMR 7.18(20).

(f) Continuous Compliance. Any person who owns, leases, operates or controls a leather surface coating line(s) subject to 310 CMR 7.18(22)(a) shall maintain continuous compliance at all times with their approved emissions control plan. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a). Demonstrations of compliance may include considerations of transfer efficiency provided that the baseline transfer efficiency is equal to or greater than 65%, and the transfer efficiency test method is detailed in the emission control plan (310 CMR 7.18(20)) approved by the Department.

(g) Recordkeeping Requirements. Any person who owns, leases, operates or controls a leather surface coating line(s) subject to 310 CMR 7.18(22)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for five years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved emission control plan (310 CMR 7.18(20) or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of coating(s) used;
2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;
3. solids content of any coating(s) used;
4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;
5. quantity of product processed;
6. any other requirements specified by the Department in any approval(s) issued under 310 CMR 7.18(20) or any order(s) issued to the person.

(h) Testing Requirements. Any person who owns, leases, operates or controls a leather surface coating line(s) subject to 310 CMR 7.18(22)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance with 310 CMR 7.18(22). Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(23) Wood Products Surface Coating.

(a) Applicability. 310 CMR 7.18(23) applies in its entirety to any person who owns, leases, operates or controls wood products surface coating line(s) which in total have the potential to emit, before the application of air pollution control equipment, equal to or greater than 50 tons per year of volatile organic compounds.

7.18: continued

(b) Reasonably Available Control Technology Requirements. On or after January 1, 1994, unless exempted by 310 CMR 7.18(23)(c) or granted a non-renewable extension by the Department under 310 CMR 7.18(23)(d), no person subject to 310 CMR 7.18(23)(a) shall cause, suffer, allow or permit emissions from any wood products surface coating line in excess of the emission limitations set forth in 310 CMR 7.18(23)(e).

(c) Exemptions. The requirements of 310 CMR 7.18(23)(b) do not apply to:

1. a. any person subject to 310 CMR 7.18(23)(a) who is able to demonstrate to the Department that, since January 1, 1990, the wood products surface coating line(s) have not, in total, emitted, before the application of air pollution control equipment, greater than or equal to 50 tons per year of volatile organic compounds; and

   b. provided the person obtains and complies with a federally enforceable emission limit which restricts the potential emissions to below 50 tons per year; and

   c. provided the person complies with of 310 CMR 7.18(23)(i).

2. any person subject to 310 CMR 7.18(23)(a) who, according to the Department, has complied with 310 CMR 7.18(17) prior to January 1, 1993.

(d) Extensions.

1. Any person subject to 310 CMR 7.18(23)(b) may apply in writing to the Department for a non-renewable extension of the implementation deadline in 310 CMR 7.18(23)(b). The person must apply to the Department for the non-renewable extension at the same time the person submits the emission control plan required by 310 CMR 7.18(20) and 310 CMR 7.18(23)(e).

2. The Department will consider a non-renewable extension of the deadline in 310 CMR 7.18(23)(b) until no later than January 1, 1995, provided the emission control plan submitted for approval 310 CMR 7.18(20), meets the following criteria in addition to those of 310 CMR 7.18(20):

   a. the emission control plan proposes to reduce emissions through toxics use reduction techniques as defined in M.G.L. c. 21I; and,

   b. the toxics use reduction techniques contained in the emission control plan are approved by a Toxics Use Reduction Planner certified under M.G.L. c. 21I; (this may be an employee at the facility who is certified as Toxics Use Reduction Planner); and,

   c. implementation of the plan must meet the emission limitations of 310 CMR 7.18(23)(e) or achieve a 85% reduction in emissions, whichever is greater, through toxics use reduction techniques, as calculated on a mass of VOC emitted per gallon of solids as applied or per unit of production; and,

   d. the emission control plan must also contain contingency measures to meet RACT emission limitations of 310 CMR 7.18(23)(e); such measures must automatically take effect if the emissions reductions achieved through toxics use reduction techniques do not satisfy 310 CMR 7.18(23)(e).

(e) RACT Emissions Limitations. Any person subject to 310 CMR 7.18(23)(b) shall comply with the emissions limitations in Table 310 CMR 7.18(23)(e)1. If more than one emission limitation applies then, the coating must comply with the least stringent emission limitation.

Table 310 CMR 7.18(23)(e)1.
RACT Emission Limitations for Surface Coating of Wood Products

| Emission Source | Emission Limitation (lbs VOC/gal solids as applied) |
|---|---|
| Semitransparent stain | 89.4 |
| Wash coat | 35.6 |
| Opaque stain | 13.0 |
| Sealer | 23.4 |
| Pigmented coat | 15.6 |
| Clear topcoat | 23.4 |

7.18: continued

(f) Plan Submittal Requirements. Any person who owns, leases, operates or controls a wood products surface coating line(s) subject to 310 CMR 7.18(23)(a) must submit an emissions control plan, and have the plan approved by the Department under 310 CMR 7.18(20).

(g) Continuous Compliance. Any person who owns, leases, operates or controls a wood products surface coating line(s) subject to 310 CMR 7.18(23)(a) shall maintain continuous compliance at all times with their approved emissions control plan. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a). Demonstrations of compliance may include considerations of transfer efficiency provided that the baseline transfer efficiency is greater than 65%, and the transfer efficiency test method is detailed in the emission control plan (310 CMR 7.18(20)) approved by the Department.

(h) Recordkeeping Requirements. Any person who owns, leases, operates or controls a wood products surface coating line(s) subject to 310 CMR 7.18(23)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for five years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved emission control plan (310 CMR 7.18(20) or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of coating(s) used;
2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;
3. solids content of any coating(s) used;
4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;
5. quantity of product processed;
6. any other requirements specified by the Department in any approval(s) issued under 310 CMR 7.18(20) or any order(s) issued to the person.

(i) Testing Requirements. Any person who owns, leases, operates or controls a wood products surface coating line(s) subject to 310 CMR 7.18(23)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance with 310 CMR 7.18(23). Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(24) Flat Wood Paneling Surface Coating.

(a) Applicability. 310 CMR 7.18(24) applies in its entirety to any person who owns, leases, operates or controls a flat wood paneling surface coating line(s) which emits, before the application of air pollution control equipment, equal to or greater than 15 pounds per day of volatile organic compounds.

(b) Reasonably Available Control Technology Requirements. On or after January 1, 1994, unless exempted by 310 CMR 7.18(24)(c) or granted a non-renewable extension by the Department under 310 CMR 7.18(24)(d), no person subject to 310 CMR 7.18(24)(a) shall cause, suffer, allow or permit emissions flat wood paneling surface coating line in excess of the emission limitations set forth in either 310 CMR 7.18(24)(e).

(c) Exemptions. The requirements of 310 CMR 7.18(24)(b) do not apply to:

1. a. any person subject to 310 CMR 7.18(24)(a) who is able to demonstrate to the Department that, since January 1, 1990, the flat wood paneling surface coating line(s) have not, in total, emitted, before the application of air pollution control equipment, greater than or equal to 15 pounds per day of volatile organic compounds; and
   b. provided the person obtains and complies with a federally enforceable emission limit which restricts the potential emissions to below 15 pounds per day; and
   c. provided the person complies with of 310 CMR 7.18(24)(i).
2. any person subject to 310 CMR 7.18(24)(a) who, according to the Department, has complied with 310 CMR 7.18(17) prior to January 1, 1993.

7.18: continued

(d) Extensions.

1. Any person subject to 310 CMR 7.18(24)(b) may apply in writing to the Department for a non-renewable extension of the implementation deadline in 310 CMR 7.18(24)(b). The person must apply to the Department for the non-renewable extension at the same time the person submits the emission control plan required by 310 CMR 7.18(20) and 310 CMR 7.18(24)(f).

2. The Department will consider a non-renewable extension of the deadline in 310 CMR 7.18(24)(b) until no later than January 1, 1995, provided the emission control plan submitted for approval 7.18(20), meets the following criteria in addition to those of 310 CMR 7.18(20):

a. the emission control plan proposes to reduce emissions through toxics use reduction techniques as defined in M.G.L. c. 21I; and,

b. the toxics use reduction techniques contained in the emission control plan are approved by a Toxics Use Reduction Planner certified under M.G.L. c. 21I; (this may be an employee at the facility who is certified as Toxics Use Reduction Planner); and,

c. implementation of the plan must meet the emission limitations of 310 CMR 7.18(24)(e) or achieve a 85% reduction in emissions, whichever is greater, through toxics use reduction techniques, as calculated on a mass of VOC emitted per gallon of solids as applied or per unit of production; and,

d. the emission control plan must also contain contingency measures to meet RACT emission limitations of 310 CMR 7.18(24)(e); such measures must automatically take effect if the emissions reductions achieved through toxics use reduction techniques do not satisfy 310 CMR 7.18(24)(e).

(e) RACT Emissions Limitations. Any person subject to 310 CMR 7.18(24)(b) shall comply with the emissions limitations in Table 310 CMR 7.18(24)(e)1. If more than one emission limitation applies then, the coating must comply with the least stringent emission limitation.

Table 310 CMR 7.18(24)(e)1.
RACT Emission Limitations for Surface Coating of Flat Wood Panels

| Emission Source | Emission Limitation (lbs VOC/1000 square feet coated) |
|---|---|
| Printed hardwood panels and thin particleboard panels | 6.0 |
| Natural finish hardwood plywood panels | 12.0 |
| Class II finish on hardboard panels | 10.0 |

(f) Plan Submittal Requirements. Any person who owns, leases, operates or controls a flat wood paneling surface coating line(s) subject to 310 CMR 7.18(24)(a) must submit an emissions control plan, and have the plan approved by the Department under 310 CMR 7.18(20).

(g) Continuous Compliance. Any person who owns, leases, operates or controls a flat wood paneling surface coating line(s) subject to 310 CMR 7.18(24)(a) shall maintain continuous compliance at all times with their approved emissions control plan. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a). Demonstrations of compliance may include considerations of transfer efficiency provided that the baseline transfer efficiency is greater than 65%, and the transfer efficiency test method is detailed in the emission control plan (310 CMR 7.18(20)) approved by the Department.

7.18: continued

(h) Recordkeeping Requirements. Any person who owns, leases, operates or controls a flat wood paneling surface coating line(s) subject to 310 CMR 7.18(24)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for five years and shall be made available to representatives of the Department and EPA in accordance with the requirements of an approved emission control plan (310 CMR 7.18(20) or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of coating(s) used;
2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;
3. solids content of any coating(s) used;
4. actual operational and emissions characteristics of the coating line and any appurtenant emissions capture and control equipment;
5. quantity of product processed;
6. any other requirements specified by the Department in any approval(s) issued under 310 CMR 7.18(20) or any order(s) issued to the person.

(i) Testing Requirements. Any person who owns, leases, operates or controls a flat wood paneling surface coating line(s) subject to 310 CMR 7.18(24)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance with 310 CMR 7.18(24). Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(25) Offset Lithographic Printing.

(a) Applicability. 310 CMR 7.18(25) applies in its entirety to any person who owns, leases, operates or controls a facility with offset lithographic presses which, in total, have the potential to emit, before the application of air pollution control equipment, equal to or greater than 50 tons per year of volatile organic compounds. Facilities subject to 310 CMR 7.26(20) are not subject to 310 CMR 7.18(25).

(b) Reasonably Available Control Technology Requirements. On or after January 1, 1994, unless exempted by 310 CMR 7.18(25)(c), or granted a non-renewable extension by the Department under 310 CMR 7.18(25)(d), no person subject to 310 CMR 7.18(25)(a) shall cause, suffer, allow, or permit emissions of volatile organic compounds in excess of the emission limitations and standards set forth in 310 CMR 7.18(25)(e) through (l).

(c) Exemptions. The requirements of 310 CMR 7.18(25)(b) do not apply to:

1. a. any person subject to 310 CMR 7.18(25)(a) who is able to demonstrate to the Department that, since January 1, 1990, the offset lithographic presses have not, in total, emitted, before the application of air pollution control equipment, greater than or equal to 50 tons per year of volatile organic compounds; and
   b. provided the person obtains and complies with a federally enforceable emission limit which restricts the potential emissions of the offset lithographic presses to below 50 tons per year; and,
   c. provided the person complies with 310 CMR 7.18(25)(k), (l), and (p).
2. any person subject to 310 CMR 7.18(25)(a) who, according to the Department, has complied with 310 CMR 7.18(17) prior to January 1, 1993.

(d) Extensions.

1. Any person subject to 310 CMR 7.18(25)(a) may apply in writing to the Department for a non-renewable extension of the implementation deadline in 310 CMR 7.18(25)(a). The person must apply to the Department for the non-renewable extension at the same time the person submits the emission control plan required by 310 CMR 7.18(20).
2. The Department will consider a non-renewable extension of the deadline in 310 CMR 7.18(25)(a) until January 1, 1995, provided the emission control plan submitted for approval meets the following criteria in addition to those of 310 CMR 7.18(20):

7.18: continued

a. the emission control plan proposes to reduce emissions through toxics use reduction techniques as defined in M.G.L. c. 21I; and,

b. the toxics use reduction techniques contained in the emission control plan are approved by a Toxics Use Reduction Planner certified under M.G.L. c. 21I; (this may be an employee at the facility who is certified as Toxics Use Reduction Planner); and,

c. implementation of the plan must meet the emission limitations of 310 CMR 7.18(25)(e) through (l) or achieve an 85% emissions reduction, whichever is greater, through toxics use reduction techniques, as calculated on a mass of VOC emitted per gallon of solids as applied or per unit of production; and,

d. the emission control plan must also contain contingency measures to meet the RACT emission limits of 310 CMR 7.18(25)(e) through (l); such measures must automatically take effect if the emissions reductions achieved through toxics use reduction techniques do not satisfy 310 CMR 7.18(25)(e) through (l) or achieve an 85% reduction.

(e) Heatset Offset Lithographic Requirements. Any person subject to 310 CMR 7.18(25)(a) who owns, leases, operates, or controls a heatset offset lithographic printing press which is equipped with an air pollution control device used to reduce VOC emissions, and which device was installed on or before November 1, 1992 shall either:

1. reduce VOC emissions from the dryer exhaust vent by 85% weight; or,

2. maintain a maximum exhaust VOC concentration of 20 parts per million by volume (ppmv) of non-methane hydrocarbons as carbon in the control device exhaust, whichever is less stringent.

(f) Heatset Offset Lithographic Requirements. Any person subject to 310 CMR 7.18(25)(a) who owns, leases, operates, or controls a heatset offset lithographic printing press which is equipped with an air pollution control device used to reduce VOC emissions, and which device was installed after November 1, 1992 shall either:

1. reduce VOC emissions from the dryer exhaust vent by 90% weight; or,

2. maintain a maximum exhaust VOC concentration of 20 parts per million by volume (ppmv) of non-methane hydrocarbons as carbon in the control device exhaust, whichever is less stringent.

(g) Sheet-fed Offset Lithographic Requirements. Any person subject to 310 CMR 7.18(25)(a), who owns, leases, operates, or controls a sheet-fed offset lithographic press, and who uses propanol in the fountain solution, shall:

1. maintain a VOC concentration of 5% or less by volume, as applied, in the fountain solution; or,

2. maintain a VOC concentration of 8% or less by volume, as applied, in the fountain solution, and refrigerate the fountain solution to a temperature below 60°F.

(h) Web-fed Offset Lithographic Requirements. Any person subject to 310 CMR 7.18(25)(a), who owns, leases, operates, or controls a web-fed offset lithographic press which uses propanol in the fountain solution, shall:

1. Maintain a VOC concentration of 1.6% or less by volume, as applied, in the fountain solution; or,

2. Maintain a VOC concentration of 3% or less by volume, as applied, in the fountain solution, and refrigerate the fountain solution to a temperature below 60°F.

(i) Non-heatset Web-fed Offset Lithographic Printing Requirements. Any person subject to 310 CMR 7.18(25)(a), who owns, leases, operates, or controls a non-heatset web-fed offset lithographic printing press, shall use zero per cent propanol in the fountain solution, and shall maintain a total VOC concentration in the fountain solution of 2.5% cent or less by weight.

(j) Propanol Substitute Requirements. Any person subject to 310 CMR 7.18(25)(a), who owns, leases, operates, or controls an offset lithographic press with fountain solution with propanol substitutes, containing a concentration of VOC in the fountain solution at 3.0% by volume or less, shall be considered in compliance with the VOC emission limitations for fountain solutions contained in 310 CMR 7.18(25).

7.18: continued

(k) Fountain Solution Mixing Requirements. Any person subject to 310 CMR 7.18(25)(a), who owns, leases, operates, or controls an offset lithographic press shall keep the fountain solution mixing tanks covered, except for necessary operator access.

(l) Cleaning Solution Requirements. Any person subject to 310 CMR 7.18(25)(a), who owns, leases, operates, or controls an offset lithographic press, and who uses cleaning solutions containing VOC to wash ink from the blanket and other accessible press components shall meet the following criteria:

1. Cleaning solutions shall be transported and stored in tightly covered containers; and,
2. Cleaning rags used in conjunction with the cleaning solutions shall be placed, when not in use, in tightly covered containers and collected for proper disposal or recycle.
3. Cleanup solution as used at the press shall either;
   (i) not exceed 30% by weight VOC; or
   (ii) have a VOC composite partial pressure of 10 mmHg or less at 20°C (68°F).

(m) Plan Submittal Requirement. Any person subject to 310 CMR 7.18(25)(a) must submit an emission control plan, and have the plan approved by the Department under 310 CMR 7.18(20).

(n) Continuous Compliance. Any person subject to 310 CMR 7.18(25)(a) shall maintain continuous compliance at all times with their approved emission control plan. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a).

(o) Recordkeeping Requirements. Any person subject to 310 CMR 7.18(25)(a) shall maintain daily records sufficient to demonstrate compliance. Records kept to demonstrate compliance shall be kept on site for five years and shall be made available to representatives of the Department or EPA upon request. Such records shall include, but are not limited to:

1. Identity, formulation (as determined by the manufacturer's formulation data) and quantity for each VOC containing material used, including but not limited to:
   a. Propanol;
   b. Propanol substitutes;
   c. Fountain concentrate;
   d. Printing Ink;
   e. Cleaning Solution.
2. For heatset offset lithographic printing presses using emissions control equipment, the recordkeeping requirements specified in 310 CMR 7.18(2)(e); and,
3. For offset lithographic printing presses the percent of VOC by volume in the fountain solution as monitored whenever new fountain solution is mixed, propanol is added to the fountain solution, or daily, whichever is more frequent; and,
4. For offset lithographic printing presses subject to the refrigeration requirements of 310 CMR 7.18(25)(f) or (h), the temperature of the fountain solution as recorded on a once per shift basis; and,
5. Total VOC content of each material used for each printing press subject to 310 CMR 7.18(25) (sum of 310 CMR 7.18(25)(o)1.a. through e.; and,
6. Total VOC content of materials all used for all printing presses subject to 310 CMR 7.18(25) (sum of 310 CMR 7.18(25)(o)5. for all printing presses); and,
7. any other requirements specified by the Department in any approval(s) issued under 310 CMR 7.18(20) or any order(s) issued to the person.

(p) Testing Requirements. Any person subject to 310 CMR 7.18(25)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance with 310 CMR 7.18(25). Testing shall be conducted in accordance with EPA Method 24, Method 25 and/or Method 25A as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(26) Textile Finishing.

(a) Applicability. 310 CMR 7.18(26) applies in its entirety to any person who owns, leases, operates or controls a textile finishing facility which has the potential to emit, before the application of air pollution control equipment, equal to or greater than 50 tons per year of volatile organic compounds.

7.18: continued

(b) Reasonably Available Control Technology Requirements. On or after January 1, 1994, unless exempted by 310 CMR 7.18(26)(c), or granted a non-renewable extension by the Department under 310 CMR 7.18(26)(d), no person subject to 310 CMR 7.18(26)(a) shall cause, suffer, allow or permit emissions of volatile organic compounds in excess of the emission limitations set forth in 310 CMR 7.18(26)(e).

(c) Exemptions. The requirements of 310 CMR 7.18(26)(b) do not apply to:

1. a. any person subject to 310 CMR 7.18(26)(a) who is able to demonstrate to the Department that, since January 1, 1990, the textile finishing facility has not emitted, before the application of air pollution control equipment, greater than or equal to 50 tons per years of volatile organic compounds; and

   b. provided the person and complies with a federally enforceable emission limit which restricts the potential emissions to below 50 tons per year; and,

   c. provided the person complies with 310 CMR 7.18(26)(i).

2. any person subject to 310 CMR 7.18(26)(a) who, according to the Department, has complied with 310 CMR 7.18(17) prior to January 1, 1993.

(d) Extensions.

1. Any person subject to 310 CMR 7.18(26)(a) may apply in writing to the Department for a non-renewable extension of the implementation deadline. The person must apply to the Department for the extension at the same time the person submits the emission control plan required by 310 CMR 7.18(20).

2. The Department will consider a non-renewable extension of the deadline in 310 CMR 7.18(26)(a) until no later than January 1, 1995, provided the emission control plan submitted for approval meets the following criteria in addition to those of 310 CMR 7.18(20):

   a. the emission control plan proposes to reduce emissions through toxics use reduction techniques as defined in M.G.L. c. 21I; and,

   b. the toxics use reduction techniques contained in the emission control plan are approved by a Toxics Use Reduction Planner certified under M.G.L. c. 21I; (this may be an employee at the facility who is certified as Toxics Use Reduction Planner); and,

   c. implementation of the plan must meet the emission limitations of 310 CMR 7.18(26)(e) or achieve an 85% emissions reduction, whichever is greater, through toxics use reduction techniques, as calculated on a mass of VOC emitted per gallon of solids as applied or per unit of production; and,

   d. the emission control plan must also contain contingency measures to meet the RACT emission limits of 310 CMR 7.18(26)(e); such measures must automatically take effect if the emissions reductions achieved through toxics use reduction techniques do not satisfy 310 CMR 7.18(26)(e) or achieve an 85% reduction.

(e) RACT Emission Limitations.

1. No person who owns, leases, operates, or controls a rotary screen or roller printing press subject to 7.18(26)(a) shall use a print paste formulation containing greater than 0.5 pound of VOC per pound of solids, as applied.

2. No person who owns, leases, operates, or controls a final finish application line subject to 7.18(26)(a) shall use a finish formulation containing greater than 0.5 pound VOC per pound of solids, as applied.

(f) Plan Submittal Requirement. Any person subject to 310 CMR 7.18(26)(a) must submit an emission control plan, and have the plan approved by the Department under 310 CMR 7.18(20).

(g) Continuous Compliance. Any person subject to 310 CMR 7.18(26)(a) shall maintain continuous compliance at all times with their approved emission control plan. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a).

(h) Recordkeeping Requirements. Any person subject to 310 CMR 7.18(26)(a) shall maintain records sufficient to demonstrate compliance. Records kept to demonstrate compliance shall be kept on site for five years and shall be made available to representatives of the Department or EPA upon request. Such records shall include, but are not limited to:

7.18: continued

1. identity, quantity, formulation, solids content, and density of VOC containing materials used, including but not limited to:
   a. print pastes
   b. dyeing formulations
   c. finishing formulations
   d. clean up solvents;
2. actual operational and emissions characteristics of the textile finishing process equipment and any appurtenant emissions capture and control equipment;
3. quantity of textile processed; and
4. any other requirements specified by the Department in any approval(s) issued under 310 CMR 7.18(20) or any order(s) issued to the person.

(i) Testing Requirements. Any person subject to 310 CMR 7.18(26)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance with 310 CMR 7.18(26). Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(27) Coating Mixing Tanks.

(a) Applicability. On or after January 1, 1994, no person who owns, leases, operates, or controls a coating mixing tank which emits, before the application of air pollution control equipment, 15 pounds of volatile organic compounds per day shall cause, suffer, allow or permit emissions therefrom, unless the person complies with the standards set forth in 310 CMR 7.18(27)(b) and (c).

(b) Portable Coating Mixing Tank Requirements.

1. Any person subject to 310 CMR 7.18(27)(a) shall keep any portable coating mixing tanks which emits, before application of air pollution control equipment, 15 pounds per day of volatile organic compounds, covered with a lid or other method approved by the Department, except to add ingredients, take samples, or perform maintenance.
2. A lid used to comply with 310 CMR 7.18(27)(b)1. shall:
   a. extend at least 0.5 inch beyond the outer rim of the tank or be attached to the rim of the tank; and,
   b. be maintained so that when in place, the lid maintains contact with the rim of the portable coating mixing tank for at least 90% of the rim's circumference; and,
   c. if necessary, have an opening to allow for insertion of a mixer shaft, which opening shall be covered after insertion of the mixer, except to allow adequate clearance for the mixer shaft.

(c) Stationary Coating Mixing Tank Requirements.

1. Any person subject to 310 CMR 7.18(27)(a) shall keep any stationary coating mixing tank, which emits, before application of air pollution control equipment, 15 pounds per day of volatile organic compounds, covered with a lid or other method approved by the Department, except to add ingredients, take samples, or perform maintenance.
2. A lid used to comply with 310 CMR 7.18(27)(c)1. shall:
   a. extend at least 0.5 inch beyond the outer rim of the tank or be attached to the rim of the tank; and,
   b. be maintained so that when in place, the lid maintains contact with the rim of the portable coating mixing tank for at least 90% of the rim's circumference; and,
   c. if necessary, have an opening to allow for insertion of a mixer shaft, which opening shall be covered after insertion of the mixer, except to allow adequate clearance for the mixer shaft.

(d) Plan Submittal Requirement. Any person subject to 310 CMR 7.18(27)(a), who is:

1. not subject to any other section of 310 CMR 7.18, excluding 310 CMR 7.18(1) and (2); and,
2. who owns, leases, operates or controls a coating mixing tank facility with the potential to emit 50 tons per year of VOC, must submit an emission control plan, and have the plan approved by the Department under 310 CMR 7.18(20). Any person subject to 310 CMR 7.18(27)(a) who does not meet the two above conditions, is not required to submit an emission control plan for approval under 310 CMR 7.18(20).

7.18: continued

(e) Continuous Compliance. Any person subject to 310 CMR 7.18(27)(a) shall maintain continuous compliance at all times.

(f) Recordkeeping Requirements. Any person subject to 310 CMR 7.18(27)(a) shall maintain records sufficient to demonstrate compliance. Records kept to demonstrate compliance shall be kept on site for five years, and shall be made available to representatives of the Department or EPA upon request. Such records shall include, but are not limited to:

1. the date and description of any repair or replacement of a mixing tank lid.
2. any other requirements specified by the Department in any approval(s) issued under 310 CMR 7.18(20) or any order(s) issued to the person.

(28) Automotive Refinishing.

(a) Applicability. 310 CMR 7.18(28) applies to any person who sells, offers for sale, or manufactures automotive refinishing coatings for sale in Massachusetts, or who owns, leases, operates or controls an automotive refinishing facility.

(b) Reasonably Available Control Technology (RACT) Requirements.

1. On or after August 1, 1995, no person subject to 310 CMR 7.18(28)(a) who manufactures automotive refinishing coatings, shall manufacture automotive refinishing coatings for sale in Massachusetts which, when prepared for use according to the manufacturer's instructions, contain VOC in excess of the limitations set forth in 310 CMR 7.18(28)(c).
2. On or after August 1, 1995, no person subject to 310 CMR 7.18(28)(a) who manufactures automotive refinishing coatings, shall manufacture automotive refinishing coating for sale in Massachusetts unless the person complies with 310 CMR 7.18(28)(d) and (k).
3. No person shall sell or offer for sale any automotive refinishing coating manufactured after August 1, 1995, unless the coating satisfies the VOC limitations and labeling requirements specified in 310 CMR 7.18(28)(c) and (d), respectively.
4. On or after August 1, 1995, no person who owns, leases, operates, or controls an automotive refinishing facility shall refinish a vehicle or any part thereof unless the person complies with the standards set forth in 310 CMR 7.18(28)(e) through (h), and any coatings used, which are manufactured after August 1, 1995, satisfy the requirements specified in 310 CMR 7.18(28)(c) and (d).

(c) RACT Emission Limits. No person subject to 310 CMR 7.18(28)(a) shall manufacture for sale in Massachusetts, sell, offer for sale, or apply coatings in Massachusetts which exceed the VOC emission limitations in Table 7.18(28)(c), expressed as pounds of VOC per gallon of coating and grams of VOC per liter of coating, excluding water and exempt solvents. If a coating requires the addition of a reducer, hardener, or other additive, in some combination, the manufacturer's recommended amount(s) of reducer, hardener, or other additive added must not cause the coating, as applied, to exceed the applicable VOC limitation.

TABLE 7.18(28)(c)
RACT Emission Limitations for Automotive Refinishing Products

| Coating Type | VOC Emission Limitation | |
|---|---|---|
| | grams/liter | lbs/gal |
| Pretreatment Wash Primer | 780 | 6.5 |
| Primer/Primer Surfacer | 575 | 4.8 |
| Primer Sealer | 550 | 4.6 |
| Single-stage Topcoat | 600 | 5.0 |
| Two-stage Topcoat | 600 | 5.0 |
| Three or Four-Stage Topcoat | 620 | 5.2 |
| Specialty Coating | 840 | 7.0 |

(d) Labeling Requirements. No person subject to 310 CMR 7.18(28)(a) shall manufacture for sale in Massachusetts, sell, offer for sale, or apply automotive refinishing coatings manufactured after August 1, 1995 in Massachusetts unless:

7.18: continued

1. the containers for all subject automotive refinishing coatings display the month and year on which the contents were manufactured, or a batch number or code which indicates whether the contents were manufactured after August 1, 1995. The manufacturer shall supply an explanation of each code to the Department by August 1, 1995, and thereafter, 30 days before the use of any new code; and

2. the manufacturer provides written instructions for the preparation of all subject automotive refinishing coatings on containers, packaging, or in accompanying literature which includes, but is not limited to, data sheets and wall charts.

3. the facility owner or operator maintains, in the automotive refinishing facility, the manufacturer's written instructions for the preparation of all subject coatings.

(e) Alternative Control Requirements. The emission limitations in 310 CMR 7.18(28)(c) shall not apply to any person who owns, leases, operates, or controls an automotive refinishing facility who installs and operates an emissions control system which has received written approval after submitting an emission control plan pursuant to 310 CMR 7.18(20). No such approval shall be issued unless the VOC emissions from coating use at such facility are determined to be less than or equal to those limits specified in Table 7.18(28)(c).

(f) Good Housekeeping Requirements. In order to minimize solvent evaporation, any person subject to 310 CMR 7.18(28)(a), who owns, leases, operates, or controls an automotive refinishing facility shall:

1. use a surface preparation product containing less than or equal to 1.67 pounds of VOC per gallon of product as applied, including water to clean non-plastic surfaces; and,

2. use a surface preparation product containing less than or equal to 6.5 pounds of VOC per gallon as applied, to clean plastic surfaces, and,

3. ensure that rags used during surface preparation or other solvent cleaning operations, fresh and spent solvent, coatings, and sludge are stored in tightly closed containers and are disposed of or recycled properly.

(g) Equipment Requirements. Any person who is subject to 310 CMR 7.18(28)(a), who owns, leases, operates, or controls an automotive refinishing facility shall comply with the following requirements in addition to 310 CMR 7.18(28)(c) through (f).

1. Coatings must be applied using one of the following methods:
   a. High Volume Low Pressure (HVLP) spray equipment, operated and maintained in accordance with the manufacturer's recommendations;
   b. Electrostatic application equipment, operated and maintained in accordance with the manufacturer's recommendations;
   c. Any other coating application method approved by the Department in writing.
2. Spray guns must be cleaned in a device that:
   a. minimizes solvent evaporation during the cleaning, rinsing, and draining operations;
   b. recirculates solvent during the cleaning operation so that the solvent is reused; and,
   c. collects spent solvent so that it is available for proper disposal or recycling.

(h) Training Requirements. Any person who owns, leases, operates, or controls an automotive refinishing facility shall ensure that, on and after November 1, 1995, all spray equipment operators have received training and instruction in the proper operation and maintenance of the spray equipment and spray equipment cleaning device.

(i) Prohibition of Specification. A person shall not solicit or require for use or specify the application of a coating on a vehicle, or part thereof, if such use or application results in a violation of the provisions of 310 CMR 7.00. The prohibition of 310 CMR 7.18 shall apply to all written or oral contracts under the terms of which any coating which is subject to the provisions of 310 CMR 7.00 is to be applied to any automotive or part thereof within Massachusetts.

(j) Continuous Compliance. Any person subject to 310 CMR 7.18(28)(a) shall maintain continuous compliance at all times with applicable sections. Compliance averaging times will be met in accordance with the requirements of 310 CMR 7.18(2)(a).

(k) Compliance Certification Requirements. Each manufacturer of automotive refinishing coatings subject to 310 CMR 7.18(28)(a) shall submit to the Department by August 1, 1995, and biennially thereafter, or when requested in writing by the Department, a document which certifies that each coating is in compliance with 310 CMR 7.00. The document shall include, at a minimum for each surface preparation product or coating to be manufactured after August 1, 1995, the following:

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1. Signature of the responsible official and the name and title of the designated contact person;
2. Maximum VOC content, including water, of surface preparation products;
3. Coating brand name and category;
4. Coating mixing instructions as stated on the container or in literature supplied with the coating;
5. Maximum VOC content of the coating after mixing according to manufacturer's instructions;
6. Any other requirements specified by the Department.

(l) Testing Requirements. Any person subject to 310 CMR 7.18(28)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance with 310 CMR 7.18(28). Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(m) Good Neighbor Requirements. Any person subject to 310 CMR 7.18(28)(a) who owns, leases, operates, or controls an automotive refinishing facility shall prevent emissions of particulates or odors to the ambient air which create a nuisance or condition of air pollution.

(n) The provisions of 310 CMR 7.18(28)(m) are subject to the enforcement provisions specified in 310 CMR 7.52.

(o) Exemptions.

1. The requirements of 310 CMR 7.18(28)(b) do not apply to:
   a. stencil coatings.
   b. b. coatings that are sold in nonrefillable aerosol containers.
2. The requirements of 310 CMR 7.18(28)(g) do not apply to touch-up coatings.

(p) Recordkeeping Requirements. Any person subject to 310 CMR 7.18(28)(a) must maintain purchase records of coatings and surface preparation products on a monthly basis. The purchase records must be summarized and include:

1. each coating category, coating or coating component, and surface preparation product as identified on the container,
2. the quantity of each coating, and surface preparation product, and
3. the VOC content (pounds per gallon) of each coating, and surface preparation product, after mixing according to the manufacturer's instructions.

Records kept to demonstrate compliance must be kept on site for three years, and must be made available to representatives of the Department upon request.

(29) Bakeries.

(a) Applicability: 310 CMR 7.18(29) applies in its entirety to any person who owns, leases, operates or controls any bakery which has the potential to emit, before the application of air pollution control equipment, equal to or greater than 50 tons per year of volatile organic compounds.

(b) Reasonably Available Control Technology Requirements: On or after May 31, 1995, unless exempted under 310 CMR 7.18(29)(c) or (d), no person subject to 310 CMR 7.18(29)(a) shall cause, suffer, allow or permit emissions from any bakery oven unless in compliance with the requirements set forth in 7.18(29)(e).

(c) Exemption for Small Bakeries: The requirements of 310 CMR 7.18(29) do not apply to:

1. any person who is able to demonstrate to the Department that, since January 1, 1990, the bakery has not emitted, before the application of air pollution control equipment, greater than or equal to 50 tons per year of volatile organic compounds; and
2. provided the person obtains a permit restriction from the Department under 310 CMR 7.02(9) which restricts potential emissions to below 50 tons per year.

(d) Exemption for Small Ovens: Any individual baking oven (at an applicable facility) which has not emitted since January 1, 1990, before application of air pollution control equipment, greater than or equal to 25 tons of VOC in any calendar year, is exempt from the requirements of 310 CMR 7.18(29)(e) and (f).

(e) RACT Requirement: Unless exempted under 310 CMR 7.18(29)(c), no person subject to 310 CMR 7.18(29) shall operate a baking oven unless VOC emissions from such oven are reduced 81% by weight.

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(f) Plan Submittal Requirement: Any person who owns, leases, operates or controls a bakery subject to the requirements of 310 CMR 7.18(29)(e) must submit an emission control plan and have the plan approved by the Department in accordance with the schedule and requirements of 310 CMR 7.18(20), except that bakeries subject to 310 CMR 7.18(29)(e) at the time of promulgation shall submit an emission control plan by April 15, 1995.

(g) Recordkeeping Requirements: Any person operating a bakery applicable to 310 CMR 7.18(29) shall maintain records of operations necessary to demonstrate compliance. Such records shall be retained in the owner's or operator's files for a period of not less than five years and should include, but are not limited to:

1. Monthly records to determine emissions from each oven. Using the formula in EPA's "Alternative Control Technology Document for Bakery Oven Emissions", dated December 1992, or other formula approved by the Department and EPA, such records would include:
    a. formula number;
    b. initial bakers yeast as percent of flour;
    c. total yeast action time;
    d. yeast spike as percent of flour;

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e. spike time;
f. ethanol emission factor (lbs/ton);
g. production (tons of bread baked);
h. total ethanol emissions (tons).

2. Hourly (or continuous) records of control equipment operating parameters such as temperature, pressure drop or other applicable parameters to assure continuous compliance.

(h) Testing Requirements: Any person who owns, leases, operates or controls a bakery subject to 310 CMR 7.18(29) shall, upon request of the Department, perform or have performed tests to demonstrate compliance with 310 CMR 7.18(29). Testing shall be conducted in accordance with EPA Methods 25, 25A, and/or 18 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

7.19: U Reasonably Available Control Technology (RACT) for Sources of Oxides of Nitrogen ($NO_x$)

(1) Applicability.

(a) 310 CMR 7.19 shall apply in its entirety to any person who owns, leases, operates or controls any facility having potential to emit, before application of air pollution control equipment, greater than or equal to 50 tons per year (TPY) of $NO_x$.

(b) Any person who owns, leases, operates or controls a facility subject to 310 CMR 7.19, which has had actual emissions greater than or equal to 50 TPY in any year after 1989 shall continue to comply with all requirements of 310 CMR 7.19 even if emissions from the subject facility no longer exceed the 50 TPY applicability requirement of 310 CMR 7.19.

(c) The requirements of 310 CMR 7.19 do not apply to:

1. Any person subject to 310 CMR 7.19 who is able to demonstrate to the Department that, after calendar year 1989, the facility has not emitted 50 TPY or more of $NO_x$, provided the person obtains a permit restriction from the Department under 310 CMR 7.02(9) (Restricted Emission Status) by May 31, 1995 which restricts the potential emissions to below 50 TPY and complies with the permit restriction by May 31, 1995. Persons who have obtained an RES prior to May 31, 1995, may notify the Department of their intent to operate in compliance with one of the rolling 12-month emission caps under 310 CMR 7.02(11)(e) or (f) as a means of limiting the facility's potential emissions to 25 TPY or less of $NO_x$.

2. Any emissions unit that has a permit restriction prohibiting it from operating between May 1 and September 30 of each year and restricting potential emissions to less than 50 tons per year from the emissions unit.

3. Any boiler having an energy input capacity of less than 20,000,000 Btu per hour provided that potential emissions from the emissions unit are less than 50 TPY of $NO_x$.

4. Any stationary combustion turbine having an energy input capacity of less than 25,000,000 Btu per hour.

5. Any stationary reciprocating internal combustion engine having an energy input capacity of less than 3,000,000 Btu per hour.

6. Any glass melting furnace having a maximum production rate of less than 14 tons of glass removed from the furnace per day.

7. Any other furnace, kiln, dryer or oven having potential emissions less than 25 TPY of $NO_x$.

8. Any municipal waste combustor unit having potential emissions of less than 25 TPY of $_{Nox}$.

9. Any person who, since January 1, 1990, obtains plan approval for an emission unit under 310 CMR 7.02 where said approval establishes BACT or LAER to be no less stringent than RACT for a facility size and type, as defined in 310 CMR 7.19 at the time of the plan approval.

(2) General Provisions.

(a) After May 31, 1995, any person subject to 310 CMR 7.19 shall achieve and maintain continuous compliance with all requirements of 310 CMR 7.19.

(b) Any person unable to comply with emission standards under 310 CMR 7.19(4), (5), (7), (8) or (9) may submit an application under 310 CMR 7.19(3) for a source specific alternative

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RACT; said application to be submitted by April 1, 1994 for 310 CMR 7.19(4), and by June 1, 1994 for 310 CMR 7.19(5), (7) or (8) and by May 1, 1999 for 310 CMR 7.19(9) for Department, and EPA approval. For any person subject to 310 CMR 7.08(2) and is required to submit an Emission Control Plan under 310 CMR 7.08(2), a separate Emission Control Plan to demonstrate compliance with 310 CMR 7.19(9) is not required. On and after May 31, 1995, a person approved under 310 CMR 7.19(2)(b) must comply with the approved source specific alternative RACT. Such application must evaluate each of the following $NO_x$ controls, where it may be applied, and its technological and economic feasibility.

1. low-$NO_x$ burners;
2. close coupled and separated overfire air;
3. flue gas recirculation;
4. burners out of service;
5. steam/water injection;
6. dry low-$NO_x$ combustors;
7. ignition timing retard;
8. separate circuit after-cooling;
9. fuel emulsification;
10. fuel switching;
11. selective noncatalytic reduction (SNCR);
12. selective catalytic reduction (SCR);
13. nonselective catalytic reduction (NSCR).
14. use of emission reduction credits (ERCs) certified by the Department pursuant to 310 CMR 7.00: *Appendix B*(3), or pursuant to the interstate trading provisions at 310 CMR 7.00: *Appendix B*(3)(f).

Any person approved under 310 CMR 7.19(2)(b) must comply with the requirements of 310 CMR 7.19(13).

(c) An emission unit subject to 310 CMR 7.19 shall be operated under conditions acceptable to the Department and EPA, and consistent with the operational parameters and limits established in the approved emission control plan.

(d) Any person subject to 310 CMR 7.19 may elect to comply with a more stringent $NO_x$ limit in order to; create Emission Reduction Credits under 310 CMR 7.00: *Appendix* B(3); create emissions offsets for use under the provisions of 310 CMR 7.00: *Appendix* A(6); reduce the net emissions increase below the significance level under 310 CMR 7.00: *Appendix* A(3); emissions average under 310 CMR 7.19(14) and 7.00: *Appendix* B(4).

(e) Any person subject to a more stringent emission standard either contained in a plan approval (issued pursuant to the Department's regulations) or in a PSD permit or contained in a Department regulation shall remain subject to that more stringent emission standard.

(f) Seasonal fuel switching. After May 31, 1995, any person owning, leasing, operating or controlling an emissions unit subject to an emissions standard contained in 310 CMR 7.19 may choose to have the emissions unit comply with 310 CMR 7.19(2)(f) instead of an emissions limit contained in 310 CMR 7.19(4) through (11) by fuel switching.

1. The 12 month rolling average NOx emissions standard, in pounds per million Btu, shall be less than or equal to the $NO_x$ emissions standard calculated in the following manner.

a. The annual limit shall be determined according to the following equation:

$$AS_{NOx} = \frac{(HI_1)x(ES_1)+ (HI_2)x(ES_2)\ldots. + (HI_N)x(ES_N)}{HI_1 + HI_2 \ldots. + HI_N}$$

$AS_{NOx}$ is the annual standard for nitrogen oxides derived from all fuels fired during the baseyear.

$HI_1$ is the heat input for fuel 1 in Btu during the baseyear.

$ES_1$ is the emissions standard for fuel 1 contained in 310 CMR 7.19(4) through (11), except that for tangential oil or oil and gas fired boilers, the emissions standard is 0.2 pounds per million Btu.

N is the number of fuels burned during the baseyear.

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b. The baseyear shall be 1990. 1991 or 1992 may be used instead if the Department determines 1991 or 1992 is more representative of normal operation.

2. The maximum daily NOx emissions standard from May 1 through September 30 shall be the emissions standard allowed under 310 CMR 7.19(4) through (11) for the fuel burned in the largest amount, on a Btu basis, during the baseyear. However, for tangential oil or oil and gas fired boilers, the emissions standard is 0.2 pounds per million Btu.

3. the emission unit(s) must burn only the fuel, of the fuels it is approved to burn, that has the lowest $NO_x$ emissions rate, between May 1 and September 30 of each year unless the fuel is not available.

NON-TEXT PAGE

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(g) Emission Reduction Credits. Any facility may comply, either in part, or entirely, with the applicable emissions standard requirement contained in 310 CMR 7.19 through the use of emissions reduction credits (ERCs) certified by the Department pursuant to 310 CMR 7.00: *Appendix* B(3).

(3) Emission Control Plans for Implementation of RACT.

(a) General Applicability. Any person subject to 310 CMR 7.19(2)(b), (4), (11) or (12) shall submit an emission control plan by April 1, 1994, any person subject to 310 CMR 7.19(5), (7) or (8) shall submit an ECP by June 1, 1994 for Department approval prior to implementation of RACT, and any person subject to 310 CMR 7.19(9) shall submit an ECP by May 1, 1999 for Department approval. Any person submitting an Emission Control Plan to satisfy 310 CMR 7.08(2) is not required to submit a separate Emission Control Plan to demonstrate compliance with 310 CMR 7.19. Any person who has received a plan approval under 310 CMR 7.02(1) since January 1, 1990 is exempt from submitting an emission control plan, if that approval requires compliance with 310 CMR 7.19 for the entire facility. A plan application under 310 CMR 7.02(1) is not required in order to implement NOx RACT, except for boilers complying with the repowering provision under 310 CMR 7.19(4)(b).

Any person subject to 310 CMR 7.19 who is required to submit an emissions control plan by April 1, 1994 or June 1, 1994 as applicable pursuant to 310 CMR 7.19(2), who applies to the Department for restricted emission status (RES) pursuant to 310 CMR 7.02(9)(a)(4), is not required to submit an emission control plan until the Department has acted on the RES application, and has determined whether the facility is subject to 310 CMR 7.19.

(b) Notification. Any person subject to 310 CMR 7.19(6) shall provide written notification to the Department by January 1, 1995 that the facility is subject to, and will comply with 310 CMR 7.19(6).

(c) Emission Control Plan Requirements. The emission control plan under 310 CMR 7.19(3) shall be submitted on a Department approved form and shall include, at a minimum, the following:

1. a list and description of all the exempt and non-exempt emission units at the facility having potential to emit $NO_x$ including:
   a. any associated plan approvals, dates of installation, any subsequent alterations, *etc.*;
   b. the maximum energy input capacity, in millions of Btu per hour, of each emission unit;
   c. for fuel utilization facilities, the type of fuel(s) permitted to be burned in each emission unit;
   d. the maximum $NO_x$ emissions rate of each unit, in pounds per million Btu, for each fuel burned before and after the application of $NO_x$ RACT;
   e. the total actual fuel usage and energy input in million Btu for each fuel for each of the last two years for each emission unit;
   f. the energy conversion efficiency (in brake horsepower hour output per million Btu input (HHV)) for each reciprocating internal combustion engine;
   g. the $O_2$ exhaust gas concentration and the dry standard cubic feet per million Btu of energy input for each stationary combustion turbine; and
   h. the energy input, million Btu, per ton of glass produced for glass manufacturing furnaces.
2. a demonstration that the provisions of 310 CMR 7.19 can be met by each emission unit included in the emission control plan, including the potential emissions after implementation of RACT of all emission units emitting $NO_x$ for which the emission control plan is being submitted. A demonstration that combustion conditions will not significantly deteriorate shall be included for any emission unit for which a higher CO emission standard is being applied pursuant to 310 CMR 7.19(4)(f), (5)(d) or (7)(a)4.
3. if applicable, the control efficiency, design, specifications, and standard operating and maintenance procedures for any control equipment used to reduce $NO_x$ emissions to implement RACT;
4. the testing, monitoring, recordkeeping and reporting procedures, as contained in 310 CMR 7.19(13), used to demonstrate compliance with 310 CMR 7.19;

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5. a schedule for the implementation of RACT at the facility, including provisions for demonstrating periodic increments of progress and demonstrating compliance;
6. any other information required by the Department; and
7. the signature of a responsible official.

(d) Additional Requirements for Demonstration of RACT. An emission control plan submitted by any person who owns, leases operates or controls a facility or part of a facility subject to 310 CMR 7.19(2)(b), 7.19 (4)(b) or 7.19(12), must meet the following requirements in addition to the requirements under 310 CMR 7.19(3)(c). For any person applying under 310 CMR 7.19(4)(b), these additional requirements are only for determining RACT for the period from May 31, 1995 until May 1, 1999. After April 30, 1999, 310 CMR 7.19(4)(b)3. will apply.

1. The plan must demonstrate the emission limits reflecting the application of RACT for that facility or part thereof; and
2. pertinent information supporting the demonstration made under 310 CMR 7.19(3)(d)1., including technical and economic considerations.

(e) Approval of an Emission Control Plan. For persons applying under 310 CMR 7.19(2)(b) or (4)(b) or 7.19 (12) or 7.19(14), where the information submitted in the emission control plan is sufficient to support the emissions limits and the proposed schedule, the Department will publish a notice of public hearing in accordance with M.G.L. c. 30A. The Department shall allow for a 30 day public comment period following the published notice. After the public hearing and the close of the public comment period, the Department will issue a final approval or disapproval of the emission control plan.

(f) Prohibition. Except as provided for in 310 CMR 7.19(3)(a), no emission reductions or any other actions taken at any facility or part of a facility will constitute implementation of RACT at that facility unless those emission reductions or other actions are part of an emission control plan approved by the Department.

(g) Additional requirements may be included in the emission control plan approval to assure that emissions from the unit(s) subject to RACT will not cause or contribute to a condition of air pollution or a violation of any other regulation. Such requirements include but are not limited to emissions limits on other air contaminants, and additional stack testing or emissions monitoring requirements.

(4) Large Boilers.

(a) Applicability and $NO_x$ RACT. After May 31, 1995, any person owning, leasing, operating or controlling a boiler having an energy input capacity of 100,000,000 Btu per hour or greater, at a facility subject to 310 CMR 7.19, shall comply with the following $NO_x$ emission standard, except as provided in 310 CMR 7.19(2)(b), 7.19(2)(e), 7.19(2)(f), 7.19(4)(b) and 7.19(4)(c).

1. For dry bottom boilers burning coal:
   a. for tangential fired boilers, 0.38 pounds per million Btu,
   b. for face fired boilers, 0.45 pounds per million Btu.
2. For stoker-fired boilers burning other solid fuels, 0.33 pounds per million Btu.
3. For boilers with an energy input capacity greater than or equal to 250 million Btu per hour burning either oil or oil and gas (This includes burning the oil and gas simultaneously or at different times. Boilers approved to burn another fuel, such as coal, are subject to this limit only while burning only oil and/or gas and not the other fuel.):
   a. i. for tangential oil fired boilers, 0.25 pounds per million Btu;
      ii. for tangential gas fired boilers, 0.20 pounds per million Btu.
   b. for face fired boilers, 0.28 pounds per million Btu.
4. For boilers with an energy input capacity greater than or equal to 100,000,000 Btu per hour and less than 250,000,000 Btu per hour burning either oil or oil and gas:
   a. for boilers with a heat release rate less than or equal to 70,000 Btu/hours-$ft^3$, 0.30 pounds per million Btu, and
   b. for boilers with a heat release greater than 70,000 Btu/hour-$ft^3$, 0.40.
5. For boilers burning only gas, 0.20 pounds per million Btu.

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6. The averaging time for determining compliance with 310 CMR 7.19(4)(a) shall be one hour. Except that, for boilers using a continuous emissions monitoring system that satisfies the requirements of 310 CMR 7.19(13)(b) to determine compliance, compliance will be based on a calendar day average.

(b) Repowering. Any person subject to 310 CMR 7.19(4)(a), may choose to repower by December 31, 2003 and comply with 310 CMR 7.19(4)(b) rather than 310 CMR 7.19(4)(a). Such person shall enter into an enforceable agreement with the Department prior to June 1, 1994 agreeing to comply with the requirements of 310 CMR 7.19(4)(b).

1. A boiler to be repowered by December 31, 2003 shall not, after May 31, 1995 and before May 1, 1999, cause, suffer, allow or permit emissions from the facility in excess of an emission rate achievable through the implementation of RACT as required in an emission control plan approved under 310 CMR 7.19(3).

2. The repowered boiler shall be approved under 310 CMR 7.02(1), 310 CMR 7.00: *Appendix A* or 40 CFR 52.21, unless specifically exempted by those regulations.

3. The existing or repowered boiler shall not be operated after April 30, 1999 unless it complies with the most restrictive of the following $NO_x$ emissions standards (this limit represents RACT):

a. For dry bottom, tangential and face fired boilers burning solid fuel, 0.2 pounds per million Btu, based on a one hour average;

b. For boilers burning oil or gas, 0.1 pounds per million Btu, based on a one hour average;

c. The averaging time for determining compliance with 310 CMR 7.19(4)(b) shall be one hour. Except that, for boilers utilizing a CEMS that satisfies the requirements of 310 CMR 7.19(13)(b) to determine compliance, compliance shall be based on a calendar day average.

d. A Best Available Control Technology determination made as part of an approval issued pursuant to 310 CMR 7.02(1) or 40 CFR 52.21 or Lowest Achievable Emission Rate determination made pursuant to 310 CMR 7.00: *Appendix A*, as applicable.

e. An applicable New Source Performance Standards (40 CFR 60).

(c) Alternative NOx RACT. Any person owning, leasing, operating or controlling a boiler subject to 310 CMR 7.19(4)(a), may choose to have that boiler comply with 310 CMR 7.19(4)(c) instead of 310 CMR 7.19(4)(a).

1. After May 31, 1995, the maximum allowable daily NOx emission standard, in pounds per million Btu, shall be equal to 0.6 times the worst NOx emission rate. The worst NOx emission rate shall be determined in accordance with a methodology specified by the Department for each fuel burned.

2. The Department will approve the boiler to comply with an alternative emission limitation contained in 310 CMR 7.19(4)(c)1. only if a demonstration is contained in the Emission Control Plan that the boiler can not comply with the emission limitation contained in 310 CMR 7.19(4)(a) through use of available NOx controls or NOx ERCs. This may be demonstrated either through technical or economic infeasibility.

(d) Except as provided for under 310 CMR 7.19(2)(f), if more than one fuel is fired simultaneously or during the same hour (or day if an averaging time of 24 hours is used), the allowable $NO_x$ emission standard shall be calculated according to the procedure contained in 310 CMR 7.19(15) using the emission standard from 310 CMR 7.19(4).

(e) Testing, Monitoring, Recordkeeping, Reporting and Emission Control Plan. Any facility subject to 310 CMR 7.19(4), shall comply with any applicable testing, monitoring, recordkeeping, and reporting requirements contained in 310 CMR 7.19(13) and shall submit an emission control plan as required by 310 CMR 7.19(3).

(f) Carbon Monoxide (CO) Limitation. Any facility subject to 310 CMR 7.19(4), shall not exceed a CO exhaust concentration of 200 ppmvd, corrected to 3% oxygen. This shall be based on a one hour averaging time. If a continuous emissions monitoring system is used for determining compliance, the averaging time shall be a calendar day. Not withstanding this CO emission standard, the Department may approve a higher CO emission standard for a large boiler as part of the emission control plan if the facility demonstrates that combustion conditions will not significantly deteriorate with the higher CO emission standard.

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(5) Medium-size Boilers.

(a) Applicability and $NO_x$ RACT. After May 31, 1995, any person owning, leasing, operating or controlling a boiler with an energy input capacity of 50,000,000 Btu per hour or greater and less than 100,000,000 Btu per hour at a facility subject to 310 CMR 7.19, shall comply with the following $NO_x$ emission standard, except as provided for in 310 CMR 7.19(2)(b), 7.19(2)(e) and 7.19(2)(f).

1. For tangential or face-fired or stoker-fired boilers, burning solid fuel, 0.43 pounds per million Btu, based on a one-hour average.

2. For tangential or face fired boilers, based on a one-hour average.

a. burning gas only, 0.1 pounds per million Btu.

b. burning distillate oil or oil and gas (This includes burning the oil and gas simultaneously or at different times. Boilers approved to burn another fuel such as coal are subject to this limit while only burning oil and/or gas and not coal.) 0.12 pounds per million Btu.

c. burning residual oil,

i. 0.3 pounds per million Btu burning residual oil or residual oil and gas (This includes burning the oil and gas simultaneously or at different times. Boilers approved to burn another fuel such as coal are subject to this limit while burning only oil and/or gas and not coal.), or

ii. recirculate at least 15% of the flue gas and maintain flue gas oxygen concentration at 3% at the boiler exit. The O2 level should not be decreased beyond the point that the CO concentration increases beyond 130 ppmvd, corrected to 3% O2.

3. For boilers using a continuous emissions monitoring system that satisfies the requirements of 310 CMR 7.19(13)(b) to determine compliance, compliance will be based on a calendar day average.

(b) Cofiring Fuels. Except as provided for under 310 CMR 7.19(2)(f), if more than one fuel is fired simultaneously or during the same hour (or day if an averaging time of 24 hours is used), the allowable $NO_x$ emissions standard shall be calculated according to the procedure contained in 310 CMR 7.19(15).

(c) Testing, Monitoring, Recordkeeping, Reporting and Emission Control Plan. Any facility subject to 310 CMR 7.19(5), shall comply with all applicable testing, monitoring, recordkeeping, and reporting requirements contained in 310 CMR 7.19(13) and shall submit an emission control plan as required by 310 CMR 7.19(3).

(d) Carbon Monoxide (CO) Limitation. Any facility subject to 310 CMR 7.19(5), shall not exceed a CO exhaust concentration of 200 ppmvd, corrected to 3% oxygen. This shall be based on a one hour averaging time. If a continuous emissions monitoring system is used for determining compliance, the averaging time shall be a calendar day. Not withstanding this CO emission standard, the Department may approve a higher CO emission standard for a medium-size boiler as part of the emission control plan if the facility demonstrates that combustion conditions will not significantly deteriorate with the higher CO emission standard.

(6) Small Boilers.

(a) Applicability and $NO_x$ RACT After March 15, 1995, any person owning, leasing, operating or controlling a boiler, with an energy input capacity of less than 50,000,000 Btu per hour and equal to or greater than 20,000,000 Btu per hour or with an energy input capacity less than 20,000,000 Btu per hour with potential emissions greater than 50 TPY of NOx, at a facility subject to 310 CMR 7.19, shall tune the boiler annually according to the following procedure (tuneup procedure based on *Combustion Efficiency Optimization Manual for Operators of Oil and Gas Fired Boilers* (EPA 340/1-83-023)):

1. Operate the boiler at a firing rate most typical of normal operation. If the boiler experiences significant load variations during normal operation, operate it at its average firing rate.

7.19: continued

2. At this firing rate record stack gas temperature, oxygen concentration, and CO concentration (for gaseous fuels) or smoke-spot number (For liquid fuels, the smoke spot number can be determined with ASTM Test Method D-2156 (Bacharach or equivalent)) and observe flame conditions after boiler operation stabilizes at the firing rate selected. If the excess oxygen in the stack gas is at the lower end of the range of typical minimum values (typical minimum oxygen levels for boilers at high firing rates are: for natural gas 0.5-3.0%; for liquid fuels 2.0-4.0%. The $O_2$ level should be reduced below this range with caution). If the CO emissions are low and there is no smoke, the boiler is probably operating at near optimum efficiency at this particular firing rate. However, complete the remaining portion of this procedure at 310 CMR 7.19(6)(a)3. through 10. to determine whether still lower oxygen levels are practical.

3. Increase combustion air flow to the boiler until stack gas oxygen levels increase by 1 to 2% over the level measured in 310 CMR 7.19(6)(a)2.. As in 310 CMR 7.19(6)(a)2., record the stack gas temperature, CO concentration (for gaseous fuels) and smoke-spot number (for liquid fuels), and observe flame conditions for these higher oxygen levels after boiler operation stabilizes.

4. Decrease combustion air flow until the stack gas oxygen concentration is at the level measured in 310 CMR 7.19(6)(a)2. From this level gradually reduce the combustion air flow, in small increments. After each increment, record the stack gas temperature, oxygen concentration, CO concentration (for gaseous fuels) and smoke-spot number (for liquid fuels). Also observe the flame and record any changes in its condition.

5. Continue to reduce combustion air flow stepwise, until one of these limits is reached:

a. Unacceptable flame conditions - such as flame impingement on furnace walls or burner parts, excessive flame carryover, or flame instability.

b. Stack gas CO concentrations greater than 400 ppm for gaseous fuels.

c. Smoking at the stack for liquid fuels.

d. Equipment-related limitation - such as low windbox/furnace pressure differential, built in air-flow limits, etc.

6. Develop an $O_2$/CO curve (for gaseous fuels) or $O_2$/smoke curve (for liquid fuels) similar to those shown in figures 310 CMR 7.19(6)-1 and 2 using the excess oxygen and CO or smoke-spot number data obtained at each combustion air flow setting.

7. From the curves prepared in 310 CMR 7.19(6)(a)6., find the stack gas oxygen levels where the CO emission or smoke spot number equals the following values:

| Fuel | Measurement | Value |
|---|---|---|
| Gaseous | CO emissions | 400 ppm |
| #1 & #2 oils | smoke-spot number | number 1 |
| #4 oil | smoke-spot number | number 2 |
| #5 oil | smoke-spot number | number 3 |
| #6 oil | smoke-spot number | number 4 |

The above conditions are referred to as CO or smoke threshold, or as the minimum excess oxygen level. Compare this minimum value of excess oxygen to the expected value provided by the combustion unit manufacturer. If the minimum level found is substantially higher than the value provided by the combustion unit manufacturer, the owner or operator should improve fuel and air mixing, thereby allowing operation with less air.

8. Add 0.5 to 2.0% to the minimum excess oxygen level found in 310 CMR 7.19(6)(a)7. and reset burner controls to operate automatically at this higher stack gas oxygen level. This margin above the minimum oxygen level accounts for fuel variations, variations in atmospheric conditions, load changes, and non-repeatability or play in automatic controls.

7.19: continued

9. If the load of the combustion unit varies significantly during normal operation, repeat 310 CMR 7.19(6)(a)1. through 8. for firing rates that represent the upper and lower limits of the range of the load. Because control adjustment at one firing rate may effect conditions at other firing rates, it may not be possible to establish the optimum excess oxygen level at all firing rates. If this is the case, choose the burner control settings that give best performance over the range of firing rates. If one firing rate predominates, settings should optimize conditions at that rate.

10. Verify that the new settings can accommodate the sudden changes that may occur in daily operation without adverse effects. Do this by increasing and decreasing load rapidly while observing the flame and stack. If any of the conditions in 310 CMR 7.19(6)(a)5. result, reset the combustion controls to provide a slightly higher level of excess oxygen at the affected firing rates. Next, verify these new settings in a similar fashion. Then make sure that the final control settings are recorded at steady-state operating conditions for future reference.

11. Another method may be substituted if it is approved, in writing, by the Department and EPA as equivalent.

12. Nothing in any tune-up procedure shall be construed to require any act or omission that would result in unsafe conditions or would be in violation of any regulation or requirement established by National Fire Prevention Association, Federal Occupational Safety and Health Administration, or other applicable regulations or requirements.

(b) Testing, Recordkeeping, and Notification. Any person subject to 310 CMR 7.19(6) shall:

1. provide written notification to the Department by January 1, 1995 that the facility is subject to, and will comply with 310 CMR 7.19(6).

2. maintain records for five years of the tune-up, including:

a. date of tune-up;

b. person(s) conducting tune-up;

c. $O_2$/CO (for gas) or $O_2$/smoke spot (for oil) correlations obtained during tune-up;

d. boiler/burner manufacturer's recommended set-points;

e. final boiler set-points as result of tune-up;

f. normal boiler/burner maintenance records.

g. at least once per month verify that the settings determined during the tune-up have not changed.

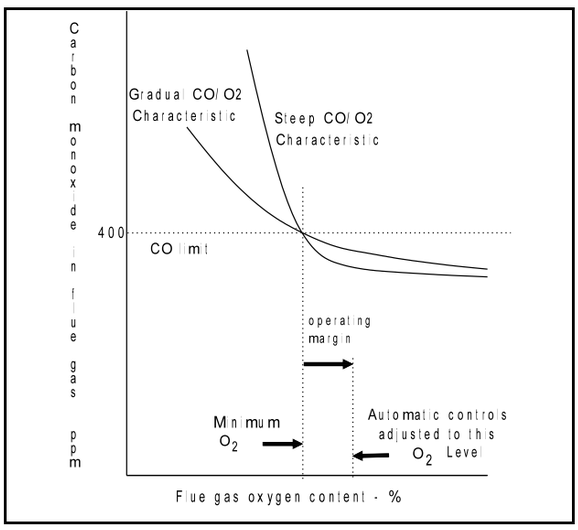


Figure 310 CMR 7.19(6) - 1

7.19: continued

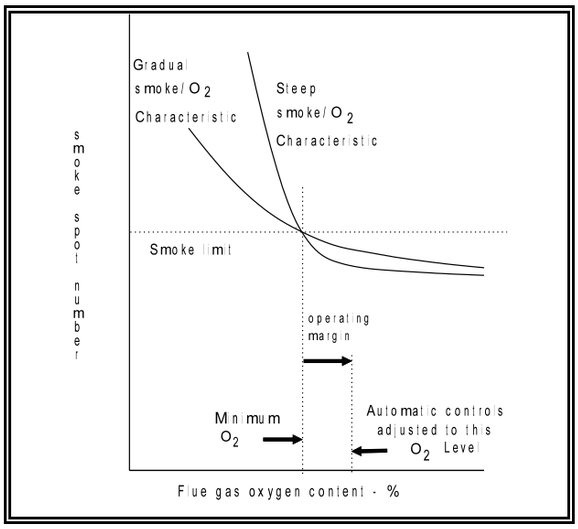


Figure 310 CMR 7.19(6) - 2

(7) Stationary Combustion Turbines.

(a) Applicability and $NO_x$ RACT After May 31, 1995, any person owning, leasing, operating or controlling any stationary combustion turbine having an energy input capacity of 25,000,000 Btu per hour or greater at a facility subject to 310 CMR 7.19, shall comply with the following $NO_x$ and CO emission standard, except as provided for in 310 CMR 7.19(2)(b), 7.19(2)(e) and 7.19(2)(f).

1. For combined cycle stationary combustion turbines, based on a one-hour average:
   a. 42 ppmvd $NO_x$, corrected to 15% $O_2$, when firing gas, and
   b. 65 ppmvd $NO_x$, corrected to 15% $O_2$, when firing oil, and
   c. 50 ppmvd CO, corrected to 15% $O_2$, when firing oil and/or gas.
2. For simple cycle stationary combustion turbines, based on a one hour average:
   a. 65 ppmvd $NO_x$, corrected to 15% $O_2$, when firing gas, and
   b. 100 ppmvd $NO_x$, corrected to 15% $O_2$, when firing oil, and
   c. 100 ppmvd CO, corrected to 15% $O_2$, when firing oil and/or gas.
3. For stationary combustion turbines using a monitoring system that satisfies the requirements of 310 CMR 7.19(13)(b) to determine compliance, compliance will be based on a calendar day average.
4. Not withstanding the CO emission standard stated in 310 CMR 7.19(7)(a)1.c. and 2.c., the Department may approve a higher CO emission standard for a stationary combustion turbine if it is demonstrated that combustion conditions will not significantly deteriorate with a higher CO emission standard.

(b) Testing, Monitoring, Recordkeeping, Reporting and Emission Control Plan. Any facility subject to 310 CMR 7.19(7), shall comply with all applicable testing, monitoring, recordkeeping, and reporting requirements contained in 310 CMR 7.19(13) and shall submit an emission control plan as required by 310 CMR 7.19(3).

(8) Stationary Reciprocating Internal Combustion Engines.

(a) Applicability and $NO_x$ RACT After May 31, 1995, any person owning, leasing, operating or controlling a reciprocating internal combustion engine having energy input capacity of 3,000,000 Btu per hour or greater at a facility subject to 310 CMR 7.19, is subject to 310 CMR 7.19(8) and shall comply with NOx RACT as defined in 310 CMR 7.19(8)(c) or (d) as applicable, except as provided for in 310 CMR 7.19(2)(b), 7.19(2)(e) and 7.19(2)(f).

7.19: continued

(b) Exemption. Emergency standby engines are exempted from the requirements of 310 CMR 7.19(8) provided:

1. the engine is not operated more than 300 hours per year, and
2. the engine is not operated as a load shaving unit, peaking power production unit, or standby engine in an energy assistance program.

(c) For a stationary reciprocating internal combustion engine that has operated 1000 hours or more during any consecutive 12 month period since January 1, 1990, the $NO_x$ emission standard shall be:

1. For rich burn, gas-fired reciprocating internal combustion engines, 1.5 grams per bhp-hr, based on a one-hour average.
2. For lean burn, gas-fired reciprocating internal combustion engines, 3.0 grams per bhp-hr, based on a one hour average.
3. For lean burn, oil-fired or dual fuel reciprocating internal combustion engines, 9.0 grams per bhp-hr, based on a one-hour average.
4. For stationary reciprocating internal combustion engine using a monitoring system that satisfies the requirements of 310 CMR 7.19(13)(b) to determine compliance, compliance will be based on a calendar day average.

(d) For a stationary reciprocating internal combustion engine that has not operated 1000 hours or more during any consecutive 12 month period since January 1, 1990, the NOx emission standard shall be:

1. the emission standard in 310 CMR 7.19(8)(c); or, set and maintain the ignition timing of the engine four degrees retarded relative to standard timing; provided the ignition timing shall not be retarded beyond the point that:
   a. the CO emission concentration increases by 100 ppmvd, corrected to 15% O2, or
   b. the turbocharger speed is increased beyond the maximum operating speed recommended by the manufacturer, or
   c. the exhaust port temperature increases beyond the manufacturer's recommended maximum operating temperature.
2. install and maintain an elapsed time meter to indicate, in cumulative hours, the elapsed engine operating time for the previous 12 months;
3. determine the hours of operation for each engine for the previous 12 month period on a monthly basis;
4. notify the Department if the operation exceeds 1000 hours for any consecutive 12 month period, and the facility is subject to the emission standard in 310 CMR 7.19(8)(c).
5. maintain records to certify that the ignition timing of the engine has been inspected and adjusted at least once every three years.

(e) Testing, Monitoring, Recordkeeping, Reporting and Emission Control Plan. Any facility subject to 310 CMR 7.19(8), shall comply with all applicable testing, monitoring, recordkeeping, and reporting requirements contained in 310 CMR 7.19(13) and shall submit an emission control plan as required by 310 CMR 7.19(3).

(9) Municipal Waste Combustor Units.

(a) Applicability and $NO_x$ RACT. After May 31, 1995, any person owning, leasing, operating or controlling a municipal waste combustor unit with potential emissions of $NO_x$ equal to or greater than 25 tons per year at a facility having potential emissions, before application of air pollution control equipment, greater than or equal to 50 tons per year of $NO_x$ shall comply with 310 CMR 7.19(9). The $NO_x$ emission standard for a municipal waste combustor unit subject to 310 CMR 7.19(9) is 0.6 pounds per million Btu, based on a one hour average, while burning municipal waste, except as provided for in 310 CMR 7.19(2)(b), (2)(e) and (2)(f). However, for any municipal waste combustor unit equipped with a continuous emissions monitoring system, the averaging time shall be based on a calendar day average.

(b) Testing, Monitoring, Recordkeeping, Reporting and Emission Control Plan. Any facility subject to 310 CMR 7.19(9), shall comply with any applicable testing, monitoring, recordkeeping, and reporting requirements contained in 310 CMR 7.19(13) and shall submit an emissions control plan as required by 310 CMR 7.19(3).

((10) Reserved)

7.19: continued

(11) Glass Melting Furnaces.

(a) Applicability and $NO_x$ RACT. After May 31, 1995, any person owning, leasing, operating or controlling a container glass melting furnace having a maximum production rate of 14 tons of glass removed from the furnace per day or greater, at a facility subject to 310 CMR 7.19, shall comply with an emission standard of 5.3 pounds of $NO_x$ per ton of glass removed from the furnace based on a calendar day average, except as provided for in 310 CMR 7.19(2)(b), 7.19(2)(e) and 7.19(2)(f).

(b) Testing, Monitoring, Recordkeeping, Reporting and Emission Control Plan Any facility subject to 310 CMR 7.19(11), shall comply with any applicable testing, monitoring, recordkeeping, and reporting requirements contained in 310 CMR 7.19(13) and shall submit an emission control plan as required by 310 CMR 7.19(3).

NON-TEXT PAGE

7.19: continued

(12) Miscellaneous RACT.

(a) Applicability. Any emissions unit with potential emissions of $NO_x$ equal to or greater than 25 tons per year at a facility having potential emissions, before application of air pollution control equipment, greater than or equal to 50 tons per year of $NO_x$ is subject to 310 CMR 7.19(12) and shall comply with the source specific RACT for that emissions unit.

(b) Emissions Exemptions.

1. RACT is not required to be defined under 310 CMR 7.19(12) for any emissions unit that since January 1, 1990 has been approved as Best Available Control Technology or Lowest Achievable Emission Rate in an approval containing specific emission limits or work practice standards issued under a federally enforceable regulation.

2. RACT is not required to be defined under 310 CMR 7.19(12) for any emissions unit either subject to a RACT standard under 310 CMR 7.19(4), (5), (6), (7), (8), or (11) or exempt under 310 CMR 7.19(1)(c)2. through 8.

(c) $NO_x$ Reasonably Available Control Technology Requirements. After May 31, 1995, no person subject to the requirements of 310 CMR 7.19(12) shall cause, suffer, allow or permit emissions from the facility in excess of an emission rate achievable through the implementation of reasonably available control technology as required in an emission control plan approved under 310 CMR 7.19(3).

(d) Emission Control Plan Requirements. Any person subject to 310 CMR 7.19(12)(a) must submit an emission control plan as required by 310 CMR 7.19(3) by April 1, 1994 to demonstrate how compliance will be achieved. The emission control plan and the plan approval issued by the Department under 310 CMR 7.19(3) must also be approved by the EPA as a Massachusetts SIP revision.

(e) Testing, Monitoring, Recordkeeping, Reporting and Emission Control Plan. Any facility subject to 310 CMR 7.19(12), shall comply with any applicable testing, monitoring, recordkeeping, and reporting requirements contained in 310 CMR 7.19(13) and shall submit an emission control plan as required by 310 CMR 7.19(3).

(13) Testing, Monitoring, Recordkeeping, and Reporting Requirements.

(a) Applicability. Any person subject to 310 CMR 7.19(2)(b), (4), (5), (7), (8), (9), (10), (11), (12) or (14) shall comply with 310 CMR 7.19(13). If the provisions or requirements from 310 CMR 7.27(11) conflict with a provision of 310 CMR 7.19(13), the more stringent of the provisions will apply unless otherwise determined by the Department in the approved emission control plan. For any variance of a requirement under 310 CMR 7.19(13), the variance must be made federally enforceable. A variance from the requirement will be given only where it will not adversely impact the ability to monitor emissions. Regardless of the Department's determination in the emission control plan, any facility that is subject to 40 CFR Parts 60 and 75 must still comply with those requirements.

1. For boilers with an energy input capacity greater than or equal to 250,000,000 Btu per hour, compliance with the $NO_x$ and CO emission standards shall be demonstrated with a continuous emissions monitoring system (CEMS) as specified in 310 CMR 7.19(13)(b), and recordkeeping and reporting as specified in 310 CMR 7.19(13)(d). Boilers that will be repowered pursuant to 310 CMR 7.19(4)(b) are not subject to the CEMS requirement until May 1, 1999 unless required as the result of the single source SIP revision approving RACT for the period from May 31, 1995 until May 1, 1999.

2. For boilers with an energy input capacity equal to or greater than 100,000,000 Btu per hour and less than 250,000,000 Btu per hour, compliance with the $NO_x$ and CO emission standards shall be demonstrated by performing an annual stack test as specified in 310 CMR 7.19(13)(c), and recordkeeping and reporting as specified in 310 CMR 7.19(13)(d). Boilers that will be repowered pursuant to 310 CMR 7.19(4)(b) are not required to stack test until May 1, 1999. The annual stack test requirement is waived for boilers equipped with a CEMS satisfying the requirements of 310 CMR 7.19(13)(b).

3. For multiple emission units that are complying with 310 CMR 7.19(14), compliance with the CO (as applicable) and $NO_x$ emission standards shall be demonstrated:

a. with a continuous emissions monitoring system (CEMS) as specified in 310 CMR 7.19(13)(b), or

b. for emission unit(s) not required by 310 CMR 7.19(13)(a) to use CEMS to determine compliance, by performing an annual stack test as specified in 310 CMR 7.19(13)(c).

7.19: continued

The emission rate from the stack tested emission unit shall be adjusted by a compliance assurance multiplier determined by the Department within the range of 1.1-1.25.

c. for emission unit(s) not generating surplus emission reductions to be used by another emission unit in the average, compliance may alternatively be determined by the procedure contained in 310 CMR 7.19(13)(a) for similar emission units (*e.g.* a stationary combustion turbine burning the same fuel with the same energy input) that are not emissions averaging to determine compliance.

4. a. For boilers with an energy input capacity equal to or greater than 50,000,000 Btu per hour and less than 100,000,000 Btu per hour, compliance with the $NO_x$ and CO emission standards shall be demonstrated by performing an initial stack test as specified in 310 CMR 7.19(13)(c). The recordkeeping in 310 CMR 7.19(13)(d) shall apply.

b. For boilers complying with the requirement on allowable oxygen level, an oxygen analyzer and recorder shall be utilized. The recordkeeping in 310 CMR 7.19(13)(d) shall apply.

5. For combined cycle combustion turbines with an energy input capacity greater than or equal to 100,000,000 Btu per hour, compliance with the $NO_x$ and CO emission standards shall be demonstrated with a continuous emission monitoring system (CEMS) as specified in 310 CMR 7.19(13)(b) and recordkeeping as specified in 310 CMR 7.19(13)(d).

6. For combined cycle combustion turbines with an energy input capacity less than 100,000,000 Btu per hour, compliance with the $NO_x$ and CO emission standards shall be demonstrated by performing an annual stack test as specified in 310 CMR 7.19(13)(c). The annual stack test requirement is waived for combined cycle combustion turbines equipped with a monitoring system satisfying the requirements of 310 CMR 7.19(13)(b).

7. For simple cycle combustion turbines, compliance with the $NO_x$ and CO emission standards shall be demonstrated by performing an annual stack test as specified in 310 CMR 7.19(13)(c).

8. For stationary reciprocating internal combustion engine with an energy input capacity greater than or equal to 30,000,000 Btu per hour, compliance with the $NO_x$ emission standards shall be demonstrated with a continuous emissions monitoring system (CEMS) as specified in 310 CMR 7.19(13)(b) and recordkeeping as specified in 310 CMR 7.19(13)(d). For engines operating less than 1000 hours per year in this size range compliance shall be determined by recordkeeping as required in 310 CMR 7.19(8)(d).

9. For stationary reciprocating internal combustion engine with an energy input capacity less than 30,000,000 Btu per hour and operating 1000 hours or more in any consecutive 12 month period, compliance with the applicable emission standard shall be demonstrated by performing an initial stack test as as specified in 310 CMR 7.19(13)(c), and recordkeeping as specified in 310 CMR 7.19(13)(d). For engines operating less than 1000 hours per year in this size range compliance shall be determined by recordkeeping as required in 310 CMR 7.19(8)(d).

10. For glass melting furnaces, compliance with the applicable emission standard shall be demonstrated by performing an annual stack test as specified in 310 CMR 7.19(13)(c), and recordkeeping and reporting as specified in 310 CMR 7.19(13)(d). The annual stack test requirement is waived for glass melting furnaces equipped with a CEMS satisfying the requirements of 310 CMR 7.19(13)(b).

11. For emission units subject to 310 CMR 7.19(2)(b) or 7.19(12), compliance with the applicable emission standard shall be demonstrated through a combination of continuous emissions monitoring, stack testing and/or recordkeeping specified in the approved emission control plan.

12. The Department or EPA may require compliance stack testing beyond that listed above.

13. For municipal waste combustors with potential emissions greater than 25 tons per year of $NO_x$, compliance with the applicable $NO_x$ emissions standard shall be demonstrated by performing an annual stack test as specified in 310 CMR 7.19(13)(c), and recordkeeping and reporting as specified in 310 CMR 7.19(13)(d). However, for any municipal waste combustor unit that in May 1995 is equipped with a continuous emissions monitoring system (CEMS), compliance shall be demonstrated with a CEMS as specified in 310 CMR 7.19(13)(b) and recordkeeping and reporting as specified in 310 CMR 7.19(13)(d).

7.19: continued

(b) Continuous Emissions Monitoring Systems (CEMS). Any person required to monitor NOx emissions (*i.e.*, through NOx concentrations and the associated diluent concentrations) pursuant to 40 CFR 75, 310 CMR 7.27 or 310 CMR 7.28 shall use the procedures contained either therein or in 310 CMR 7.19(13)(b)1. through (b)12. to gather and analyze data and provide quality assurance and quality control in order to determine compliance with 310 CMR 7.19, except that missing data routines and bias adjustment factors do not need to be applied. The person subject to 40 CFR 75, 310 CMR 7.27, or 310 CMR 7.28 shall monitor for CO as specified in 310 CMR 7.19(13)(b)1. through (b)12. and use the data reduction procedures contained in either 40 CFR 75 or 310 CMR 7.19(13)(b)9. Any person demonstrating compliance with 310 CMR 7.19 for emission units using CEMS who is not subject to 40 CFR 75, 310 CMR 7.27 or 310 CMR 7.28 shall:

1. for any emission unit either already having a CEMS in place or having a CEMS being procured or installed, submit a preliminary CEMS monitoring plan for Department approval as part of the emission control plan required in 310 CMR 7.19(3)(f), unless the CEMS is already certified and approved by the Department or EPA;
2. for any emission unit not covered under 310 CMR 7.19(13)(b)1., submit a preliminary CEMS monitoring plan for Department approval at least 180 days prior to equipment installation;
3. include the following information in the preliminary CEMS monitoring plan: source identification, source description, control technology description, the applicable regulations, the type of monitor, a monitoring system flow diagram, a description of the data handling system, and a sample calculation demonstrating compliance with the emission limits using conversion factors from 40 CFR 60 or approved by the Department and EPA;
4. submit a CEMS certification protocol at least 90 days prior to certification testing for the CEMS, and submit any proposed adjustment to the certification testing at least seven days in advance;
5. include the following information in the certification protocol, which must be found acceptable by the Department: the location of and specifications for each instrument or device, as well as procedures for calibration, operation, data evaluation and data reporting;
6. install, calibrate, maintain and operate a CEMS for measuring $NO_x$, and either O2 or CO2 at locations approved in the Department's approval of the CEMS certification protocol and record the output of each CEMS;
7. submit a certification report within 60 days of the completion of the certification test for review and written Department approval;
8. certify each CEMS in accordance with the performance specifications contained in 40 CFR 60 Appendix B and quality assurance and quality control procedures contained in 40 CFR 60 Appendix F and continue to comply with the requirements of 40 CFR 60 Appendix F;
9. calculate a calendar day average from a block hourly average for each hour the emissions unit is operating and a block hourly average from at least three data points, generated by a CEMS at 15 minute intervals over each one-hour period.
10. operate each continuous emission monitoring system at all times that the emissions unit(s) is operating except for periods of CEMS calibrations checks, zero span adjustment, and preventive maintenance as described in the preliminary monitoring plan submitted to the Department and as determined during certification. Notwithstanding such exceptions, in all cases obtain valid data for at least 75% of the hours per day, 75% of the days per month, and 90% of the hours per quarter during which the emission unit is operating;
11. use only valid data to calculate the emissions rate averages using conversion factors from 40 CFR 60 or approved by the Department and EPA; and
12. Any person required to utilize a monitoring system to determine compliance of a stationary reciprocating engine or stationary combustion turbine with the applicable $NO_x$ emissions standard may monitor process or control device parameters provided it is demonstrated to the Department, and the Department approves in writing, that the parametric monitoring system (PMS) provides an equivalent degree assurance of compliance with the emissions standard. The Department may require any conditions it deems necessary to assure continuous compliance. The Department will be required to bring these PMS requirements into compliance with 40 CFR 64, Enhanced Monitoring Requirements, after EPA has finalized those rules.

7.19: continued

(c) Stack Testing Any person required to demonstrate compliance with a $NO_x$ emission standard contained in 310 CMR 7.19 by stack testing shall comply with 310 CMR 7.19(13)(c). That person shall:

1. submit a pretest protocol for the required emission test for review and Department approval at least 60 days prior to the anticipated date of testing;
2. include in the pretest protocol, a description of sampling point locations, sampling equipment, sampling and analytical procedures, and the operating conditions for the required testing;
3. conduct compliance stack testing in accordance with procedures set forth in Appendix A of 40 CFR Part 60 or another method approved by the Department and EPA;
4. perform the initial compliance stack test on the emission unit before August 1, 1995 for existing emission units, or within 90 days of continuous operation for new emission units to demonstrate compliance;
5. perform the annual compliance test, where annual compliance stack testing is required either by 310 CMR 7.00 or in the approved emission control plan, on the emission unit prior to October 1 of each year beginning 1995;
6. submit the emission test report for the review and written Department approval within 60 days of the completion of the compliance stack testing.

(d) Recordkeeping and Reporting. Any person required to demonstrate compliance with 310 CMR 7.19 by recordkeeping and reporting shall comply with 310 CMR 7.19(13)(d). That person:

1. shall maintain a record of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each continuous emission monitor;
2. shall submit to the Department's regional office by the 30th day of April, July, October, and January of each calendar year, a report showing any excess emissions as measured by a CEMS within the previous calendar quarter (January-March, April-June, *etc*.) and shall include:
   a. the date and time of commencement and completion of each period of excess emissions and the magnitude of the excess emissions for each hour;
   b. identification of the suspected reason for the excess emissions and any corrective action taken;
   c. the date and time that any CEMS stopped collecting valid data and when it started to collect valid data again, except for zero and span checks; and
   d. the nature and date of system repairs;

   In the event none of the above items have occurred such information shall be stated in the report;
3. shall measure and record for each unit on a daily basis: type fuel(s) burned each day, heat content of each fuel, the total heating value of the fuel consumed for each day, the actual emission rate (for emissions units demonstrating compliance with CEMS), and the allowable emission rate. For units complying with 310 CMR 7.19(14), daily records should also include a summation of these values for all units included in the average, as well as any other data needed to demonstrate compliance.
4. Reserved)
5. shall obtain a certification from the fuel supplier for each shipment of residual oil that includes the following information:
   a. the name of the oil supplier;
   b. the nitrogen content of each oil shipment (acceptable test methods for determining nitrogen content of the oil are ASTM methods D3228 and D4629 or any other method approved by the Department and EPA);
   c. the location where the sample was drawn for analysis to determine the nitrogen content of the oil, specifically including whether the oil was sampled as delivered to the affected facility or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility or another location;
6. may, as an alternative to the fuel supplier certification required in 310 CMR 7.19(13)(d)5., elect to sample and analyze the residual oil immediately after the fuel tank is filled and before any oil is combusted for each new shipment according to methods approved by the Department;

7.19: continued

7. shall maintain copies of all fuel supplier certifications or fuel oil analyses on site for a period of five years;
8. shall maintain all records required by 310 CMR 7.19(13)(d) for a period of five years in a permanently bound log book or any other form acceptable to the Department including computer retained and generated data; and
9. shall submit compliance records within ten days of written request by the Department or EPA.

(14) Averaging for Multiple Emission Units to Achieve Compliance.

(a) Applicability and RACT Requirement. After May 31, 1995, any person operating or controlling more than one emission unit subject to a $NO_x$ emission standard contained in 310 CMR 7.19(4), (5), (7), (8) or (12) may comply with 310 CMR 7.19 by emissions averaging, provided the requirements of 310 CMR 7.19(14) and 7.00 *Appendix* B(4) are met.

(b) Stationary Reciprocating Internal Combustion Engines. For any stationary reciprocating internal combustion engine(s) included in the average with boiler(s), the emissions rate and emissions standard for the stationary reciprocating internal combustion engine(s) shall be converted to pounds per million according to the following equation:

$$ES_{p/mmBtu} = 0.866 \times ES_{gm/bhp\text{-}hr} \times Eff$$

Where:

$ES_{p/mmbtu}$ - Emission standard expressed in pounds per million Btu.

$ES_{gm/bhp\text{-}hr}$ - Emission standard expressed in grams per brake horse-power hour.

Eff = Thermal efficiency; the ratio of the electrical/mechanical output energy to the energy input.

The thermal efficiency must be demonstrated to the Department's satisfaction. There shall be either a direct or indirect readout of the electrical/mechanical energy output. If a stationary combustion turbine and a stationary reciprocating internal combustion engine are to be averaged, the conversion factors contained in 310 CMR 7.19(14)(b) and (c) shall both be used.

(c) Stationary Combustion Turbines. If stationary combustion turbines are to be averaged with boilers, the emissions rate in ppmvd at 15% $O_2$ shall be converted to units of pounds per million Btu according to the procedure contained in 40 CFR 60.45.

For natural gas or propane:

pounds per million Btu = (ppmvd@15%$O_2$) x (0.00369)

For oil:

pounds per million Btu = (ppmvd@15%$O_2$) x (0.00389)

If a stationary combustion turbine and a stationary reciprocating internal combustion engine are to be averaged, the conversion factors contained in 310 CMR 7.19(14)(b) and (c) shall both be used.

(d) Testing, Monitoring, Recordkeeping, Reporting and Emission Control Plan. Any facility subject to 310 CMR 7.19(14) shall comply with the applicable testing, monitoring, recordkeeping, and reporting requirements contained in 310 CMR 7.19(13)(b), (c) and (d) and shall submit an emission control plan as required by 310 CMR 7.19(3).

(15) Cofiring fuels. When different fuels are either burned simultaneously in any combination, or during the same hour (or day if a 24 hour averaging time is used), the applicable emission standard (*e.g.* in pounds per million Btu) is determined by proration using the following formula:

7.19: continued

$$PS_{NOx} = \frac{(HI_1)x(ES_1) + (HI_2)x(ES_2) \quad .... + (HI_N)x(ES_N)}{HI_1 + HI_2 .... + HI_N}$$

$PS_{NOx}$ is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in pounds per million Btu heat input derived from all fuels fired.

$HI_1$ is the heat input for fuel 1

$ES_1$ is the emissions standard for fuel 1

N is the total number of fuels burned either simultaneously or on that day.

## 7.21: Sulfur Dioxide Emissions Limitation

(1) Definitions: For the purpose of 310 CMR 7.21:

Calendar Year or "data year" means two years prior to the current year.

CAP means the average of total statewide actual annual sulfur dioxide ($SO_2$) emissions in the years 1979 to 1982 inclusive.

Current Year means the present year.

Four Year Average means the average of statewide actual sulfur dioxide emissions for the data year and the three years previous to the data year.

Projection Average means any consecutive four year average of statewide expected sulfur dioxide emissions within the time period two years prior to the data year through the following seven years (*e.g.* if the data year was 1983, the time period would be 1981 to 1988).

Trigger means the level of sulfur dioxide emissions that is ten thousand tons lower than the average of total statewide actual annual $SO_2$ emissions from 1979 to 1982, the cap.

(2) The Department of Environmental Protection, hereafter "the Department", is promulgating a limitation on the total statewide actual annual sulfur dioxide emissions in accordance with St. 1985, c. 590. There is hereby established a statewide cap on sulfur dioxide emissions of 417,000 tons of emissions and a statewide sulfur dioxide trigger of 407,000 tons of emissions.

(3) By July 1 of each year, the Department shall prepare and make available to the public a report which will:

(a) Determine the statewide actual sulfur dioxide emissions for the calendar year (hereinafter referred to as the data year).

(b) Determine the average (hereinafter referred to as the four year average) of statewide actual sulfur dioxide emissions for the data year and the three years previous to the data year.

(c) Compare the amount of actual emissions for the data year to the trigger.

(d) Compare the amount of actual emissions for the four years average to the cap.

(e) Contain an explanation of the calculation methods and data sources used by the Department in preparing such a report.

(f) Determine whether the Department will prepare a second report as specified in 310 CMR 7.21(4) and if so, contain an explanation of the methods the Department will use to project emissions as required by 310 CMR 7.21(4)(c).

(PAGES 250.57 AND 250.58 ARE RESERVED FOR FUTURE USE.)

7.21: continued

(4) If the amount of emissions from the data year exceeds the trigger or if the amount of emissions from the four year average exceeds the cap, then the Department shall, by December 31 of the current year, prepare a draft of a second report which shall:

(a) Explain why, in the opinion of the Department, the sulfur dioxide trigger or cap was exceeded.

(b) Determine whether the trigger or cap exceedance is temporary or may be expected to continue indefinitely.

(c) Project the statewide expected sulfur dioxide emissions for each year for the time period ranging from the data year through the following five years. In preparing this projection, the Department will consider, among other things, future energy use, the sources expected to provide that energy and such other things which the Department may decide appropriate. This may include information such as the availability of future energy sources, the scheduling of power plant operations and outages, power plant dispatch schedules, types of fuel, and conservation improvements.

(d) Determine whether the projections required by 310 CMR 7.21(4)(c) indicate that any consecutive four year average (hereinafter called a projection average) of statewide expected sulfur dioxide emissions within the time period two years prior to the data year through the following seven years will exceed the cap.

(e) Develop a schedule and plan for initiating the actions pursuant to St. 1985, c. 590, §§ 4 and 5 to reduce any projection averages that exceed the cap to a level that is equal to or less than the cap.

(5) After preparing a draft of the second report, the Department shall:

(a) Hold a public hearing on the draft of the second report pursuant to St. 1985, c. 590, § 4 to receive comments on the projections determined pursuant to 310 CMR 7.21(4)(c) and the schedule and plan developed pursuant to 310 CMR 7.21(4)(e) by March 1 of the year following the first report.

(b) After receiving public comment, and after responding to said comments on the draft second report, the second report shall be made final by June of the year following the first report.

(6) If after public hearing and comment, the second report shows that: a) the amount of emissions from the data year exceed the trigger and one or more projection averages exceed the cap; or b) the amount of emissions from the four year average exceeds the cap and one or more projection averages exceed the cap, the Department will:

Adopt such further regulations as may be necessary to insure that any future four year average, as calculated pursuant to 310 CMR 7.21(4)(c), does not exceed the level of the cap.

7.22: Sulfur Dioxide Emissions Reductions for the Purpose of Reducing Acid Rain

(1) On or after December 31, 1994, no person owning, operating, leasing or controlling the operation of a fossil or alternative fuel utilization facility of a capacity to burn fuel at a rate greater than or equal to 100,000,000 Btus of fuel input per hour; hereafter referred to as "facility", shall cause, suffer, allow or permit the compound emission rate from said facility to exceed an annual calendar average of 1.2 pounds of sulfur dioxide ($SO_2$) per 1,000,000 Btu of fuel input.

(2) On or before January 1, 1991 any owner or operator of a facility which exceeds the emission limitation required in 310 CMR 7.22(1), hereafter referred to as an "affected facility", shall submit to the Department for approval an emission control plan, hereafter referred to as "control plan", detailing the method and schedule by which said affected facility shall achieve and maintain compliance with the emission limitation set forth in 310 CMR 7.22(1).

7.22: continued

(a) The proposed control plan shall contain sufficient documentation and guarantees from appropriate suppliers, contractors, manufacturers or fabricators in support of the proposed plan such that the schedule submitted shall achieve compliance with the emission limitation contained in 310 CMR 7.22(1).

(b) For the purpose of compliance with 310 CMR 7.22(2) only facilities of a capacity to burn fuel at a rate greater than or equal to 100,000,000 Btus of fuel input per hour may be incorporated in any proposed control plan.

(3) The control plan submitted pursuant to 310 CMR 7.22(2) must demonstrate a commitment to compliance utilizing one, or a combination of the following methods:

(a) persons owning, operating, leasing or controlling an affected facility may submit a control plan such that the compound emission rate of said facility is less than or equal to the emission limitation as described in 310 CMR 7.22(1).

(b) persons operating or controlling an affected facility seeking to average the compound emission rate of said facility with one or more facilities located, operated or controlled by said persons within the Commonwealth, may submit a control plan, such that the compound emission rate of said facilities is less than or equal to the emission limitation as described in 310 CMR 7.22(1).

(c) persons operating or controlling an affected facility seeking to engage in emission trading with another person operating or controlling a facility within the Commonwealth, may submit a control plan such that the sum of the $SO_2$ emissions used in calculating said affected facility's compound emission rate, minus the actual emission reduction credit in pounds of $SO_2$ obtained through emission trading, achieves a compound emission rate less than or equal to the emission limitation as described in 310 CMR 7.22(1).

(d) persons operating or controlling an affected facility seeking to receive emission reduction credit for reduced fossil fuel use as a result of energy conservation measures implemented within the Commonwealth, may submit a control plan so as to receive full emission reduction credit for such conservation measures as are put into service after January 1, 1989 and before December 31, 1994 at a rate of 10,000 Btus per kilowatt hour of energy saved, added to the sum of the Btus used in calculating said affected facility's compound emission rate.

(e) persons operating or controlling an affected facility seeking to receive emission reduction credit for utilizing non-combustion energy sources located within the Commonwealth may submit a control plan so as to receive full emission reduction credit for such energy sources as are put into service after January 1, 1989 and before December 31, 1994 at a rate of 10,000 Btus per kilowatt hour of energy produced, added to the sum of the Btus used in calculating said affected facility's compound emission rate.

(f) persons operating or controlling an affected facility seeking to receive emission reduction credit for measures which utilize a cogeneration technology, implemented after January 1, 1989 and before December 31, 1994, for the simultaneous production of electricity and thermal energy from a single fuel input may submit a control plan so as to receive full emission reduction credit for reduced fuel use upon demonstration that said technology uses fuels more efficiently than a reasonable combination of comparable state-of-the-art technologies separately generating electric and thermal energy. Emission reduction credit in millions of Btu will be added to the sum of the Btus used in calculating said affected facility's compound emission rate.

(4) (a) Upon written Department approval of a submitted control plan and schedule, persons owning, operating, leasing or controlling an affected facility shall submit regular progress reports; submittal dates, content, and format of which will be determined by the Department at the time of control plant approval.

(b) Upon compliance with 310 CMR 7.22(1) persons owning, operating, leasing or controlling an affected facility shall submit on an annual basis an emissions compliance report; the submittal date, content, and format of which will be determined by the Department at the time of control plan approval.

7.22: continued

(5) The Department shall determine compliance with the emission limitation approved for an affected facility through emissions compliance reports as described in 310 CMR 7.22(4)(b), emissions testing in accordance with the applicable procedures described in ANSI/ASTM D129 (Bomb method) and/or EPA Method No. 6 as described in 40 CFR 60 Appendix A as amended, or by another method which has been approved by the Department.

(6) Nothing in 310 CMR 7.22 shall be deemed to reduce or revoke the responsibility of any person regulated hereunder from complying with 310 CMR 7.00 *et seq*. and all terms of any permit(s) issued by the Department pursuant to 310 CMR 6.00 through 8.00.

(7) 310 CMR 7.22 will be enforced in accordance with applicable law.

7.24: U Organic Material Storage and Distribution

(1) Organic Material Storage Tanks. No person who owns, leases, operates or controls a storage tank with a capacity equal to or greater than 40,000 gallons, into which organic material having a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions, is placed, stored, or held shall store, hold or otherwise transfer the organic material in the storage tank unless:

(a) each tank is equipped with a submerged fill pipe; and,

(b) each tank not equipped with an external floating roof (*see* 310 CMR 7.24(1)(c)) is equipped with one of the following control devices:

1. a pressure tank system which maintains pressure at all times so as to prevent organic material loss to the atmosphere; or,
2. a vapor recovery system which collects all of the organic vapors emitted from the tank, and a vapor control system which reduces emissions of vapors to the atmosphere by at least 95% over every three hour period; or
3. if the tank does not store organic material with a true vapor pressure greater than 11.0 psia under actual storage conditions, then a fixed roof and a floating roof consisting of a pontoon, double deck, or internal floating roof which rests on the surface of the liquid contents and is equipped with a closure seal, or seals, to close the space between the roof edge and tank wall, and tank gauging and sampling devices which are gas tight except when in use; or,
4. any other equipment equal to or greater in efficiency than listed in 310 CMR 7.24(1)(b)2. and approved by the Department and EPA; and

(c) on or after November 1, 1984, each external floating roof tank is equipped with an external floating roof of a pontoon, double deck, or external floating cover design, which rests on the surface of the liquid contents; and is fitted with a primary seal and a continuous secondary seal which seals the space between the edge of the floating roof and the tank wall; and stores organic material which has a vapor pressure less than 11.0 pounds per square inch absolute under actual storage conditions; and all tank gauging or sampling devices are gas tight except when in use; and,

(d) each of the seal(s) required by 310 CMR 7.24(1)(b)3. and 310 CMR 7.24(1)(c) meet the following requirements, where applicable:

1. there are no visible holes, tears, or other openings in the seal(s) or seal fabric; and,
2. the seal(s) is intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and,
3. for vapor mounted primary seals on any external floating roof tank, the accumulated area of gaps between the secondary seal and the tank wall which exceed 0.32 cm ( c in.) in width do not exceed 21.2 square cm per meter of tank diameter (1.0 square in per ft of tank diameter), as determined by 310 CMR 7.24(1)(k); and,

7.24: continued

4. measurement of the gap in the secondary seal is made annually, and such measurement complies with 310 CMR 7.24(1)(d)3.; and,

5. a visual inspection of the secondary closure seal is conducted semi-annually; and,

6. an inspection of internal floating roofs is conducted through the roof hatches monthly; and,

7. an inspection of cover and seal for internal floating roofs is conducted whenever the tank is emptied for nonoperational reasons or once every ten years whichever is sooner; and,

(e) all openings in a floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are:

1. equipped with covers, seals, or lids which are kept closed except when the openings are in actual use; and,

2. equipped with projections into tank which remain below-the-liquid surface at all times; and

(f) automatic bleeder vents are kept closed except when the roof is being floated off of, or being landed on, the roof leg supports; and,

(g) rim vents are set to open when the roof is being floated off the leg supports, or at the manufacture recommended setting; and,

(h) emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least 90% of the area of the opening; and,

(i) Recordkeeping and Reporting. for any tank with a capacity of 40,000 gallons or more which contains an organic liquid with a true vapor pressure greater than 1.5 psia, records are prepared, maintained and kept onsite for a minimum of two years: of the average monthly storage temperature; of the true vapor pressure, monthly throughput and type of organic material stored; of any inspections or tests conducted under 310 CMR 7.24(1)(d)4. through 7.; of any transfers made; and of any maintenance of the vapor processing system; and,

(j) for any tank with a capacity in excess of 40,000 gallons which is equipped with an external floating roof and which contains any organic material with a vapor pressure greater than 1.0 psia but less than 1.5 psia under actual storage conditions, records are maintained and kept for a minimum of two years; of the average monthly storage temperature and the type of liquid stored and its vapor pressure; and

(k) the total area of gaps under 310 CMR 7.24(1)(d)3. is determined by physically measuring the length and width of all gaps around the entire circumference of the secondary seal in each place where a c in. uniform diameter probe passes freely (without forcing or binding against the seal) between the seal and the tank wall, and summing the area of the individual gaps; any person who proposes to conduct this test shall notify the Department at least 30 days before the test so the Department may, at its option, observe the test.

(l) 310 CMR 7.24(1)(a) through 310 CMR 7.24(1)(k) do not apply to petroleum liquid storage tanks which are used to store waxy, heavy pour crude oil, or which have a capacity less than 416,000 gallons and are used to store produced crude oil and condensate prior to lease custody transfer.

(2) Bulk Terminals and Bulk Plants.

(a) U Bulk Terminals No person who owns, leases, operates or controls a bulk terminal shall cause, suffer, allow or permit the transfer into a tank truck, trailer or other contrivance of any organic material with a vapor pressure of 1.5 psia or greater under actual storage conditions unless:

1. each loading rack at the bulk terminal is equipped with a vapor collection and disposal system, which has been installed and is maintained and operated in accordance with the operating instructions of the manufacturer; and,

2. any vapor discharged during transfer of the organic material is collected and disposed of by the vapor collection and disposal system; and,

3. the amount of organic material released to the ambient air is less then 80 milligrams per liter of liquid loaded or unloaded over a six hour period, as determined by the reference method and test procedures found in Title 40 CFR 60.503(c) and 60.503(d); and,

7.24: continued

4. any transfer of organic material takes place through a submerged fill pipe; and,
5. each loading rack at the bulk terminal is equipped with a loading arm which has a vapor collection adaptor designed, maintained and operated to force a vapor-tight seal between the adaptor and hatch; and,
6. each loading rack at the bulk terminal has a means to:
   a. prevent any remaining liquid organic material from draining when the loading rack is disconnected from the hatch of any tank truck, trailer or other contrivances: or,
   b. accomplish complete drainage of any remaining organic material before the loading rack is disconnected from the hatch of any tank truck, trailer or other contrivance; or,
   c. if loading is effected through means other than a hatch, then all loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected.

(b) CM, MB, MV, PV, SM. Bulk Plants On or after July 1, 1980 no person who owns, leases, operates or controls a bulk plant shall cause, suffer, allow or permit the transfer into any tank truck, trailer or other contrivance of any organic material with a vapor pressure of 1.5 psia or greater under actual storage conditions unless:

1. the transfer of the organic material takes place through a submerged fill pipe; and,
2. any vapor discharged during transfer of the organic material is processed by vapor balance system.

(c) B, Dukes County, Nantucket County. Bulk Plants. On or after April 1, 1993 no person who owns, leases, operates or controls a bulk plant shall cause, suffer, allow or permit the transfer into a tank truck, trailer or other contrivance of any organic material with a vapor pressure of 1.5 psia or greater under actual storage conditions unless:

1. the transfer of the organic material takes place through a submerged fill pipe; and,
2. any vapor discharged during transfer of the organic material is processed by a vapor balance system.

(d) Any person who owns, leases, operates or controls a facility which is or becomes subject to 310 CMR 7.24(2)(a) through (c), shall only transfer organic material with a vapor pressure of 1.5 psia or greater under actual storage condition into tank trucks which are in compliance with 310 CMR 7.24(4).

(e) Any person who owns, leases, operates or controls a facility which is or becomes subject to 310 CMR 7.24(2)(a), (b) or (c), shall continue to comply with all requirement of 310 CMR 7.24(2)(a), (b) or (c), respectively, even if the facility no longer meets the applicability requirements of 310 CMR 7.24(2)(a), (b) or (c).

(f) 310 CMR 7.24(2) shall not apply to dispensing of motor vehicle fuel to motor vehicle fuel tanks.

(3) Distribution of Motor Vehicle Fuel.

(a) No person who owns, leases, operates or controls a storage tank having a capacity greater than 250 gallons but less than 40,000 gallons shall cause, suffer, allow or permit the transfer of motor vehicle fuel with a true vapor pressure greater than 1.5 psia or greater under actual storage conditions into said facility from any delivery vessel unless the transfer takes place through submerged filling.

(b) CM, MB, MV, PV, SM. On or after July 1, 1980, no person shall cause, suffer, allow or permit the transfer of motor vehicle fuel with a true vapor pressure of 1.5 psia or greater under actual storage conditions to a motor vehicle fuel dispensing facility with a stationary tank having a capacity equal to or greater than 2000 gallons from any delivery vessel unless the vapors displaced from the stationary tank during submerged filling are processed by a vapor balance system.

7.24: continued

(c) B. On or after April 1, 1993, no person shall cause, suffer, allow or permit the transfer of motor vehicle fuel with a true vapor pressure of 1.5 psia or greater under actual storage conditions to a motor vehicle fuel dispensing facility with a stationary tank having a capacity equal to or greater than 2000 gallons from any delivery vessel unless the vapors displaced from the tank during submerged filling are processed by a vapor balance system.

(d) U. On or after July 1, 1991, no person shall cause, suffer, allow or permit the transfer of motor vehicle fuel with a true vapor pressure of 1.5 psia or greater under actual storage conditions to a motor vehicle fuel dispensing facility with a stationary tank having a capacity greater than 250 gallons installed after July 1, 1991 from any delivery vessel unless the vapors displaced from the tank during submerged filling are processed by a vapor balance system.

(e) U. Any person who owns, operates, leases, or controls a vapor-laden delivery vessel shall:

1. maintain and operate the vapor-laden delivery vessel such that it is vapor tight at all times, and
2. re-fill the vapor-laden delivery vessel only at bulk gasoline terminals and plants which are in compliance with 310 CMR 7.24(2), and
3. keep hatches on the vessel closed at all times during loading and unloading.

(f) Any person subject to 310 CMR 7.24(3)(b), (c) or (d) shall:

1. install, maintain and properly operate the vapor balance system; and,
2. maintain records of all maintenance performed, including the type of maintenance performed and date the maintenance was performed; and,
3. maintain records of all malfunctions, including the type of malfunction, the date the malfunction was observed, and the date the malfunction was repaired; and,
4. maintain all gauges, meters, or other specified testing device in proper working order; and
5. maintain records of the daily throughput of any organic material with a true vapor pressure of 1.5 psia or greater under actual storage conditions.

(g) The provisions of 310 CMR 7.24(3) shall not apply to:

1. stationary gasoline storage tanks of less than 550 gallons capacity used exclusively for the fueling of implements of husbandry, provided the container are equipped with submerged fill pipes; and,
2. transfers made to storage tanks of motor vehicle fuel dispensing facilities equipped with floating roofs which have been approved by the Department.

(h) The provisions and requirements of 310 CMR 7.24(3) are subject to the enforcement provisions specified in 310 CMR 7.52.

(4) Motor Vehicle Fuel Tank Trucks.

(a) No person owning, leasing, operating or controlling a tank truck that carries motor vehicle fuel with a true vapor pressure equal to or greater than 1.5 psia under actual storage conditions and receives fuel from or delivers fuel to a facility subject to 310 CMR 7.24(2), or delivers fuel to a facility subject to the requirements of 310 CMR 7.24(2) or (3) shall cause, suffer, allow or permit the tank truck to be loaded or unloaded unless the tank truck

1. was tested within the 12 preceding months;
2. sustains a pressure change of no more than three in. of $H_20$ in five minutes when pressurized to a gauge pressure of 18 in. of $H_20$ or when evacuated to a gauge pressure of six in. of $H_20$ during the testing;
3. is repaired and retested within 15 days of testing if it does not meet the criteria of 310 CMR 7.24(4)(a)2; and
4. displays a marking in two inch high letter near the Department of Transportation Certification plate required by 49 CFR 178.340-10b, which:
   a. shows the initials "DEP" and the date the tank truck last passed the test ("DEP date"); and
   b. shall expire not more than 12 months after the date the tank truck last passed the test.

7.24: continued

(b) The owner or operator of a bulk terminal, bulk plant, motor vehicle fuel dispensing facility or tank truck subject to 310 CMR 7.24(2), 7.24(3), or 7.24(4)(a) shall design, install and operate any vapor collection and disposal system, vapor balance system, and any appurtenant loading equipment in a vapor-tight manner that prevents:

1. gauge pressure from exceeding 18 inches of $H_20$ and vacuum from exceeding six inches of $H_20$ in the tank truck; and,
2. a reading equal to or greater than 100% of the lower explosive limit (LEL, measured as methane) at one inch from all points of the perimeter of a potential leak source during transfer operations at the loading rack or stationary tank; and,
3. visible liquid leaks during loading at the loading rack or unloading at the stationary tank.

(c) The owner or operator of a tank truck subject to 310 CMR 7.24(4) shall:

1. notify the Department in writing of the date and location of a certification test at least two days before the anticipated test date; and
2. Within 15 days, repair and retest a vapor recovery system or tank truck that exceeds the limits in 310 7.24(4)(a) or (b).

(d) The Department may, at any time, test any tank truck, or vapor recovery system to determine compliance with the requirements of 310 CMR 7.24(4)(a) or (b).

(e) [Reserved]

(f) Copies of all records and reports required under 310 CMR 7.24 shall immediately be made available to the Department upon verbal or written request, at any reasonable time.

(g) At the discretion of the Department, the requirements for testing and marking motor vehicle fuel tank trucks subject to 310 CMR 7.24(4) may be satisfied if the vehicle undergoes equivalent certification in another state.

(h) The owner or operator of a tank truck subject to 310 CMR 7.24(4)(a) shall maintain records of the daily throughput of any organic material with a true vapor pressure of 1.5 psia or greater under actual storage conditions.

(i) Testing Requirements. Testing to determine compliance with 310 CMR 7.24(4) shall be conducted in accordance with EPA Method 27 as described in Appendix A of CFR Title 40 Part 60, or by any other methods approved by the Department and EPA.

(5) Gasoline Reid Vapor Pressure.

(a) No person shall sell or supply from a bulk plant or terminal, gasoline having a Reid Vapor Pressure greater than 9.0 pounds per square inch (psi) during the period beginning May 1 and continuing through September 15, beginning in 1989 and continuing every year thereafter.

(b) Compliance with 310 CMR 7.24 may be determined by the Department through an audit of RVP test results provided by the supplier or through fuel sampling and testing subject to the following provisions:

1. Any person owning, operating, leasing or controlling any gasoline marketing facility shall, upon request by any employee of the Department, provide a sample or samples of gasoline from said gasoline marketing facility in accordance with the test methods listed in 310 CMR 7.24(5)(b)2.
2. Any fuel sampling and testing required by the Department shall be conducted in accordance with ASTM Method D4177, ASTM Method D4057, ASTM Method D323 or any other method approved by the Department and EPA.

(c) 310 CMR 7.00 will be enforced in accordance with M.G.L. c. 111, § 142A through E.

7.24: continued

(6) U Dispensing of Motor Vehicle Fuel.

(a) Applicability and Installation Requirements.

1. Any person who owns, leases, operates or controls a motor vehicle fuel dispensing facility constructed or substantially modified after November 1, 1989 shall install, prior to commencing operation, a Stage II system as required by the terms and conditions of the system's currently applicable Executive Order and any Approval Letters issued by CARB on or before March 1, 2009..

2. Any person who owns, leases, operates or controls a motor vehicle fuel dispensing facility constructed before November 1, 1989, that has not been substantially modified since November 1, 1989 shall install a Stage II system as required by the terms and conditions of the system's currently applicable Executive Order and as required by the following schedule:

a. by April 1, 1991 where the annual (calendar year) throughput of the motor vehicle fuel dispensing facility is greater than or equal to 1,000,000 gallons of motor vehicle fuel; or

b. by April 1, 1992 where the annual (calendar year) throughput of the motor vehicle fuel dispensing facility is less than 1,000,000 gallons but greater than or equal to 500,000 gallons of motor vehicle fuel; or

c. by April 1, 1993 where the annual (calendar year) throughput of the motor vehicle fuel dispensing facility is less than 500,000 gallons per year but is greater than or equal to 20,000 gallons in any one calendar month; or

d. by April 1, 1994, or 90 days after dispensing 10,000 gallons or more in any calendar month, whichever is later, for all other motor vehicle fuel dispensing facilities.

3. Any person who owns, leases, operates or controls a motor vehicle fuel dispensing facility constructed before November 1, 1989, which has not been substantially modified since November 1, 1989 and which has not dispensed greater than 10,000 gallons of motor vehicle fuel in any one calendar month since January 1, 1988 shall maintain, on site at the facility, monthly records of the total number of gallons of motor vehicle fuel dispensed at said facility for the most recent rolling five year period.

4. Any person who owns, leases, operates or controls a tank truck engaged in the direct dispensing of motor vehicle fuel to a motor vehicle or portable container shall install, by September 1, 1995 or prior to commencing operation, whichever is later, a Stage II system that meets the terms and conditions of the system's currently applicable Executive Order. Tank trucks dispensing motor vehicle fuel to emergency motor vehicles or portable containers during fire fighting activities or a declared emergency situation are exempt from the requirements of 310 CMR 7.24(6).

5. Any person subject to 310 CMR 7.24(6) shall conspicuously post Stage II system operating instructions on both sides of all motor vehicle fuel dispensers or at a position adjacent to the dispensers that is clearly visible to the system operator during the refueling process. Such instructions shall include:

a. a clear pictorial or written description of how to correctly dispense motor vehicle fuel using the installed Stage II system;

b. a warning not to continue dispensing motor vehicle fuel ("topping-off") after automatic system shutoff has engaged; and

c. the telephone number of the Department's Stage II Consumer Hotline.

6. Stationary motor vehicle fuel storage tanks used for following purposes only shall be exempt from the requirements of 310 CMR 7.24(6).

a. A stationary motor vehicle fuel storage tank of 550 gallons or less capacity, used for the purpose of fueling implements of husbandry, provided the fuel storage tank is equipped with submerged fill pipes.

b. A stationary motor vehicle fuel storage tank of greater than 250 gallons, but 1000 gallons or less capacity, used for the purpose of onsite fueling of motor vehicles with motor vehicle fuel that is the by-product of motor vehicle salvage yard operations, provided the fuel storage tank is equipped with:

i. a submerged fill pipe; and

ii. a pressure vacuum vent valve.

7.24: continued

Any person who owns, leases, operates or controls a stationary motor vehicle fuel storage tank currently installed at a motor vehicle salvage yard and not in compliance with the requirements of this subsection shall take such action as necessary to comply with the requirements of this subsection on or before September 1, 2009.

7. On or after March 1, 2009, any person who owns, leases, operates or controls a newly installed motor vehicle fuel dispensing facility where a Stage II system is installed in compliance with 310 CMR 7.24(6)(a)1. shall install a pressure/vacuum (P/V) vent cap on each underground motor vehicle fuel storage tank vent located at said facility, prior to commencing operation. Any person who owns, leases, operates or controls an existing motor vehicle fuel dispensing facility where a vapor balance Stage II system is installed as of March 1, 2009 shall install a P/V vent cap on each underground motor vehicle fuel storage tank vent on or before said facility's first Annual In-Use Compliance Certification submittal due date after April 1, 2009. Each P/V vent cap shall maintain 3.0+/-0.5 inches of water pressure, and 8.0+/-2.0 inches of vacuum. Note: Per the applicable CARB Executive Orders, above ground motor vehicle fuel storage tanks and all underground motor vehicle fuel storage tanks with vacuum assist type Stage II systems are also required to have P/V vent caps.

(b) Operation and Maintenance Requirements.

1. Any person subject to 310 CMR 7.24(6) shall comply with the following operation and maintenance requirements.

a. Operate and maintain the installed Stage II system as required by the terms and conditions of the system's currently applicable Executive Order.

b. Take such actions as necessary to comply with the applicable terms and conditions of any new or modified Executive Order upon Department revision of 310 CMR 7.24(6) to incorporate such new or modified Executive Order. Such actions shall be taken either:

i. during applicable Routine Maintenance, Minor Modification or Substantial Modification of the Stage II System; or

ii. within four years, whichever occurs first.

c. Once every seven days perform a weekly visual inspection of the Stage II system components to determine if such components are installed, functioning and unbroken as required by the terms and conditions of the system's currently applicable Executive Order. Each visual inspection shall include, but not be limited to, inspection of: nozzle boots and splash/vapor guards; hoses; hose retractors, coaxial adaptors, dry breaks, fill caps and gaskets, vapor recovery caps and gaskets, spill containment boxes and drain valves.

d. Upon determining a Stage II system component is incorrectly installed, non-functioning or broken during a visual inspection, immediately:

i. repair such component(s) as required by the terms and conditions of the system's currently applicable Executive Order; or

ii. stop dispensing motor vehicle fuel through such component(s), conspicuously post "Out of Service" signs on such component, and repair such component as required by the terms and conditions of the system's currently applicable Executive Order within 14 days of the date such component is determined to be incorrectly installed, non-functioning or broken.

e. If an incorrectly installed, non-functioning or broken component cannot be repaired as required by 310 CMR 7.24(6)(b)1.d., such component shall immediately be Isolated. "Out of Service" signs shall be conspicuously posted on said Isolated component until such time as said component is correctly repaired as required by the Stage II system's currently applicable Executive Order.

f. If an incorrectly installed, non-functioning or broken component cannot be repaired or Isolated as required by 310 CMR 7.24(6)(b)1.d.or e., the facility owner/operator shall immediately stop dispensing motor vehicle fuel and conspicuously post "Out of Service" signs on all motor vehicle fuel dispensers until such time as all incorrectly installed, non-functioning or broken components are correctly repaired as required by the terms and conditions of the Stage II system's currently applicable Executive Order.

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2. A visual inspection of a Stage II system to meet the requirements of 310 CMR 7.24(6)(b)1.c. shall be performed only by a person who is trained to operate and maintain the Stage II system as required by the terms and conditions of the system's currently applicable Executive Order. A current record of all persons trained shall be maintained on site or, for tank trucks, at the address from which the tank truck is principally operated, and shall include the following:

a. the date training was last received;

b. the trainee's printed name; and

c. the personal signature of the trainee acknowledging receipt of the training.

3. Any person subject to 310 CMR 7.24(6) shall maintain all Stage II system maintenance records on site, in a centralized location, for the most recent rolling twelve-month period. Such records may be either hard copy documents or electronic documents, provided that a hard copy of the electronic documents shall be printed on-site immediately upon request. Such maintenance records for tank trucks shall be maintained at the address from which the tank truck is principally operated. Stage II system maintenance records shall include:

a. all of the facility's weekly inspection checklists for the prior rolling twelve-month period, identifying:

i. the date each weekly visual inspection was performed and the signature of the person who performed the visual inspection;

ii. any Stage II system component determined to be incorrectly installed, non-functioning or broken;

iii. whether the identified incorrectly installed, non-functioning or broken component was immediately repaired, taken out of service and repaired within 14 days, Isolated, or the facility stopped dispensing motor vehicle fuel and all fuel dispensers were taken out of service;

iv. the date the incorrectly installed, non-functioning or broken components identified in iii. above were repaired.

b. A copy of compliance testing company test results for all Stage II compliance tests during the prior rolling 12-month period.

c. A copy of the Stage II system's most recent Annual In-Use Compliance Certification.

4. All records maintained pursuant to 310 CMR 7.24(6)(b)2. and 3. shall be made available to the Department or the US EPA immediately upon request. In the event requested records cannot be made immediately available, requested records shall be delivered to the Department or the US EPA, as applicable, within 24 hours of the initial request.

(c) Compliance Testing and Certification Requirements.

1. Stage II system testing, record keeping and certification as a result of Routine Maintenance or Minor Modification of a Stage II system.

a. In the event of Routine Maintenance, a record of such maintenance shall be maintained in accordance with 310 CMR 7.24(6)(b)3. Compliance testing and submittal of a compliance certification to the Department is not required.

b. In the event of a Minor Modification of a Stage II system, applicable compliance tests shall be performed and passed prior to commencing system operation and a record of such modification and test results shall be maintained in accordance with 310 CMR 7.24(6)(b)3. Submittal of a compliance certification to the Department is not required.

2. Installation/Substantial Modification Certification. Any person subject to 310 CMR 7.24(6) who installs or makes a Substantial Modification to a Stage II system after March 1, 2009 shall, prior to commencing operation, perform and pass all applicable compliance tests pursuant to 310 CMR 7.24(6)(d) and submit to the Department within seven days of performing and passing said tests, a fully completed and signed Installation/Substantial Modification Certification, on a form obtained from the Department, attesting to the following:

a. the installed or substantially modified Stage II system is installed or substantially modified in compliance with 310 CMR 7.24(6)(a);

b. all applicable compliance tests as required by 310 CMR 7.24(6)(d) were performed and passed; and

7.24: continued

c. the applicable installation compliance tests were performed and passed not more than 30 days prior to the date postmarked on the envelope used to submit the Certification to the Department.

3. Annual In-use Compliance Certification. Except as provided in 310 CMR 7.24(6)(c), any person subject to 310 CMR 7.24(6) shall annually submit to the Department a fully completed and signed Annual In-use Compliance Certification, on a form obtained from the Department, attesting to the following:

a. the installed Stage II system is operated and maintained as required by 310 CMR 7.24(6)(b);

b. the following in-use compliance tests, as applicable, were performed as required by 310 CMR 7.24(6)(d):

i. Vapor Balance Systems. Annual In-use Compliance Tests. Pressure Decay Test; Vapor-Tie Test; P/V Vent Test; Every-third-year in-use compliance test: Dynamic Pressure/Liquid Blockage Test.

ii. Vacuum Assist Systems. Annual in-use compliance tests: Pressure Decay Test; Vapor-Tie Test; P/V Vent Test; and Air-to-Liquid Ratio Test; Every-third-year in-use compliance test: Dynamic Pressure/Liquid Blockage Test.

iii. Healy Systems. All applicable tests shall be performed annually.

c. The applicable in-use compliance tests were performed and passed not more than 30 days prior to the date postmarked on the envelope used to submit the Certification to the Department.

4. Alternative Annual In-use Compliance Certification. Any person subject to 310 CMR 7.24(6) who submits two consecutive years of Annual In-Use Compliance Certifications in compliance with 310 CMR 7.24(6)(c)3. in which all applicable in-use compliance tests were passed on the first try, as certified pursuant to 310 CMR 7.24(6)(g)8., may elect to submit annually to the Department an Alternative Annual In-Use Compliance Certification on a form obtained from the Department:

a. Facilities meeting the requirements of 310 CMR 7.24(6)(c)4. and electing to submit an Alternative Annual In-Use Compliance Certification shall be:

i. exempt from annual Stage II compliance testing requirements in the year following the submittal of two consecutive years' of Annual In-use Compliance Certifications in compliance with 310 CMR 7.24(6)(c)4.; and

ii. subject to all applicable Stage II compliance tests as referenced in 310 CMR 7.24(6)(d) in the second year following the submittal of two consecutive years' Annual In-use Compliance Certifications in compliance with 310 CMR 7.24(6)(c)3., and every other year thereafter.

b. Any person submitting an Alternative Annual In-Use Compliance Certification to the Department shall fully complete and sign said Certification and attest to the following:

i. the installed Stage II system is correctly operated and maintained as required by 310 CMR 7.24(6)(b);

ii. all applicable compliance tests were performed and passed as required by 310 CMR 7.24(6)(c)4.a.ii.; and

iii. The applicable compliance tests were performed and were passed not more than 30 days prior to the date postmarked on the envelope used to submit the Certification to the Department.

c. Any person submitting an Alternative Annual In-Use Compliance Certification and fails one or more compliance certification tests on the first try as required by 310 CMR 7.24(6)(c) 4. shall be required, in subsequent years, to annually certify in compliance with the requirements of 310 CMR 7.24(6)(c)3., until such time as said person meets the requirements in 310 CMR 7.24(6)(c)4.

5. Annual In-use Compliance Certification Submittal Requirements. The annual submittal date for Certifications required pursuant to 310 CMR 7.24(6)(c)3. and 4., is no later than:

a. For persons subject to 310 CMR 7.24(6) who install or make a Substantial Modification to a Stage II system on or after January 1, 2001, the anniversary of the date postmarked on the envelope used to submit to the Department the Installation Compliance Certification required by 310 CMR 7.24(6)(c)1. or the date the facility commenced operation, whichever occurs first; and

7.24: continued

b. For all other persons subject to 310 CMR 7.24(6), May 1, 2002, or a date otherwise provided by the Department, whichever is earlier. Persons subject to 310 CMR 7.24(6)(c)5.b. who are provided an annual submittal date by the Department shall be notified by the Department of their first annual submittal date and required in-use compliance tests pursuant to 310 CMR 7.24(6)(c)3.b. no less than 90 days prior to the first annual submittal date established by the Department.

c. Upon request of any person subject to 310 CMR 7.24(6), the Department may revise said person's annual Certification submittal date. Such revision shall set a revised annual submittal date that is no more than 12 months after the otherwise applicable submittal date.

6. Any person who owns, leases, operates or controls a Stage II system that fails one or more in-use compliance tests required by 310 CMR 7.24(6)(c)3. or 4., shall immediately:

a. repair incorrectly installed, non-functioning or broken component as required by the terms and conditions of the Stage II system's currently applicable Executive Order;

b. re-test and pass each failed test; and

c. submit to the Department the required Annual In-Use Compliance Certification on or before the facility's Annual In-Use Compliance Certification submittal date or within 30 days of the date of the Stage II system's first passing test result as required by 310 CMR 7.24(6)(c)3.c. or 310 CMR 7.24(6)(c)4.c., as applicable, whichever occurs first.

7. If a facility fails one or more required in-use compliance tests and the incorrectly installed, non-functioning or broken components cannot be repaired as required by 310 CMR 7.24(6)(c)6., the facility owner/operator shall immediately:

a. Isolate the incorrectly installed, non-functioning or broken components from the Stage II system so that the remainder of the Stage II system operates as required by the terms and conditions of the system's currently applicable Executive Order; and

b. submit to the Department the required Annual In-Use Compliance Certification based on passing test results for the remainder of the Stage II system on or before the facility's Annual In-use Compliance Certification submittal date or within 30 days of the date of the Stage II system's first passing test result as required by 310 CMR 7.24(6)(c)3.c. or 310 CMR 7.24(6)(c)4.c., as applicable, which ever occurs first.

c. Any Stage II system component Isolated from the remainder of the Stage II System shall remain Isolated until such time as:

i. said component is repaired as required by the terms and conditions of the Stage II System's currently applicable Executive Order; and

ii. all applicable, compliance testing, record keeping and certification requirements for the Routine Maintenance, Minor Modification, or Substantial Modification of a Stage II system are complied with.

8. If a facility fails one or more required in-use compliance test and the incorrectly installed, non-functioning or broken Stage II system component cannot be repaired as required by 310 CMR 7.24(6)(c)6. or 7., the facility owner/operator shall immediately stop dispensing motor vehicle fuel and conspicuously post "Out of Service" signs on all motor vehicle fuel dispensers until such time as:

a. all incorrectly installed, non-functioning or broken components are repaired as required by the terms and conditions of the Stage II system's currently applicable Executive Order;

b. all applicable in-use compliance tests are performed and passed as required by 310 CMR 7.24(6)(c)3. or 4., as applicable; and

c. a fully completed Annual In-use Compliance Certification has been submitted to the Department as required by 310 CMR 7.24(6)(c)3.

d. If a facility fails one or more required in-use compliance tests and is subject to 310 CMR 7.24(6)(c)8., for purposes of compliance with the Annual In-use Compliance Certification submittal requirements of 310 CMR 7.24(6)(c)3. or 4., said facility owner/operator shall submit to the Department a fully completed and signed Stage II System Closure Notification as required by 310 CMR 7.24(6)(e)2. on or before said facility's currently applicable Annual In-Use Compliance Certification submittal due date.

7.24: continued

9. Any Certification submitted to the Department as required by 310 CMR 7.24(6)(c) shall be signed by a Stage II System Responsible Official as required by 310 CMR 7.24(6)(f).

10. Any person subject to 310 CMR 7.24(6), upon written notice from the Department, shall perform such compliance tests as the Department determines necessary to demonstrate the Stage II system is installed and maintained as required by the terms and conditions of the system's currently applicable Executive Order and shall submit the results to the Department within 14 days of the performance of said tests.

(d) Stage II System Compliance Testing Requirements. For the purposes of 310 CMR 7.24(6)(c), the following Stage II System compliance tests and requirements shall be required:

1. Vapor Balance Systems. Pressure Decay Test, Vapor-Tie Test, P/V Vent Test and Dynamic Pressure/Liquid Blockage Test

2. Vacuum Assist Systems. Pressure Decay Test, Vapor-Tie Test, P/V Vent Test, Air-to-Liquid Ratio Test and Dynamic Pressure/ Liquid Blockage Test

3. Healy Systems.

a. Healy 400 ORVR (Executive Order # G-70-186), Healy 400 ORVR Above Ground Storage System (Executive Order # G-70-187) and Franzen-Hill Cargo Tank Truck System (Executive Order # G-70-193):

i. Pressure Decay Test:
ii. Vapor Tie Test;
iii. P/V Vent Test;
iv. Exhibit 4: Vapor Return Line Vacuum Integrity Test; and
v. Exhibit 5: Fillneck Vapor Pressure Regulation Fueling Test.

b. Healy 600 (Executive Order # G-70-165):

i. Pressure Decay Test;
ii. Vapor Tie Test;
iii. P/V Vent Test;
iv. Air-to-Liquid Ratio Test; and
v. Exhibit 4: Vapor Return Line Vacuum Integrity Test.

4. Compliance tests performed to meet the requirements of 310 CMR 7.24(6)(c) shall be performed only by a person or Stage II compliance testing company that has submitted to the Department a Stage II Compliance Testing Company Notification as required by 310 CMR 7.24(6)(g)1.

(e) Notification Requirements.

1. Any person, upon entering into a purchase, lease or other contractual agreement by which said person becomes the owner, operator, lessee or controller of an existing motor vehicle fuel dispensing facility or tank truck subject to 310 CMR 7.24(6) shall submit to the Department, within 30 days of the effective date of becoming such an owner, operator, lessee or controller or within ten days of a written request from the Department, a fully completed New Stage II System Owner, Operator, Lessee or Controller Notification on a form obtained from the Department.

a. Said Notification shall include the following:

i. the name of the new Stage II system owner, operator, lessee or controller and related business documentation, including the name and address of the facility where the Stage II system is located or from which the tank truck is principally operated; and

ii. the effective date said person became the new owner, operator, lessee or controller.

b. Said Notification shall be signed by the individual who is a Responsible Official for the new owner, operator, lessee or controller regarding the Stage II system, who shall attest to the following:

i. I certify that I personally examined the foregoing and am familiar with the information contained in this document and all the attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment;

ii. I am fully authorized to make this attestation on behalf of this facility or tank truck, as applicable.

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2. Any person subject to 310 CMR 7.24(6), upon entering into a sale, lease or other contractual agreement by which said person relinquishes his or her authority as an owner, operator, lessee or controller of a facility or tank truck subject to 310 CMR 7.24(6), shall submit to the Department, within 30 days of the effective date of said sale, lease or other contractual agreement, a signed letter notifying the Department of the following:

a. the name of the person relinquishing his or her authority as an owner, operator, lessee or controller of the facility or tank truck subject to 310 CMR 7.24(6), the facility name, DEP Facility Account Number and address or the address from which the tank truck is principally operated, as applicable;

b. the name of the new owner, operator, lessee or controller of the facility or tank truck subject to 310 CMR 7.24(6) and related business information, including the new facility name and address or the address from which the tank truck is principally operated, as applicable; and

c. the effective date of the change of owner, operator, lessee or controller.

3. Any person subject to the requirements of 310 CMR 7.24(6) seeking to permanently or temporarily take out of use an existing motor vehicle fuel dispensing facility or tank truck shall submit to the Department a fully completed and signed Stage II System Closure Notification, on a form obtained from the Department.

a. Said Notification shall include the following:

i. the name of the Stage II facility owner, operator, lessee or controller and related business information, including the name and address of the facility where the Stage II system was located or from which the tank truck was principally operated, as applicable;

ii. the DEP Facility Account Number for the applicable facility or tank truck; and

iii. a copy of the Notification For Removal or Closure of In Place Underground Storage Tanks Regulated Under 527 CMR 9.00 (FP-290R) Form, documenting the permanent or temporary out of use status of said facility or tank truck on record with the Massachusetts Department of Fire Safety.

b. The temporary out of use status of a motor vehicle fuel dispensing system shall be renewed as necessary by any person subject to the requirements of 310 CMR 7.24(6) by submitting a new, fully completed Stage II System Closure Notification, on or before the annual anniversary of the effective date said dispensing system was taken out of use, as noted in the required FP-290R Form. Said renewal shall include a current FP-290R Form for said dispensing system on record with the Massachusetts Department of Fire Safety documenting the system's continued temporary out of use status.

c. Any person subject to the requirements of 310 CMR 7.24(6) who temporarily takes out of use a motor vehicle fuel dispensing system shall, prior to commencing the distribution of motor vehicle fuel, perform and pass all applicable compliance tests and submit to the Department a fully completed Installation/Substantial Modification Certification as required by 310 CMR 7.24(6)(c) 2.

d. Any person subject to the requirements of 310 CMR 7.24(6), where the motor vehicle fuel dispensing facility is permanently taken out of use, shall no longer be subject to 310 CMR 7.24(6) as of the effective date the facility was permanently taken out of use as referenced in the required FP-290R Form.

4. Any Notification submitted to the Department as required by 310 CMR 7.24(6)(e) shall be signed by a Stage II System Responsible Official as required by 310 CMR 7.24(6)(f).

(f) Stage II System Responsible Official Certification of Compliance.

1. Except in circumstances described in 310 CMR 7.24(6)(f)2., any Certification or Notification required by 310 CMR 7.24(6)(c) or (e) shall be signed by an individual who is a Responsible Official regarding Stage II system compliance.

2. For Stage II systems owned by one party and leased, operated or controlled by another independent party and where both parties have separate Stage II compliance responsibilities, any Certification or Notification submitted in compliance with the requirements of 310 CMR 7.24(6)(c) or (e) shall be signed by Responsible Officials for each party regarding Stage II system compliance. Each Stage II System Responsible Official shall attest to the following:

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i. I certify that I personally examined the foregoing and am familiar with the information contained in this document and all the attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment;

ii. that systems to maintain compliance are in place at the facility or, if applicable, at the location from which the tank truck is principally operated and will be maintained for the coming year even if the processes or operating procedures are changed over the course of the year; and

iii. I am fully authorized to make this attestation on behalf of this facility or tank truck, as applicable.

3. Any person immediately responsible for obtaining information referenced in 310 CMR 7.24(6)(f), who knowingly and willfully makes false, inaccurate, incomplete or misleading statements pursuant to any Certification or Notification required under 310 CMR 7.24(6), may be in violation of 310 CMR 7.24(6). Not withstanding the previous sentence, any person subject to the requirements of 310 CMR 7.24(6), shall comply with all applicable provisions of 310 CMR 7.24(6).

(g) Compliance Testing Company Requirements.

1. On or after March 1, 2009, any person who owns, leases, operates or controls a company that performs Stage II compliance tests to meet the requirements of 310 CMR 7.24(6)(c) shall submit to the Department a fully completed Stage II Compliance Testing Company Notification, on a form obtained from the Department, prior to performing any required Stage II compliance test.

a. the Notification shall include the following:

i. the name and business mailing address of the Stage II compliance testing company owner, operator, lessee or controller;

ii. the name and address of any business that is engaged in the installation or Substantial Modification of Stage II systems and is owned, operated, leased or controlled by, or affiliated with the owner, operator, lessee or controller of the compliance testing company;

iii. the name and address of any motor vehicle fuel dispensing facility or tank truck subject to 310 CMR 7.24(6) that is owned, operated, leased or controlled by, or affiliated with the owner, operator, lessee or controller of the compliance testing company;

iv. the address and telephone number of the facility(ies) from which the daily compliance testing activities of the compliance testing company originate and at which any records required by 310 CMR 7.24(6)(g)10. are maintained;

v. a written description of the employee training systems in place at the compliance testing company to ensure required compliance tests are performed as required by applicable protocols and procedures, pursuant to 310 CMR 7.24(6)(g)6. and 7; and

vi. a list of all Compliance Testing Company Responsible Officials with the authority to sign Compliance Testing Company Certifications on behalf of the compliance testing company.

b. Each Notification shall be signed by an individual who is a Responsible Official regarding the compliance testing company, who shall attest to the following:

i. I certify that I personally examined the foregoing and am familiar with the information contained in this document and all the attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment;

ii. Employee training systems are in place at the company to ensure Stage II compliance tests are performed as required by all applicable protocols and procedures and such training systems will be maintained for the coming year even if the protocols and procedures are changed over the course of the year; and

iii. I am fully authorized to make this attestation on behalf of this Stage II Compliance Testing Company.

7.24: continued

2. Any person subject to the requirements of 310 CMR 7.24(6)(g) shall notify the Department in writing of any change to the information submitted to the Department pursuant to 310 CMR 7.24(6)(g)1. within 14 days of the effective date of such change. Upon the Department's written request, the person shall submit a fully revised and completed Notification to the Department as required by the requirements of 310 CMR 7.24(6)(g)1.

3. No person subject to 310 CMR 7.24(6)(g) shall perform any Stage II compliance test unless said person has first been trained in accordance with the applicable compliance test protocols and procedures required by 310 CMR 7.24(6)(g)6. and 7.

4. Any person subject to the requirements of 310 CMR 7.24(6)(g) shall submit, at least once every two weeks, a written list to the Department identifying all motor vehicle fuel dispensing facilities and tank trucks at which the company is scheduled to perform required Stage II compliance test(s) over the next 14 day period.

a. The list shall be organized by Department region and date, and shall include the name and address of each facility or tank truck to be tested, the applicable section under 310 CMR 7.24(6)(c)2., 3., or 4. the required compliance tests to be performed, and the estimated time that the company expects to arrive at the facility location.

b. The Department shall be notified, in writing, of any change of date of an individual facility's scheduled compliance tests no later than 9:00 A.M. of the day the scheduled test(s) is to occur. Additions to a submitted compliance-testing schedule shall be submitted to the Department, in writing, no less than two working days prior to the date of any scheduled test.

c. Failure to comply with the Notification requirements of 310 CMR 7.24(6)(g)4. may be a basis for the Department to determine that tests conducted after inadequate notice are invalid.

5. Any person subject to the requirements of 310 CMR 7.24(6)(g) shall immediately notify the Department of any failed Stage II compliance tests performed as required by 310 CMR 7.24(6)(c) if said person did not return to retest the Stage II system as required by 310 CMR 7.24(6)(c) 6. or 7. on or before the facility's Annual In-Use Compliance Certification submittal date, or within 30 days of the date of the Stage II system's first passing test result, which ever occurs first. Said person shall notify the Department regarding the name and address of the facility, and the facility's Facility Account Number.

6. Any person subject to 310 CMR 7.24(6)(g) shall perform compliance tests to meet the requirements of 310 CMR 7.24(6)(c) only upon confirmation that:

a. all above ground Stage II system components including, but not limited to: dispensers; nozzles; swivels; hose retractors; hoses; breakaways; vapor check valves; and the pressure/vacuum valve(s) are installed as required and are the correct components as required by the terms and conditions of the system's currently applicable Executive Order; and

b. all motor vehicle fuel dispensing facilities with two or more motor vehicle fuel storage tanks are properly manifolded as required by the terms and conditions of the system's currently applicable Executive Order.

7. Any person subject to 310 CMR 7.24(6)(g), shall perform Stage II compliance tests to meet the requirements of 310 CMR 7.24(6) only in accordance with the applicable test procedures cited below:

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a. Pressure Decay Test (Bay Area Air Pollution Control District Source Test Procedure ST-30 (2/6/1991)) and Table A. Minimum Allowable Pressure.

**Table A. MINIMUM ALLOWABLE PRESSURE (Based on an initial pressure of 10.0" wc.)**

| Ullage (Gal) | Minimum Allowable Pressure ("wc) | Ullage (Gal) | Minimum Allowable Pressure ("wc) |
|---|---|---|---|
| 500 | 3.70 | 6,000 | 9.38 |
| 600 | 4.50 | 7,000 | 9.46 |
| 700 | 5.20 | 7,500 | 9.50 |
| 800 | 5.80 | 8,000 | 9.52 |
| 900 | 6.20 | 9,000 | 9.56 |
| 1,000 | 6.50 | 10,000 | 9.60 |
| 1,250 | 7.05 | 11,000 | 9.62 |
| 1,750 | 7.90 | 12,000 | 9.64 |
| 2,000 | 8.20 | 13,000 | 9.66 |
| 2,250 | 8.35 | 14,000 | 9.68 |
| 2,500 | 8.50 | 15,000 | 9.70 |
| 2,750 | 8.60 | 16,000 | 9.71 |
| 3,000 | 8.70 | 17,000 | 9.71 |
| 3,250 | 8.80 | 18,000 | 9.72 |
| 3,500 | 8.90 | 19,000 | 9.73 |
| 3,750 | 9.00 | 20,000 | 9.73 |
| 4,000 | 9.10 | 21,000 | 9.74 |
| 4,250 | 9.15 | 22,000 | 9.75 |
| 4,500 | 9.20 | 23,000 | 9.75 |
| 4,750 | 9.25 | 24,000 | 9.76 |
| 5,000 | 9.30 | 25,000 | 9.77 |
| | | 30,000 | 9.80 |

Note: For a valid test, total ullage must be at least 500 gallons but no more than 30,000 gallons.

b. Underground Piping Check (Vapor Tie) Test (San Diego County Air Pollution Control District Test Procedure TP-96-1, Section 5.1.9)

c. Pressure/Vacuum Vent Test (Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, CARB TP-201.1E) P/V relief vents shall be tested to be within .29oz/in2 or 0.5 inches of water column of the designed pressure and within 1.2oz/in2 or 2.0 inches of water column of the vacuum settings.

d. Air-to-Liquid Volume Ratio Test (CARB TP-201.5).

e. Dynamic Pressure/Liquid Blockage Test (CARB TP-201.4).

f. Healy 400 ORVR (Executive Order # G-70-186), Healy 400 ORVR Above Ground Storage System (Executive Order # G-70-187) and Franzen-Hill Cargo Tank Truck System (Executive Order # G-70-193)

Exhibit 4: Vapor Return Line Vacuum Integrity Test

Exhibit 5: Fillneck Vapor Pressure Regulation Fueling Test

Healy 600 (Executive Order # G-70-165)

Exhibit 4: Vapor Return Line Vacuum Integrity Test.

8. Any person subject to 310 CMR 7.24(6)(g) shall certify to the Department that each compliance test performed to meet the requirements of 310 CMR 7.24(6)(c) was performed as required by 310 CMR 7.24(6)(g)6. and 7. As applicable the Certification shall be submitted on a Stage II Installation/Substantial Modification Certification or Annual In-Use Compliance Certification and shall include:

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a. the date each compliance test was first performed and the result; and
b. the date each compliance test was performed and passed.
c. a notation whether:
i. the entire installed Stage II system was tested and passed all applicable compliance tested; or
ii. incorrectly installed, non-functioning or broken components were Isolated from the remainder of the installed Stage II system and the remainder of Stage II system was tested and passed all applicable compliance tests.
d. If the remainder of the Stage II system was tested and passed all applicable compliance tests, as noted in 310 CMR 7.24(6)(g) 8.c., identify all components Isolated from the remainder of the Stage II system.

9. Each Certification submitted pursuant to 310 CMR 7.24(6)(g)8. shall be fully completed and signed by a Compliance Testing Company Responsible Official, who shall attest to the following:

a. I certify that I personally examined the foregoing and am familiar with the information contained in this document and all the attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment; and
b. I am fully authorized to make this attestation on behalf of this Stage II Compliance Testing Company.

10. Any person subject to 310 CMR 7.24(6)(g) shall maintain the following records on site, for a minimum of five years, at the location(s) referenced on the form submitted pursuant to 310 CMR 7.24(6)(g)1.a.iv:

a. A complete set of records of compliance tests performed to meet the requirements of 310 CMR 7.24(6)(c). Such records shall include, by facility address:
i. the date and first result for each required test performed;
ii. the date each test was performed and passed; and
iii. an itemized list of all Stage II system components re-installed, repaired or replaced as necessary for the system to pass the applicable test(s).
b. A current record of all persons or employees trained as required by 310 CMR 7.24(6)(g)3. Such record shall include the following:
i. the date training was received;
ii. the person or employee's printed name; and iii. the personal signature of the person or employee acknowledging receipt of required training.

11. All records maintained pursuant to 310 CMR 7.24(6)(g)10. shall be made available to the Department or the US EPA immediately upon the request of either.

(h) Violations of 310 CMR 7.24(6). For any person subject to 310 CMR 7.24(6) it shall be a violation of 310 CMR 7.24(6) to:

1. fail to submit any Certification or Notification required by to 310 CMR 7.24(6) as applicable;
2. make any false, inaccurate, incomplete or misleading statements in any Certification or Notification required by to 310 CMR 7.24(6);
3. make any false, inaccurate, incomplete or misleading statements in any record, report, plan, file, log or register which said person is required to keep pursuant to 310 CMR 7.24(6);
4. hold themselves out as a responsible official in violation of the applicable requirements of to 310 CMR 7.24(6);
5. fail to comply with any applicable standards imposed under 310 CMR 7.24(6); or
6. violate any other provision of 310 CMR 7.24(6).

7.24: continued

(i) Department Adopted CARB Stage II System Executive Orders.

| Number | Description |
|---|---|
| G-70-7-AD | Certification of the Hasstech Model VCP-2 and VCP 2A Phase II Vapor Recovery System. |
| G-70-14-AA | Recertification of Red Jacket Aspirator Assist Phase II Vapor Recovery System. |
| G-70-17-AD | Modification of Certification of the Emco Wheaton Balance Phase II Vapor Recovery System. |
| G-70-18-C | Modification of Certification of the Shell Model 75B1 and 75B1-R3 Service Station Phase II Vapor Recovery System. |
| G-70-23-AC | Recertification of the Exxon Balance Phase II Vapor Recovery System. |
| G-70-25-AA | Recertification of the Atlantic Richfield Balance Phase II Vapor Recovery System. |
| G-70-33-AB | Certification of the Modified Hirt VCS-200 Vacuum Assist Phase II Vapor Recovery System. |
| G-70-36-AD | Modification of Certification of the OPW Balance Phase II Vapor Recovery System. |
| G-70-37-B | Modification of the Certification of the Chevron Balance Phase II Vapor Recovery System with OPW nozzles for Service. |
| G-70-38-AB | Recertification of the Texaco Balance Phase II Vapor Recovery System. |
| G-70-48-AA | Recertification of the Mobil Oil Balance Phase II Vapor Recovery System. |
| G-70-49-AA | Recertification of the Union Balance Phase II Vapor Recovery System. |
| G-70-52-AM | Certification of Components for Red Jacket, Hirt and Balance Phase II Vapor Recovery System. |
| G-70-53-AA | Recertification of the Chevron Balance Phase II Vapor Recovery System. |
| G-70-77 | Certification of the OPW Repair/Replacement Parts and Modification of the Certification of the OPW Balance Phase II Vapor Recovery System. |
| G-70-78 | Certification of the E-Z Flo Nozzle Company Rebuilt Vapor Recovery Nozzles and Vapor Recovery Components. |
| G-70-101-B | Certification of the E-Z Flo Model 3006 and 3007 Vapor Recovery Nozzles and Use of E-Z Flo Components with OPW Models 11VC and 11 VE Vapor Recovery Nozzles. |
| G-70-107 | Certification of Rainbow Petroleum Products Model RA3003, RA3005, RA3006 and RA3007 Vapor Recovery Nozzles and Vapor Recovery Components. |
| G-70-110 | Certification of Stage I and II Vapor Recovery Systems for Methanol Fueling Facilities. |
| G-70-118-AB | Certification of Amoco V-1 Vapor Recovery System. |
| G-70-125-AA | Modification of the Certification of the Husky Model V Phase II Balance Vapor Recovery Nozzle. |
| G-70-127 | Certification of the OPW Model 111-V Phase Vapor Recovery Nozzle. |
| G-70-134 | Certification of the EZ Flo Rebuilt A-4000 Series and 11V-Series Vapor Recovery System. |
| G-70-139 | Addition to the Certification of the Hirt Model VCS-200 Phase II Vapor Recovery System. |
| G-70-150-AE | Modification of the Certification of the Gilbarco VaporVac Phase II Vapor Recovery System. |
| G-70-153-AD | Modification to the Certification of the Dresser/Wayne WayneVac Phase II Vapor Recovery System. |
| G-70-154-AA | Modification to the Certification of the Tokheim MaxVac Phase II Vapor Recovery System. |
| G-70-159-AB | Modifiaction of the Certification of the Saber Nozzle for Use with the Gilbarco VaporVac Phase II Vapor Recovery System. |
| G-70-163-AA | Certification of the OPW VaporEZ Phase II Vapor Recovery System. |
| G-70-164-AA | Modification to the Certification of the Hasstech VCP-3A Vacuum Assist Phase II Vapor Recovery System. |
| G-70-165 | Healy Vacuum Assist Phase II Vapor Recovery System. |
| G-70-169-AA | Modification to the Certification of the Franklin Electric INTELLIVAC Phase II Vapor Recovery System. |
| G-70-170 | Certification of the EZ-flo Rebuilt 5005 and 5015 for use with the Balance Phase II Vapor Recovery System. |
| G-70-177-AA | Certification of the VCS400-7 Vacuum Assist Phase II Vapor Recovery System. |
| G-70-179 | Certification of the Catlow ICVN-V1 Vacuum Assist Phase II Vapor Recovery System. |
| G-70-180 | Order Revoking Certification of the Healy Phase II Vapor Recovery Systems for Gasoline Dispensing Systems. |
| G-70-183-AA | Certification of the Healy/Franklin Vacuum Assist Phase II Vapor Recovery System. |
| G-70-186 | Certification of the Healy Model 400 ORVR Vapor Recovery System. |

7.24: continued

| **Number** | **Description** (continued) |
|---|---|
| G-70-188 | Certification of the Catlow ICVN Vapor Recovery Nozzle System for use with the Gilbarco VaporVac Vapor Recovery System. |
| G-70-191AA | Healy/Franklin VP-1000 Vapor Pump Phase II Vapor Recovery System(Healy ORVR Phase II Vapor Recovery System). |
| G-70-196 | Certification of the Saber Technologies, LLC SaberVac VR Phase II Vapor Recovery System |
| G-70-199-AJ | Certification of the Gasoline Dispensing Nozzles to the Liquid Retention of 350 millileters per 1,000 Gallons Dispensed. |
| VR-201-A | Healy System Inc. Phase II Enhanced Vapor Recovery (EVR) System Not Including ISD |
| EVR-202-A | Healy Phase II Enhanced Vapor Recovery System Including Veeder-Root ISD System |
| G-70-204-A | Certification of the Gilbarco VaporVac/OPW Vaporsaver ORVR-Compatible System |

7.24: continued

(j) Department Adopted CARB Stage II System Executive Orders for Above Ground Storage Tank Vapor Recovery Systems.

| Number | Description |
|---|---|
| G-70-102-A | Certification of a Phase I Vapor Recovery System for Aboveground Storage Tanks with less than 40,000 Gallons Capacity for Gasoline or Gasoline/Methanol Blended Fuels |
| G-70-116-F | ConVault Aboveground Tank Vapor Recovery System |
| G-70-128 | Bryant Fuel Cell Aboveground Tank Vapor Recovery System |
| G-70-130A | Petrovault Aboveground Tank Vapor Recovery System |
| G-70-131A | Tank Vault Aboveground Tank Vapor Recovery System |
| G-70-132-A | Supervault Aboveground Tank Vapor Recovery System |
| G-70-132-B | Supervault Aboveground Tank Vapor Recovery System |
| G-70-136 | FireSafe Aboveground Tank Vapor Recovery System |
| G-70-137 | FuelSafe Aboveground Tank Vapor Recovery System |
| G-70-138 | Phase II Vapor Recovery Systems Installed on Gasoline Bulk Plants/Dispensing Facilities with Aboveground Tanks |
| G-70-139 | Addition to the Certification of the Hirt Model VCS-200 Phase II Vapor Recovery System |
| G-70-140-A | Integral Phase I and Phase II Aboveground Tank Configurations with the Healy Phase II Vapor Recovery System |
| G-70-142-B | Phase I Vapor Recovery System for Aboveground Gasiline Storage Tanks |
| G-70-143 | P/T Vault Aboveground Tank Vapor Recovery System |
| G-70-147-A | New United Motors Manufacturing, Incorporated Phase II Vapor Recovery System at the Fremont, California Assembly Plant |
| G-70-148-A | Lube Cube Aboveground Tank Vapor Recovery System |
| G-70-152 | Moiser BrothersTanks and Manufacturing Aboveground Tank Vapor Recovery System |
| G-70-155 | Petroleum Marketing Aboveground Tank Vapor Recovery System |
| G-70-156 | Ecovault Aboveground Tank Vacuum Assist Vapor Recovery System |
| G-70-157 | Ecovault Aboveground Tank Balance Vapor Recovery System |
| G-70-158-A | Firesafe Aboveground Tank Vapor Recovery System |
| G-70-160 | Above Ground Tank Vault Vapor Recovery System |
| G-70-161 | Hoover Containment Systems, Incorporated Fuelmaster Aboveground Tank Vapor Recovery System |
| G-70-162-A | Steel Tank Institute Fireguard Aboveground Tank Vapor Recovery System |
| G-70-167 | EnviroVault Aboveground Tank Vapor Recovery System |
| G-70-168 | Bryant Fuel Systems Phase I Vapor Recovery System |
| G-70-175 | Hasstech VCP-3A Vacuum Assist Phase II Vapor Recovery System for Aboveground Tank Systems |
| G-70-181 | Hirt VCS400-7 Bootless Nozzle Phase II Vapor Recovery System for Aboveground Storage Tank Systems |
| G-70-187 | Healy Model 400 ORVR Vapor Recovery System for Aboveground Tank Systems |
| G-70-190 | Guardian Containment, Corporation Armor Cast Aboveground Tank Vapor Recovery System |
| G-70-192 | Certification of the Healy Model 400 ORVR Nozzle for Existing Aboveground Storage Tank Systems |
| G-70-193 | Certification of the Hill-Vac Vapor Recovery System for Cargo Tank Motor Vehicle Fueling Systems |
| G-70-194 | Containment Solutions Hoover Vault Aboveground Tank Vapor Recovery System |
| G-70-195 | Cretex Companies, Inc FuelVault Aboveground Tank Vapor Recovery System |
| G-70-197 | Synchrotek Fastflo 3 Phase II Vapor Recovery System |
| G-70-200 | Oldcastle Aboveground Below-Grade Fuel Vault with Balance Vapor Recovery System and Buried Vapor Return Piping |
| G-70-201 | Oldcastle Aboveground Below-Grade Fuel Vault with Balance Vapor Recovery System and Trenched Vapor Return Piping |
| G-70-202 | Oldcastle Aboveground Below-Grade Fuel Vault with Gilbarco VaporVac Phase II Recovery System and Trenched Vapor Return Piping |

(k) The provisions and requirements of 310 CMR 7.24 (6)(a) and (b) are subject to the enforcement provisions specified in 310 CMR 7.52.

7.24: continued

(7) Oxygenated Gasoline Composition and Use.

(a) Applicability.

1. 310 CMR 7.24(7) applies to any person who owns, leases, operates, or controls one or more of the following in the Commonwealth of Massachusetts as defined in 310 CMR 7.00:

a. Bulk plants;
b. Bulk terminals;
c. Tank trucks subject to 310 CMR 7.24(4);
d. Gasoline marketing facilities; or
e. Motor vehicle fuel dispensing facilities.

2. If the Department verifies a violation of the eight hour carbon monoxide National Ambient Air Quality Standard within Boston, Cambridge, Chelsea, Everett, Malden, Medford, Quincy, Revere or Somerville, in the next applicable oxygenated gasoline control period, no person subject to 310 CMR 7.24(7)(a)1. shall provide, offer for sale, use, sell, or exchange in trade any gasoline in the oxygenated gasoline control area, during the oxygenated gasoline control period, which is not oxygenated gasoline, except where an emergency exemption has been issued by the Department pursuant to 310 CMR 7.24(7)(g).

3. Such limitations shall not apply to the offer, provision, sale, or exchange of gasoline not meeting the requirements of 310 CMR 7.24(7)(a)2. by subject bulk plants, bulk terminals, or tank trucks during the oxygenated gasoline control period to gasoline marketing facilities or motor vehicle fuel dispensing facilities located outside the oxygenated gasoline control area.

(b) Compliance Testing.

1. Any person who owns, leases, operates, or controls a bulk plant or bulk terminal subject to 310 CMR 7.00 shall conduct gasoline testing for the purposes of compliance with the requirements of 310 CMR 7.24(7). Such compliance testing shall include but not be limited to:

a. determination of the oxygenate content by weight of gasoline;
b. the percent oxygen content by weight; and
c. the oxygenate type(s) utilized to satisfy the requirements of 310 CMR 7.00.

2. Bulk plants and bulk terminals subject to 310 CMR 7.24(7) which receive oxygenated gasoline such that no additional blending of oxygenates occurs for the purpose of compliance with 310 CMR 7.00, shall conduct compliance testing upon receipt of each delivery of such oxygenated gasoline.

3. Bulk plants and bulk terminals subject to 310 CMR 7.24(7) which blend oxygenates with gasoline for the purpose of compliance with 310 CMR 7.24(7), shall conduct compliance testing upon the transfer of every 1,000,000 gallons of oxygenated gasoline from said bulk plant or bulk terminal to subject tank trucks, or more frequently if so required by the Department.

(c) Methods for Sampling, Testing, and Calculating Oxygen Content.

1. Any person determining the oxygen content by weight of gasoline shall use the values listed in Table 7.24(7)(c)1., and the methods identified in 310 CMR 7.24(7)(c)2., 3., and 4. All volume measurements shall be adjusted to 60°F.

2. Any person determining the oxygen content by weight of gasoline shall obtain a representative sample in accordance with the US Environmental Protection Agency's (EPA) sampling method as detailed in Title 40 CFR Part 80, Appendix D or any other sampling method approved by the Department and EPA.

3. Any person determining the oxygen content by weight of gasoline shall determine the mass concentration of each oxygenate in the sample by one of the following methods:

a. ASTM Method 4815 (Standard Test Method For Determination of C1 to C4 Alcohols and MTBE in Gasoline by Gas Chromatography); or

b. Appendix C to EPA's Notice of Guidelines for Oxygenated Gasoline Credit Programs as amended; or

c. Any other method approved by the Department and EPA.

4. Any person determining the oxygen content by weight of gasoline shall use the oxygen content conversion methodology contained in EPA's Notice of Guidelines for Oxygenated Gasoline Credit Programs as amended.

7.24: continued

TABLE 7.24(7)(c) - 1
SPECIFIC GRAVITY AND WEIGHT FRACTION OXYGEN OF COMMON OXYGENATES

| Oxygenate | Weight Fraction Oxygen | Specific Gravity |
|---|---|---|
| Methyl alcohol | 0.4993 | 0.7963 |
| Ethyl alcohol | 0.3473 | 0.7939 |
| Normal propyl alcohol | 0.2662 | 0.8080 |
| Isopropyl alcohol | 0.2662 | 0.7899 |
| Normal butyl alcohol | 0.2158 | 0.8137 |
| Isobutyl alcohol | 0.2158 | 0.8058 |
| Secondary butyl alcohol | 0.2158 | 0.8114 |
| Tertiary butyl alcohol | 0.2158 | 0.7922 |
| Methyl tertiary butyl ether (MTBE) | 0.1815 | 0.7460 |
| Tertiary amyl methyl ether (TAME) | 0.1566 | 0.7752 |
| Ethyl tertiary butyl ether (ETBE) | 0.1566 | 0.7452 |
| Di-isopropyl ether (DIPE) | 0.1566 | 0.7300 |

(d) Record Keeping.

1. All records and documentation maintained in compliance with 310 CMR 7.24(7)(d)2., 3., and 4. shall be retained on site, or, upon the written agreement from the Department, in a centralized location, for not less than two calendar years, and shall be made available for review upon request of the Department.

2. Any person who owns, leases, operates, or controls a bulk plant or bulk terminal subject to 310 CMR 7.24(7) shall maintain records containing the following information:

a. Results of all compliance testing, including the test method and sampling procedure, and the name and address of the person performing such testing.

b. All transfer documents specified in 310 CMR 7.24(7)(e)1.

3. Any person who owns, leases, operates, or controls a tank truck subject to 310 CMR 7.24(7) shall maintain records containing the following information:

a. All transfer documents specified in 310 CMR 7.24(7)(e)1.

b. All transfer documents specified in 310 CMR 7.24(7)(e)2.

4. Any person who owns, leases, operates, or controls a gasoline marketing facility or motor vehicle fuel dispensing facility subject to 310 CMR 7.00 shall maintain records containing the following information:

All transfer documents specified in 310 CMR 7.24(7)(e)2.

(e) Transfer Documents.

1. Any person who owns, leases, operates, or controls a bulk plant or bulk terminal subject to 310 CMR 7.24(7) shall provide a transfer document for the purposes of documenting each transfer of oxygenated gasoline from said plant or terminal to a subject tank truck. Said transfer document may consist of an invoice, bill of lading, shipping paper or other documentation, and shall include, but need not be limited to, the following information:

a. a statement that the oxygenated gasoline transferred complies with the requirements of 310 CMR 7.24(7)(a)2.;

b. the date and quantity of oxygenated gasoline transferred;

c. the name and address of the person owning, leasing, operating, or controlling said bulk plant or bulk terminal from which oxygenated gasoline is transferred; and

d. The name and address of the person owning, leasing, operating, or controlling said tank truck to which oxygenated gasoline is transferred.

7.24: continued

2. Any person who owns, leases, operates, or controls a tank truck subject to 310 CMR 7.24(7) shall provide a transfer document for the purposes of documenting each transfer of oxygenated gasoline from said tank truck to a subject gasoline marketing facility or motor vehicle fuel dispensing facility. Said transfer document may consist of an invoice, bill of lading or other documentation, and shall include, but need not be limited to, the following information:

a. a statement that the oxygenated gasoline transferred complies with the requirements of 310 CMR 7.24(7)(a)2.;

b. the date and quantity of oxygenated gasoline transferred;

c. the name and address of the person owning, leasing, operating, or controlling said tank truck from which oxygenated gasoline is transferred; and

d. The name and address of the person owning, leasing, operating, or controlling said gasoline marketing facility or motor vehicle fuel dispensing facility to which oxygenated gasoline is transferred.

(f) Dispenser Labeling.

1. Each gasoline marketing facility or motor vehicle fuel dispensing facility subject to 310 CMR 7.24(7)(f) shall permanently affix a label to each gasoline dispensing device as specified in 310 CMR 7.24(7)(f)2..

2. The label shall state the following: "From November 1 through the last day of February, the gasoline dispensed from this pump is oxygenated and will reduce carbon monoxide pollution from motor vehicles."

3. Any label required pursuant to 310 CMR 7.24 shall be:

a. Posted on the upper a, of the pump or dispenser unit face which depicts the volume and cost of gasoline dispensed, such that the label is clear, conspicuous, and easily readable to a driver in the vehicle to which gasoline may be dispensed; and

b. Is clearly legible and in block letters that are:

i. No less than 20-point bold type; and

ii. In a color that contrasts with the background on which they are placed.

(g) Emergency Exemption.

1. In extreme and unusual circumstances, such as a natural disaster or other event outside of the control of the applicant, such that the applicant has an insufficient supply of oxygenated gasoline, and which could not have been avoided by the exercise of prudence, diligence, and due care the Department may approve an application for an emergency exemption if the applicant demonstrates, in writing, to the Department's satisfaction that:

a. the emergency exemption is in the public interest;

b. the applicant has exercised prudent planning and was not able to avoid the insufficient supply of oxygenated gasoline and has taken all reasonable steps to minimize the extent of the insufficient supply of oxygenated gasoline;

c. the applicant can show how the requirements for oxygenated gasoline will be expeditiously met; and

d. the applicant will not incur a financial gain from the granting of such an emergency exemption.

2. The Department may elect to hold a public hearing on any request for an emergency exemption.

3. No person who applies, in writing, for an emergency exemption shall provide, offer for sale, sell, or exchange in trade any gasoline other than oxygenated gasoline during the oxygenated gasoline control period in the oxygenated gasoline control area without the written approval of the Department.

4. An emergency exemption issued by the Department shall not exceed 30 days. Said exemption may be renewed by the Department upon written demonstration of need, consistent with the requirements of 310 CMR 7.24(7)(g).

5. Any person to whom the Department has issued an emergency exemption shall:

a. Only provide, offer for sale, sell, or exchange in trade gasoline with an oxygen content of at least 2% by weight during the oxygenated gasoline control period;

b. Maintain records required by 310 CMR 7.24(7)(d)1. documenting the quantity of gasoline sold or transferred each day; and

7.24: continued

c. Within 30 days of the end of the emergency exemption, submit a report to the Department in writing summarizing the information contained in such records.

(h) The provisions of 310 CMR 7.24(7) may be enforced pursuant to 310 CMR 7.52.

(8) Marine Volatile Organic Liquid Transfer.

(a) Applicability. 310 CMR 7.24(8) applies to any person who owns, leases, operates, or controls a marine terminal or marine tank vessel which:

1. takes part in a loading event which transfers an organic liquid, or in which any liquid is transferred into a marine vessel cargo tank which previously held an organic liquid; or,

2. which performs ballasting or cleaning operations on a cargo tank which previously held organic liquid while the vessel is moored at a dock or other permanent stationary structure.

The provisions of 310 CMR 7.24(8) do not apply to lightering operations.

(b) Reasonably Available Control Technology (RACT) Requirements. On or after May 31, 1995 no person subject to 310 CMR 7.24(8) shall cause, suffer, allow, or permit emissions of volatile organic compounds in excess of the emissions limitations and standards set forth in 310 CMR 7.24(8)(c) through (e).

(c) RACT Emissions Limitations.

1. No person subject to 310 CMR 7.24(8) shall cause, suffer, allow, or permit a loading event while docked at a marine terminal unless:

a. marine tank vessel emissions of volatile organic compounds are limited to two lbs per 1,000 bbls of organic liquid transferred (5.7 grams per cubic meter); or,

b. marine tank vessel emissions of volatile organic compounds are processed by equipment satisfying 310 CMR 7.24(8)(d), and reduced by at least 95% by weight as compared to uncontrolled conditions when using a recovery device, or by at least 98% by weight as compared to uncontrolled conditions when using a combustion device; and,

c. the organic material storage tanks at the marine terminal to be used during the loading event meet the requirements of 310 CMR 7.24(1).

2. Marine tank vessel emissions resulting from ballasting or cleaning of cargo tanks are subject to the emissions limitations of 310 CMR 7.24(8)(c)1. only if emissions capture and control equipment is installed at the marine terminal.

(d) Emissions Capture and Control Equipment Requirements. Any emissions capture and control equipment used to comply with 310 CMR 7.24(8)(c) shall be designed and operated to collect and control volatile organic compound emissions from the loading of organic liquids into marine tank vessels or from ballasting and cleaning cargo tanks which previously held an organic liquid.

(e) Equipment Performance Standards.

1. No person subject to 310 CMR 7.24(8) shall cause, suffer, allow, or permit a loading event unless the marine tank vessel is vapor tight or the tank vessel is loaded at less than atmospheric pressure.

2. Marine tank vessels shall be demonstrated to be vapor tight by one of the following:

a. present a copy of the vapor-tightness pressure test documentation for the marine tank vessel prior to loading. The date listed on the documentation must be within the 12 months preceding the date of demonstration, and the test must be conducted in accordance with the procedures specified in Section 63.565(c)(1) of 40 CFR Part 63, Subpart Y; or

b. present a copy of the vapor-tightness leak test documentation for the marine tank vessel prior to loading. The date listed on the documentation must be within the 12 months preceding the date of demonstration, and the test must be conducted in accordance with the procedures in Method 21 of 40 CFR Part 60 Appendix A; or

c. perform a leak test during the loading event in accordance with the procedures in Method 21 of 40 CFR Part 60 Appendix A.

7.24: continued

(f) Plan Submittal Requirements. Any person subject to 310 CMR 7.24(8) must submit an emission control plan for approval by the Department which satisfies the requirements of 310 CMR 7.18(20)(c). This provision does not apply to any person who is subject to 310 CMR 7.24(8), and who has received written approval from the Department under 310 CMR 7.02, 310 CMR 7.18(17), or 310 CMR 7.18(20) for emission capture and control equipment which satisfies the requirements of 310 CMR 7.24(8).

(g) Recordkeeping Requirements. Any person subject to 310 CMR 7.24(8) shall prepare and maintain records regarding each loading event sufficient to demonstrate compliance with 310 CMR 7.24(8)(c) through (e). Records kept to demonstrate compliance shall be kept on site for five years and shall be made available to representatives of the Department or EPA. Such records shall include, but are not limited to:

1. The name and location of the marine terminal at which the loading event occurred.
2. The company responsible for the operation of the marine terminal.
3. The date(s) and times at which the marine tank vessel arrived and departed from the marine terminal.
4. The name, registry, and owner of the marine tank vessel.
5. The prior cargo carried by the marine tank vessel.
6. The type and amount of organic liquid loaded into the tank vessel.
7. The condition of the tanks prior to being loaded (*e.g.*, cleaned, gas freed, *etc*).
8. Description of the operating procedure used to control emissions while ballasting into unsegregated ballast tanks (associated with unloading or other events).
9. Any testing performed during loading.
10. Any leaks detected and the repair action taken.

(h) Testing Requirements.

1. Any person subject to 310 CMR 7.24(8) who owns or operates a marine terminal shall, upon startup of the emission control equipment, conduct initial performance tests to demonstrate compliance with 310 CMR 7.24(8). Testing shall be conducted in accordance with EPA Method 21 and Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

(i) Monitoring Requirements. Any person subject to 310 CMR 7.24(8) who installs and operates emission control equipment to meet the emission limitations in 310 CMR 7.24(8)(c) must monitor the emission control equipment in accordance with the procedures specified in Sections 63.564 (e) through (j) of 40 CFR 63 Subpart Y.

7.24: continued

2. Any person subject to 310 CMR 7.24(8) who owns or operates a marine terminal shall, upon the request of the Department, conduct tests of the emission control equipment, to demonstrate compliance with 310 CMR 7.24(8). Testing shall be conducted in accordance with EPA Method 21 and Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

3. The owner or operator of any marine terminal shall notify the Department in writing of the date of any test to demonstrate compliance with the emission limitations of 7.24(8)(c)1. at least 30 days in advance of that date. Testing results shall be submitted to the Department within 30 days of completion of the test. Testing results shall also be maintained at the marine terminal for a period of five years.

7.25: U Best Available Controls for Consumer and Commercial Products

(1) Purpose. 310 CMR 7.25 applies to and sets forth requirements for the control of volatile organic compound emissions from the use of consumer and commercial products as defined in Title I Part D Subpart 2 Section 183(e)(1)(B) of the federal Clean Air Act.

[(2) through (10): Reserved]

(11) Architectural and Industrial Maintenance (AIM) Coatings.

(a) Applicability.

1. Except as provided in 310 CMR 7.25(11)(a)2., the requirements of 310 CMR 7.25(11) apply to any person who, on or after January 1, 2009, supplies, sells, offers for sale, blends for sale, or manufactures any architectural coating listed in 310 CMR 7.25(11)(b) for use within Massachusetts, as well as any person who applies or solicits the application of any architectural coating within Massachusetts.

2. The provisions of 310 CMR 7.25(11) do not apply to any person who supplies, sells, offers for sale, blends for sale, or manufactures any architectural coating that is for exclusive use outside of Massachusetts.

(b) Definitions. Terms used in 310 CMR 7.25 are defined at 310 CMR 7.00: *Definitions* or in 310 CMR 7.25. Where a term is defined in both 310 CMR 7.00: *Definitions* and in 310 CMR 7.25, the definition in 310 CMR 7.25 shall apply.

AEROSOL COATING PRODUCT means an aerosol coating product containing pigments or resins that is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground traffic/marking applications.

ANTENNA COATING means a coating labeled and formulated exclusively for application to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals.

ANTIFOULING COATING means a coating labeled and formulated for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms. To qualify as an antifouling coating, the coating must be registered with both the U.S. EPA under the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. § 136 *et seq*.) and with the under the Massachusetts Pesticide Control Act.

APPURTENANCE means any accessory to a stationary structure coated at the site of installation, whether installed or detached, including but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lampposts; partitions, pipes and piping systems; rain gutters and downspouts; stairways; fixed ladders; catwalks and fire escapes; and window screens.

ARCHITECTURAL COATING means a coating to be applied to stationary structures or the appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to nonstationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings for the purposes of 310 CMR 7.25.

7.25: continued

ASTM means the American Society for Testing and Materials.

BAAQMD means Bay Area Air Quality Management District of the State of California.

BITUMENS means black or brown materials including, but not limited to, asphalt, tar, pitch, and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons, and are obtained from natural deposits or as residues from the distillation of crude petroleum or coal.

BITUMINOUS ROOF COATING means a coating that incorporates bitumens that is labeled and formulated exclusively for roofing.

BITUMINOUS ROOF PRIMER means a primer that incorporates bitumens that is labeled and formulated exclusively for roofing.

BOND BREAKER means a coating labeled and formulated for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured.

CALCIMINE RECOATER means a flat solvent-borne coating formulated and recommended specifically for recoating calcimine-painted ceilings and other calcimine-painted substrates.

CARB means the California Air Resources Board.

CLEAR BRUSHING LACQUERS means clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid, protective film, which are intended exclusively for application by brush and which are labeled as specified in 310 CMR 7.25(11)(d)3.

CLEAR WOOD COATINGS means clear and semi-transparent coatings, including lacquers and varnishes, applied to wood substrates to provide a transparent or translucent solid film.

COATING means a material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, and stains.

COLORANT means a concentrated pigment dispersion in water, solvent, and/or binder that is added to an architectural coating after packaging in sale units to produce the desired color.

CONCRETE CURING COMPOUND means a coating labeled and formulated for application to freshly poured concrete to retard the evaporation of water.

CONCRETE SURFACE RETARDER means a mixture of retarding ingredients such as extender pigments, primary pigments, resin, and solvent that interact chemically with the cement to prevent hardening on the surface where the retarder is applied, allowing the retarded mix of cement and sand at the surface to be washed away to create an exposed aggregate finish.

CONSUMER means any person who purchases or acquires any product for personal, family, household, or institutional use. Persons acquiring a product for resale are not consumers for that product.

CONVERSION VARNISH means a clear acid curing coating with an alkyd or other resin blended with amino resins and supplied as a single component or two-component product. Conversion varnishes produce a hard, durable, clear finish designed for professional application to wood flooring. The film formation is the result of an acid-catalyzed condensation reaction, affecting a transetherification at the reactive ethers of the amino resins.

DATE-CODE means the day, month and year on which the product was manufactured, filled, or packaged, or a code indicating such a date.

7.25: continued

DRY FOG COATING means a coating labeled and formulated only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.

EXEMPT COMPOUND a compound identified as exempt under the definition of Volatile Organic Compound (VOC), under 310 CMR 7.25(11)(b). Exempt compounds content of a coating shall be determined by U.S. EPA Method 24 or South Coast Air Quality Management District (SCAQMD) Method 303-91 (Revised August 1996).

FAUX FINISHING COATING means a coating labeled and formulated as a stain or a glaze to create artistic effects including, but not limited to, dirt, old age, smoke damage, and simulated marble and wood grain.

FIRE-RESISTIVE COATING means an opaque coating labeled and formulated to protect structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials, that has been fire tested and rated by a testing agency and approved by building code officials for use in bringing assemblies of structural materials into compliance with federal, state, and local building code requirements. The fire-resistive coating and the testing agency shall have been approved by building code officials. The fire-resistive coating shall be tested in accordance with ASTM Designation E 119-98.

FIRE-RETARDANT COATING means a coating labeled and formulated to retard ignition and flame spread, that has been fire tested and rated by a testing agency approved by building code officials for use in bringing building and construction materials into compliance with federal, state, and local building code requirements. Building code officials shall have been approved the fire-retardant coating and the testing agency. The fire-retardant coating shall be tested in accordance with ASTM Designation E 84-99.

FLAT COATING means a coating that is not defined under any other definition in 310 CMR 7.25 and that registers gloss less than 15 on an 85° meter or less than five on a 60° meter according to ASTM Designation D 523-89 (1999).

FLOOR COATING means an opaque coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, and other horizontal surfaces that may be subjected to foot traffic.

FLOW COATING means a coating labeled and formulated exclusively for use by electric power companies or their subcontractors to maintain the protective coating systems present on utility transformer units.

HIGH-TEMPERATURE COATING means a high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 204˚C.

IMPACTED IMMERSION COATING means a high performance maintenance coating formulated and recommended for application to steel structures subject to immersion in turbulent, debris-laden water. These coatings are specifically resistant to high-energy impact damage caused by floating ice or debris.

INDUSTRIAL MAINTENANCE COATING means high performance architectural coating, including primers, sealers, undercoaters, intermediate coats, and topcoats, formulated for application to substrates exposed to one or more of the following extreme environmental conditions listed in a. through e., and labeled as specified in 310 CMR 7.25(11)(d)2.:

(a) Immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposures of interior surfaces to moisture condensation;

(b) Acute or chronic exposure to corrosive, caustic, or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;

(c) Repeated exposure to temperatures above 121˚C (250˚F);

(d) Repeated heavy abrasion, including mechanical wear and frequently repeated scrubbing with industrial solvents, cleansers, or scouring agents; or

(e) Exterior exposure of metal structures and structural components.

7.25: continued

LABEL means any written, printed, or graphic matter affixed to, applied to, attached to, blown into, formed, molded into, embossed on, or appearing upon any product or product package, for purposes of branding, identifying, or giving information with respect to the product or to the contents of the package.

LACQUER means a clear or opaque wood coating, including clear lacquer sanding sealers, formulated with cellulosic or synthetic resins to dry by evaporation without chemical reaction and to provide a solid, protective film.

LOW-SOLIDS COATING means a coating containing 0.12 kilogram or less of solids per liter (one pound or less of solids per gallon) of coating material.

LUBRICANT means a product designed to reduce friction, heat, noise, or wear between moving parts, or to loosen rusted or immovable parts or mechanisms. Lubricant does not include automotive power steering fluids; products for use inside power generating motors, engines, and turbines, and their associated power-transfer gearboxes; two-cycle oils or other products designed to be added to fuels; products for use on the human body or animals or products that are sold exclusively to establishments that manufacture or construct goods or commodities, and labeled not for retail sale.

MAGNESITE CEMENT COATING means a coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

MANUFACTURER means any person who manufactures, processes, imports, assembles, produces, packages, repackages, or re-labels a product.

MANUFACTURERS MAXIMUM RECOMMENDATION means the maximum recommenda-tion for thinning that is indicated on the label or lid of the coating container.

MASTIC TEXTURE COATING means a coating labeled and formulated to cover holes and minor cracks and to conceal surface irregularities, and is applied in a single coat of at least ten mils (0.010 inch) dry film thickness.

METALLIC PIGMENTED COATING means a coating containing at least 48 grams of elemental metallic pigment per liter of coating as applied (0.4 pounds per gallon) when tested in accordance with SCAQMD Method 318-95.

MULTI-COLOR COATING means a coating that is packaged in a single container and that exhibits more than one color when applied in a single coat.

NON-FLAT HIGH GLOSS COATING means a non-flat coating that registers a gloss of 70 or above on a 60° meter according to ASTM Designation D 523-89 (1999).

NON-FLAT COATING means a coating that is not defined under any other definition in 310 CMR 7.25(11)(b) and that registers a gloss of 15 or greater on an 85° meter and five or greater on a 60° meter according to ASTM Designation D 523-89 (1999).

NON-INDUSTRIAL USE means any use of architectural coatings except in the construction or maintenance of any of the following: facilities used in the manufacturing of goods and commodities; transportation infrastructure, including highways, bridges, airports and railroads; facilities used in mining activities, including petroleum extraction; and utilities infrastructure, including power generation and distribution, and water treatment and distribution systems.

NUCLEAR COATING means a protective coating formulated and recommended to seal porous surfaces such as steel or concrete that otherwise would be subject to intrusion by radioactive materials. These coatings must be resistant to long-term, *e.g.*, service life, cumulative radiation exposure (tested according to ASTM Method D 4082-89, *Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants*), relatively easy to decontaminate, and resistant to various chemicals to which the coatings are likely to be exposed (Tested according to ASTM Method D 3912-80, Reapproved 1989, *Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants*.

7.25: continued

PESTICIDE means and includes any substance or mixture of substances labeled, designed, or intended for use in preventing, destroying, repelling or mitigating any pest, or any substance or mixture of substances labeled, designed, or intended for use as a defoliant, desiccant, or plant regulator, provided that the term "pesticide" does not include any substance, mixture of substances, or device that the U.S. EPA does not consider to be a pesticide.

POST-CONSUMER COATING means a finished coating that would have been disposed of as waste, having completed its usefulness to a consumer, and does not include manufacturing wastes.

PRE-TREATMENT WASH PRIMER means a primer that contains a minimum of 0.5% acid, by weight, when tested in accordance with ASTM Designation D 1613-96, and that is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.

PRIMER means a coating labeled and formulated for application to a substrate to provide a firm bond between the substrate and subsequent coats.

QUICK-DRY ENAMEL means non-flat coating that is labeled as specified in 310 CMR 7.25(11)(d)6. and that is formulated to have the following characteristics:

(a) Is capable of being applied directly from the container under normal conditions with ambient temperatures between 16˚C and 27˚C;

(b) When tested in accordance with ASTM Designation D 1640-95, sets to touch in two hours or less, is tack free in four hours or less, and dries hard in eight hours or less by the mechanical test method; and

(c) Has a dried film gloss of 70 or above on a 60° meter.

QUICK-DRY PRIMER SEALER AND UNDERCOATER mean a primer, sealer, or undercoater that is dry to the touch in 30 minutes and can be re-coated in two hours when tested in accordance with ASTM Designation D 1640-95.

RECYCLED COATING means an architectural coating formulated such that 50% or more of the total weight consists of secondary and post-consumer coating, with 10% or more of the total weight consisting of post-consumer coating.

RESIDENCE means areas where people reside or lodge, including, but not limited to, single and multiple family dwellings, condominiums, mobile homes, apartment complexes, motels, and hotels.

ROOF COATING means a non-bituminous coating labeled and formulated exclusively for application to roofs for the primary purpose of preventing penetration of the substrate by water or reflecting heat and ultraviolet radiation. Metallic pigmented roof coatings, which qualify as metallic pigmented coatings, shall not be considered in this category, but shall be considered to be in the Metallic Pigmented Coatings category.

RUST PREVENTIVE COATING means a coating formulated exclusively for non-industrial use to prevent the corrosion of metal surfaces and labeled as specified in 310 CMR 7.25(11)(d)4.

SANDING SEALER means a clear or semi-transparent wood coating labeled and formulated for application to bare wood to seal the wood and to provide a coat that can be abraded to create a smooth surface for subsequent applications of coatings. A Sanding Sealer that also meets the definition of a Lacquer is not included in this category, but it is included in the Lacquer category.

SCAQMD means South Coast Air Quality Management District of the State of California.

SEALER means a coating labeled and formulated for application to a substrate for one or more of the following purposes: to prevent subsequent coatings from being absorbed by the substrate, or to prevent harm to subsequent coatings by materials in the substrate.

7.25: continued

SECONDARY COATING (REWORK) means a fragment of a finished coating or a finished coating from a manufacturing process that has converted resources into a commodity of real economic value, but does not include excess virgin resources of the manufacturing process.

SHELLAC means a clear or opaque coating formulated solely with the resinous secretions of the lac beetle (Laciffer lacca), thinned with alcohol, and formulated to dry by evaporation without a chemical reaction.

SHOP APPLICATION means application of a coating to a product or a component of a product in or on the premises of a factory or a shop as part of a manufacturing, production, or repairing process (*e.g.*, original equipment manufacturing coatings).

SOLICIT means to require for use or to specify, by written or oral contract.

SPECIALTY PRIMER, SEALER, AND UNDERCOATER means a coating that is formulated for application to a substrate to seal fire, smoke or water damage; to condition excessively chalky surfaces; or to block stains. An excessively chalky surface is one that is defined as having a chalk rating of four or less as determined by ASTM Designation D 4214-98.

STAIN means a clear, semi-transparent, or opaque coating labeled and formulated to change the color of a surface, but not conceal the grain pattern or texture.

SWIMMING POOL COATING means a coating labeled and formulated to coat the interior of swimming pools and to resist the adverse effects of chemicals in swimming pool water.

SWIMMING POOL REPAIR AND MAINTENANCE COATING means a rubber-based coating labeled and formulated to be used over existing rubber-based coatings for the repair and maintenance of swimming pools.

TEMPERATURE-INDICATOR SAFETY COATING means a coating labeled and formulated as a color-changing indicator coating for the purpose of monitoring the temperature and safety of the substrate, underlying piping, or underlying equipment, and for application to substrates exposed continuously or intermittently to temperatures above 204˚C (400˚F).

THERMOPLASTIC RUBBER COATING AND MASTIC means a coating or mastic formulated and recommended for application to roofing or other structural surfaces and that incorporates no less than 40% by weight of thermoplastic rubbers in the total resin solids and may also contain other ingredients including, but not limited to, fillers, pigments, and modifying resins.

TINT BASE means an architectural coating to which colorant is added after packaging in sale units to produce a desired color.

TRAFFIC MARKING COATING means a coating labeled and formulated for marking and striping streets, highways, or other traffic surfaces including, but not limited to, curbs, driveways, parking lots, sidewalks, and airport runways.

UNDERCOATER means a coating labeled and formulated to provide a smooth surface for subsequent coatings.

VARNISH means a clear or semi-transparent wood coating, excluding lacquers and shellacs, formulated to dry by chemical reaction on exposure to air. Varnishes may contain small amounts of pigment to color a surface, or to control the final sheen or gloss of the finish.

VOC CONTENT means the weight of VOC per volume of coating, calculated according to the procedures specified in 310 CMR 7.25(11)(f)1.

WATERPROOFING CONCRETE/MASONRY SEALER means a clear or pigmented film-forming coating that is labeled and formulated for sealing concrete and masonry to provide resistance against water, alkalis, acids, ultraviolet light, and staining.

7.25: continued

WATERPROOFING SEALER means a coating labeled and formulated for application to a porous substrate for the primary purpose of preventing the penetration of water.

WOOD PRESERVATIVE means a coating labeled and formulated to protect exposed wood from decay or insect attack that is registered with both the U.S. EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. § 136, *et seq.*) and with the Massachusetts Pesticide Control Act.

(c) Standards.

1. VOC Content Limits. Except as provided in 310 CMR 7.25(11)(c)2. through 310 CMR 7.25(11)(c)4., 310 CMR 7.25(11)(c)6., and 310 CMR 7.25(11)(c)7., no person subject to 310 CMR 7.25 shall:

a. manufacture or blend for sale within Massachusetts;

b. supply, sell, or offer for sale within Massachusetts; or

c. solicit for application or apply within Massachusetts any architectural coating with a VOC content in excess of the corresponding limit specified in 310 CMR 7.25(11)(c)1.: *Table 1*.

Table 1. VOC Content Limits for Architectural And Industrial Maintenance Coatings
Effective January 1, 2009

| Coating Category | VOC Content Limit (grams/liter) |
|---|---|
| Flat Coatings | 100 |
| Non-flat Coatings | 150 |
| Non-flat High Gloss Coatings | 250 |
| SPECIALTY COATINGS | |
| Antenna Coatings | 530 |
| Antifouling Coatings | 400 |
| Bituminous Roof Coatings | 300 |
| Bituminous Roof Primers | 350 |
| Bond Breakers | 350 |
| Calcimine Recoater | 475 |
| Clear Wood Coatings | |
| Clear Brushing Lacquers | 680 |
| Lacquers (including lacquer sanding sealers) | 550 |
| Sanding Sealers (other than lacquer sanding sealers) | 350 |
| Varnishes | 350 |
| Conversion Varnishes | 725 |
| Concrete Curing Compounds | 350 |
| Concrete Surface Retarders | 780 |
| Dry Fog Coatings | 400 |
| Faux Finishing Coatings | 350 |
| Fire Resistive Coatings | 350 |
| Fire Retardant Coatings | |
| Clear | 650 |
| Opaque | 350 |
| Floor Coatings | 250 |
| Flow Coatings | 420 |
| Form-release Compounds | 250 |
| Graphic Arts Coatings (Sign Paints) | 500 |
| High Temperature Coatings | 420 |
| Impacted Immersion Coatings | 780 |
| Industrial Maintenance Coatings | 340 |
| Low-solids Coatings | 120 |
| Magnesite Cement Coatings | 450 |
| Mastic Texture Coatings | 300 |
| Metallic Pigmented Coatings | 500 |
| Multi-color Coatings | 250 |

7.25: continued

| Coating Category | VOC Content Limit (grams/liter) |
|---|---|
| Nuclear Coatings | 450 |
| Pre Treatment Wash Primers | 420 |
| Primers, Sealers, and Undercoaters | 200 |
| Quick Dry Enamels | 250 |
| Quick Dry Primers, Sealers and Undercoaters | 200 |
| Recycled Coatings | 250 |
| Roof Coatings | 250 |
| Rust Preventative Coatings | 400 |
| Shellacs | |
| Clear | 730 |
| Opaque | 550 |
| Specialty Primers, Sealers, and Undercoaters | 350 |
| Stains | 250 |
| Swimming Pool Coatings | 340 |
| Swimming Pool Repair and Maintenance Coatings | 340 |
| Temperature-indicator Safety Coatings | 550 |
| Thermoplastic Rubber Coatings and Mastics | 550 |
| Traffic Marking Coatings | 150 |
| Waterproofing Sealers | 250 |
| Waterproofing Concrete/Masonry Sealers | 400 |
| Wood Preservatives | 350 |

Limits are expressed in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water, exempt compounds, or colorant added to tint bases.

2. Most Restrictive VOC Limit. If anywhere on the container of any architectural coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on its behalf, any representation is made that indicates that the coating meets the definition of, or is recommended for use, for more than one of the coating categories specified in 310 CMR 7.25(11)(c)1., then the lowest VOC content limit shall apply. 310 CMR 7.25(11)(c)2. does not apply to the following coating categories:

a. Lacquer coatings (including lacquer sanding sealers).
b. Metallic pigmented coatings.
c. Shellacs.
d. Fire-retardant coatings.
e. Pretreatment wash primers.
f. Industrial maintenance coatings.
g. Low-solids coatings.
h. Wood preservatives.
i. High-temperature coatings.
j. Temperature-indicator safety coatings.
k. Antenna coatings.
l. Antifouling coatings.
m. Flow coatings.
n. Bituminous roof primers.
o. Specialty primers, sealers, and undercoaters.
p. Calcimine recoaters.
q. Concrete surface retarders.
r. Conversion varnishes.
s. Impacted Immersion Coatings.
t Nuclear coatings.
u. Thermoplastic rubber coating and mastic.

3. Sell-through of Coatings. A coating manufactured prior to January 1, 2009, may be sold, supplied, offered for sale, or applied after January 1, 2009, until January 1, 2012, so long as the coating complied with the VOC content standards and other applicable requirements in effect at the time the coating was manufactured. 310 CMR 7.25(11)(c)3. shall not apply if:

7.25: continued

a. A coating does not display the date on which the product was manufactured or a code indicating such date as required by 310 CMR 7.25(11)(d)1.a.i.; or

b. The manufacturer has not filed an explanation of the code with the Department by the deadlines specified in 310 CMR 7.25(11)(d)1.a.ii.(i) for a coating on which the manufacturer has used a code indicating the date of manufacture that is different than the code specified in 310 CMR 7.25(11)(d)1.a.ii.(ii).

4. Exclusions. The VOC content standards specified in 310 CMR 7.25(11)(c)1. shall not apply to:

a. Any aerosol coating product.

b. Any architectural coating that is sold in a container with a volume of one liter (1.057 quart) or less.

5. Coatings Not Listed in 310 CMR 7.25(11)(c)1.: *Table 1*. For any coating that does not meet any of the definitions for the specialty coatings categories listed in 310 CMR 7.25(11)(c)1.: *Table 1*, the VOC content limit shall be determined by classifying the coating as a flat coating, non-flat coating, or non-flat high gloss coating based on its gloss, as defined in 310 CMR 7.25(11)(b), and the corresponding flat, non-flat, or non-flat high gloss coating limit shall apply.

6. Lacquers. Notwithstanding the provisions of 7.25(11)(c)1., a person or facility may add up to 10% by volume of VOC to a lacquer to avoid blushing of the finish during days with relative humidity greater than 70% and temperature below 65˚F, at the time of application, provided that the coating contains acetone and no more than 550 grams of VOC per liter of coating, less water and exempt compounds, prior to the addition of VOC.

7. Products Registered Under FIFRA.

a. AIM coatings registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA; 7 U.S.C. § 136-136y) must comply with the VOC standards specified in 310 CMR 7.25(11)(c)1.: *Table 1*, by 12 months after the VOC limit compliance date specified in 310 CMR 7.25(11)(c)1. Such products must also be registered under the Massachusetts Pesticide Control Act.

b. The labeling requirements of 310 CMR 7.25(11)(d) do not apply to products that are registered as pesticides under FIFRA and the Massachusetts Pesticide Control Act.

c. For coatings that are registered under FIFRA, the three-year sell-through period provided in 310 CMR 7.25(11)(c)3. shall begin one year after the date specified in 310 CMR 7.25(11)(c)1.

8. Thinning. No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in Table 1.

9. Painting Practices. All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging, or other means, shall be closed when not in use. These architectural coatings containers include, but are not limited to, drums, buckets, cans, pails, trays, or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use.

(d) Labeling Requirements.

1. Each manufacturer of any architectural coating subject to this rule shall display the information required in 310 CMR 7.25(11)(d)1.a. through 7.25(11)(d)1.c. on the coating container (or label) in which the coating is sold or distributed.

a. Product Dating.

i. The date the coating was manufactured, or a code representing the date, shall be indicated on the label, lid, or bottom of the container.

ii. Explanation of the Code.

(i) If the manufacturer uses a code indicating the date of manufacture for any coating, an explanation of the code shall be filed with the Department no later than:

- the effective date of the applicable standard specified in 310 CMR 7.25(11)(c)1.; or, the date on which the product first becomes available for sale, distribution, or use within Massachusetts, whichever is later; and
- 12 months prior to any date on which the product first becomes available for sale, distribution, or use within Massachusetts after any modification to an existing product's date-code format.

7.25: continued

(ii) A manufacturer who uses the following code to indicate the date of manufacture shall not be subject to the requirements of 310 CMR 7.25(11)(d)1.a.ii.(i), if the code is represented separately from other codes on the product container so that it is easily recognizable:

YY DDD

where:

YY = two digits representing the year in which the product was manufactured.

DDD = three digits representing the day of the year on which the product was manufactured, with “001” representing the first day of the year, “002” representing the second day of the year, and so forth (*i.e.*, the “Julian date”).

iii. No person shall erase, alter, deface or otherwise remove or make illegible any date or code indicating the date of manufacture from any regulated product container without the express authorization of the manufacturer.

iv. Codes indicating the date of manufacture are public information and may not be claimed as confidential.

b. Thinning Recommendations. A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. 310 CMR 7.25(11)(d)1.b. does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating must be applied without thinning.

c. VOC Content. Each container of any coating subject to this rule shall display either the maximum or the actual VOC content of the coating, as supplied, including the maximum thinning as recommended by the manufacturer. VOC content shall be displayed in grams of VOC per liter of coating. VOC content displayed shall be calculated using product formulation data, or shall be determined using the test methods in 310 CMR 7.25(11)(f)2. The equations in 310 CMR 7.25(11)(f)1. shall be used to calculate VOC content.

2. Industrial Maintenance Coatings. In addition to the information specified in 310 CMR 7.25(11)(d)1.a. through 310 CMR 7.25(11)(d)1.c., each manufacturer of any industrial maintenance coating subject to this rule shall display on the label or the lid of the container in which the coating is sold or distributed one or more of the following descriptions:

a. “For industrial use only."
b. "For professional use only."
c. "Not for residential use." or “Not intended for residential use.”

3. Clear Brushing Lacquers. The labels of all clear brushing lacquers shall prominently display the statements "For Brush Application Only" and "This product must not be thinned or sprayed."

4. Rust Preventive Coatings. The labels of all rust preventive coatings shall prominently display the statement "For Metal Substrates Only."

5. Specialty Primers, Sealers, and Undercoaters. The labels of all specialty primers, sealers, and undercoaters shall prominently display one or more of the following descriptions:

a. For blocking stains.
b. For fire-damaged substrates.
c. For smoke-damaged substrates.
d. For water-damaged substrates.
e. For excessively chalky substrates.

6. Quick Dry Enamels. The labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time.

7. Non-flat High Gloss Coatings. The labels of all non-flat high gloss coatings shall prominently display the words "High Gloss."

7.25: continued

(e) Recordkeeping and Reporting Requirements.

1. Each manufacturer of a product subject to a VOC content limit in 310 CMR 7.25(11)(c) of this regulation shall keep records demonstrating compliance with the VOC content limits in accordance with 310 CMR 7.25(11)(f). Such records shall clearly list each product by name (and identifying number, if applicable) as shown on the product label and in applicable sales and technical literature, the VOC content as determined in 310 CMR 7.25(11)(f), the names and chemical abstract service (CAS) numbers of the VOC constituents in the product, the dates of the VOC content determinations, the coating category and the applicable VOC content limit. These records shall be kept on site for a period not less than three years and shall be made available to the Department within 90 days of a written request.

2. A responsible official from each manufacturer shall, upon request of the Department, provide data concerning the distribution and sales of coatings subject to a VOC content limit in 310 CMR 7.25(11)(c). The responsible official shall within 90 days provide information including, but not limited to:

a. the name and mailing address of the manufacturer;

b. the name, address and telephone number of a contact person;

c. the name of the product as it appears on the label and the coating category in 310 CMR 7.25(11)(c) under which it is regulated;

d. whether it is marketed for interior or exterior use or both;

e. the number of gallons sold in Massachusetts in containers greater than one liter and less than one liter;

f. the actual VOC content and VOC content limit in grams per liter. If thinning is recommended, list the actual VOC content and VOC content after recommended thinning. If containers less than one liter have a different VOC content than containers greater than one liter, list separately;

g. the names and CAS numbers of the VOC constituents in the product; and

h. the names and CAS numbers of any compounds in the products specifically exempted under 310 CMR 7.25(11)(c).

(f) Compliance Provisions and Test Methods.

1. Calculation of VOC Content. For the purpose of determining compliance with the VOC content limits in 310 CMR 7.25(11)(c)1.: *Table 1*, the VOC content of a coating shall be determined according to 310 CMR 7.25(11)(f)1.a. or 310 CMR 7.25(11)(f)1.b., as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured.

a. For all coatings other than low-solids coatings, the VOC content of the coating in units of grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water and exempt compounds, shall be determined using Equation (1) as follows:

$$\text{VOC Content} = (W_v - W_w - W_{ec}) / (V_c - V_w - V_{ec}) \qquad \text{Equation (1)}$$

Where,

VOC Content = grams of VOC per liter of coating

$W_v$ = weight of volatiles, in grams

$W_w$ = weight of water, in grams

$W_{ec}$ = weight of exempt compounds, in grams

$V_c$ = volume of coating, in liters

$V_w$ = volume of water, in liters

$V_{ec}$ = volume of exempt compounds, in liters

7.25: continued

b. For low-solids coatings, the VOC content in units of grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, including the volume of any water and exempt compounds, shall be determined using Equation (2) as follows:

$$\text{VOC Content (ls)} = (W_v - W_w - W_{ec}) / (V_c) \qquad \text{Equation (2)}$$

where,

VOC Content (ls) = the VOC content of a low solids coating in grams per liter of coating

W = weight of volatile, in grams

$W_w$ = weight of water, in grams

$W_{ec}$ = weight of exempt compounds, in grams

$V_c$ = volume of coating, in liters

2. VOC Content of Coatings. Except as provided in 310 CMR 7.25(11)(f)3. and (f)4., U.S. EPA Method 24 shall be used to determine the physical properties of a coating in order to perform the calculations in 310 CMR 7.25(11)(f)1. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised February 1996). The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised August 1996). The manufacturer may use U.S. EPA Method 24, an alternative test method as provided in 310 CMR 7.25(11)(f)3., formulation data, or any other reasonable means (*e.g.*, quality assurance records, recordkeeping) to determine the VOC content of the coating. However, if there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC content, the Method 24 results shall govern, except when an alternative method is approved by EPA. The Department may require the manufacturer to conduct a Method 24 analysis.

3. Alternative Test Methods. Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with 310 CMR 7.25(11)(c)1. may be used provided that the manufacturer has received an approval from CARB for the alternative testing method to be used in architectural and maintenance coatings VOC content determination. A copy of CARB's approval, including all conditions established by CARB applicable to the testing procedure, shall be submitted to the Department within 30 days upon the Department's written request.

4. Methacrylate Traffic Coating Markings. Analysis of methacrylate multi-component coatings used as traffic marking coatings shall be conducted according to a modification of U.S. EPA Method 24 (40 CFR 59, subpart D, Appendix A). This method has not been approved for methacrylate multicomponent coatings used for purposes other than traffic marking coatings or for other classes of multicomponent coatings.

5. Test Methods. The following test methods are incorporated by reference herein, and shall be used to test coatings subject to the provisions of this rule:

a. Flame Spread Index. The flame-spread index of a fire-retardant coating shall be determined by the ASTM Designation E 84-99, *Standard Test Method for Surface Burning Characteristics of Building Materials*.

b. Fire-resistance Rating. The fire-resistance rating of a fire-resistive coating shall be determined by ASTM designation E 119-98, *Standard Test Methods for Fire Tests of Building Construction Materials*

c. Gloss Determination. The gloss of a coating shall be determined by ASTM Designation D 523-89 (1999), *Standard Test Method for Specular Gloss*.

d. Metal Content of Coatings. The metallic content of a coating shall be determined by SCAQMD Method 318-95, *Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction*, SCAQMD *Laboratory Methods of Analysis for Enforcement Samples*.

7.25: continued

e. Acid Content of Coatings. The acid content of a coating shall be determined by ASTM Designation D 1613-96, *Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and Related Products.*

f. Drying Times. The set-to-touch, dry-hard, dry-to-touch and dry-to-recoat times of a coating shall be determined by ASTM Designation D 1640-95, *Standard Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature*. The tack free time of a quick-dry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D 1640-95.

g. Surface Chalkiness. The chalkiness of a surface shall be determined using ASTM Designation D 4214-98, *Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films*.

h. Exempt Compounds – Siloxanes. To determine the cyclic, branched, or linear completely methylated siloxanes content of a coating, the coating shall be analyzed according to BAAQMD Method 43, *Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials*, BAAQMD Manual of Procedures, Volume III, adopted November 6, 1996.

i. Exempt Compounds - Parachlorobenzotrifluoride (PCBTF). To determine parachlorobenzotrifluoride content of a coating, the coating shall be analyzed according to BAAQMD Method 41, *Determination of Volatile Organic Compounds in Solvent-Based Coatings and Related Materials Containing Parachlorobenzotrifluoride*, BAAQMD Manual of Procedures, Volume III, adopted December 20, 1995.

j. Exempt Compounds – Volatile Organic Compounds Exempted Under U.S. EPA Method 24. To determine the composition of a coating with respect to volatile organic compounds that are exempt under U.S. EPA Method 24, the coating shall be analyzed according to SCAQMD Method 303-91 (Revised August 1996), *Determination of Exempt Compounds*, SCAQMD "Laboratory Methods of Analysis for Enforcement Samples."

k. VOC Content of Coatings. The VOC content of a coating shall be determined by U.S. EPA Method 24 as it exists in appendix A of 40 Code of Federal Regulations (CFR) Part 60, *Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings*.

l. Alternative Methods for Determining VOC Content of Coatings. The VOC content of coatings may be determined by either U.S. EPA Method 24 or by SCAQMD Method 304-91 (Revised 1996), *Determination of Volatile Organic Compounds (VOC) in Various Materials,* SCAQMD *Laboratory Methods of Analysis for Enforcement Samples*.

m. Methacrylate Traffic Marking Coatings. The VOC content of methacrylate multi-component coatings used as traffic marking coatings shall be determined by the procedures in 40 CFR part 59, subpart D, appendix A, *Determination of Volatile Matter Content of Methacrylate Multi-component Coatings Used as Traffic Marking Coatings*, (September 11, 1998).

(12) Consumer Products.

(a) Applicability.

1. Except as provided in 310 CMR 7.25(12)(a)2., the requirements of 310 CMR 7.25(12) apply to any person who, on or after January 1, 2009, sells, supplies, offers for sale, or manufactures any consumer product listed in 310 CMR 7.25(12)(c)1. for use in Massachusetts.

2. a. The provisions of 310 CMR 7.25(12) do not apply to any person who, sells, supplies, offers for sale, or manufactures in Massachusetts any consumer product specified in 310 CMR 7.25(12)(b) that is for exclusive use outside of Massachusetts as long as the manufacturer or distributor can demonstrate both that the consumer product is intended for shipment and use outside of Massachusetts and that the manufacturer or distributor has taken reasonable prudent precautions to assure that the consumer product is not distributed to Massachusetts.

b. The provision in 310 CMR 7.25(12)(a)2.a. does not apply to consumer products that are sold, supplied, or offered for sale by any person to retail outlets in Massachusetts.

7.25: continued

(b) Definitions. Terms used in 310 CMR 7.25 are defined at 310 CMR 7.00: *Definitions* or in 310 CMR 7.25. Where a term is defined in both 310 CMR 7.00: *Definitions* and in 310 CMR 7.25, the definition in 310 CMR 7.25 shall apply.

ACP EXECUTIVE ORDER means the document approved and signed by CARB that includes the conditions and requirements of the ACP, and which allows a manufacturer to sell products in the state of California under the ACP.

ADHESIVE means any product that is used to bond one surface to another by attachment. Adhesive does not include products used on humans and animals, adhesive tape, contact paper, wallpaper, shelf liners, or any other product with an adhesive incorporated onto or in an inert substrate. For Contact Adhesive, "adhesive" does not include units of product, less packaging, which consist of more than one gallon. For Construction, Panel, and Floor Covering Adhesive, and General Purpose Adhesive, "adhesive" does not include units of product, less packaging, which weigh more than one pound and consist of more than 16 fluid ounces. This limitation does not apply to aerosol adhesives.

ADHESIVE REMOVER means a product designed to remove adhesive from either a specific type of substrate or a variety of types of substrates. Adhesive removers do not include products that remove adhesives intended for use on humans or animals. For the purpose of 310 CMR 7.25(11)(b): ADHESIVE REMOVER and 310 CMR 7.25(11)(b): ADHESIVE REMOVER1. through 4. , the term "adhesive" shall mean a substance used to bind one or more materials. Adhesive includes, but is not limited to: caulks; sealants; glues; or similar substances used for the purpose of forming a bond.

1. FLOOR AND WALL COVERING ADHESIVE REMOVER means a product designed or labeled to remove floor or wall coverings and associated adhesive from the underlying substrate;
2. GASKET OR THREAD LOCKING ADHESIVE REMOVER means a product designed or labeled to remove gaskets or thread locking adhesives. Products labeled for dual use as a paint stripper and gasket remover and/or thread locking adhesive remover are considered Gasket or Thread Locking Adhesive Remover.
3. GENERAL PURPOSE ADHESIVE REMOVER means a product designed or labeled to remove cyanoacrylate adhesives as well as non-reactive adhesives or residue from a variety of types of substrates. General Purpose Adhesive Remover includes, but is not limited to, products that remove thermoplastic adhesives; pressure sensitive adhesives; dextrin or starch-based adhesives; casein glues; rubber or latex-based adhesives; as well as products that remove stickers; decals; stencils; or similar materials. General Purpose Adhesive Remover does not include Floor or Wall Covering Adhesive Remover.
4. SPECIALTY ADHESIVE REMOVER means a product designed to remove reactive adhesives from a variety of substrates. Reactive adhesives include adhesives that require a hardener or catalyst in order for the bond to occur. Examples of reactive adhesives include, but are not limited to: epoxies, urethanes, and silicones. Specialty Adhesive Remover does not include Gasket or Thread Locking Adhesive Remover.

AEROSOL ADHESIVE means an aerosol adhesive product in which the spray mechanism is permanently housed in a non-refillable can designed for hand-held application without the need for ancillary hoses or spray equipment. Aerosol Adhesives include Special Purpose Spray Adhesives, Mist Spray Adhesives, and Web Spray Adhesives.

AEROSOL COOKING SPRAY means any aerosol product designed either to reduce sticking on cooking and baking surfaces or to be applied on food, or both.

AEROSOL PRODUCT means a pressurized spray system that dispenses product ingredients by means of a propellant contained in a product's container or a mechanically induced force. Aerosol Product does not include Pump Spray.

AGRICULTURAL USE means the use of any pesticide or method or device for the control of pests in connection with the commercial production, storage or processing of any animal or plant crop. Agricultural Use does not include the sale or use of pesticides in properly labeled packages or containers that are intended for home use; use in structural pest control; industrial use; or institutional use. For the purposes of this definition only:

7.25: continued

1. HOME USE means use in a household or its immediate environment.
2. STRUCTURAL PEST CONTROL USE means a use requiring a license under the Massachusetts Pesticide Control Act.
3. INDUSTRIAL USE means use for or in a manufacturing, mining, or chemical process or use in the operation of factories, processing plants, and similar sites.
4. INSTITUTIONAL USE means use within the lines of or on property necessary for the operation of buildings such as hospitals, schools, libraries, and auditoriums.

AIR FRESHENER means any consumer product including, but not limited to, sprays, wicks, powders, and crystals, designed for the purpose of masking odors, or freshening, cleaning, scenting, or deodorizing the air. Air Freshener includes dual-purpose air freshener/ disinfectant products. Air Freshener does not include products that are used on the human body, products that function primarily as cleaning products as indicated on a product label, or Toilet/Urinary Care Products, disinfectant products claiming to deodorize by killing germs on surfaces, or institutional/industrial disinfectants when offered for sale solely through institutional and industrial channels of distribution. Air Freshener does include spray disinfectants and other products that are expressly represented for use as air fresheners, except institutional and industrial disinfectants when offered for sale through institutional and industrial channels of distribution. To determine whether a product is an air freshener, all verbal and visual representations regarding product use on the label or packaging and in the product's literature and advertising may be considered. The presence of, and representations about, a product's fragrance and ability to deodorize (resulting from surface application) shall not constitute a claim of air freshening.

ALL OTHER CARBON CONTAINING COMPOUNDS means any other compound that contains at least one carbon atom and is not an Exempt Compound or an LVP-VOC.

ALL OTHER FORMS means all consumer product forms for which no form-specific VOC standard is specified. Unless specified otherwise by the applicable VOC standard, All Other Forms include, but are not limited to, solids, liquids, wicks, powders, crystals, and cloth or paper wipes (towelettes).

ALTERNATIVE CONTROL PLAN or ACP means an emissions-averaging program approved by CARB pursuant to California Code of Regulations, Title 17, Subchapter 8.5, Article 4, Sections 94540-94555.

ANTIMICROBIAL HAND OR BODY CLEANER OR SOAP means a cleaner, or soap, that is designed to reduce the level of microorganisms on the skin through germicidal activity. Antimicrobial Hand or Body Cleaner or Soap includes, but is not limited to antimicrobial hand or body washes/cleaners, food-handler hand washes, healthcare personnel hand washes, pre-operative skin preparations and surgical scrubs. Antimicrobial Hand or Body Cleaner or Soap does not include prescription drug products, Antiperspirants, Astringent/Toner, Deodorant, Facial Cleaner or Soap, General-use Hand or Body Cleaner or Soap, Hand Dishwashing Detergent (including antimicrobial), Heavy-duty Hand Cleaner or Soap, Medicated Astringent/Medicated Toner, and Rubbing Alcohol.

ANTIPERSPIRANT means any product including, but not limited to, aerosols, roll-ons, sticks, pumps, pads, creams, and squeeze bottles, that is intended by the manufacturer to be used to reduce perspiration in the human axilla by at least 20% in at least 50% of a target population.

ANTI-STATIC PRODUCT means a product that is labeled to eliminate, prevent, or inhibit the accumulation of static electricity. Anti-Static Product does not include Electronic Cleaner, Floor Polish or Wax, Floor Coating, and products that meet the definition of Aerosol Coating Product or Architectural Coating.

ARCHITECTURAL COATING means a coating to be applied to stationary structures or the appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs.

ASTM means the American Society for Testing and Materials.

7.25: continued

ASTRINGENT/TONER means any product not regulated as a drug by the United States Food and Drug Administration (FDA) that is applied to the skin for the purpose of cleaning or tightening pores. This category also includes clarifiers and substrate-impregnated products. This category does not include any hand, face, or body cleaner or soap product, Medicated Astringent/Medicated Toner, cold cream, lotion, or antiperspirant.

AUTOMOTIVE BRAKE CLEANER means a cleaning product designed to remove oil, grease, brake fluid, brake pad material or dirt from motor vehicle brake mechanisms.

AUTOMOTIVE HARD PASTE WAX means an automotive wax or polish that is:

1. designed to protect and improve the appearance of automotive paint surfaces; and
2. a solid at room temperature; and
3. contains 0% water by formulation.

AUTOMOTIVE INSTANT DETAILER means a product designed for use in a pump spray that is applied to the painted surface of automobiles and wiped off prior to the product being allowed to dry.

AUTOMOTIVE RUBBING OR POLISHING COMPOUND means a product designed primarily to remove oxidation, old paint, scratches or swirl marks, and other defects from the painted surfaces of motor vehicles without leaving a protective barrier.

AUTOMOTIVE WAX, POLISH, SEALANT OR GLAZE means a product designed to seal out moisture, increase gloss, or otherwise enhance a motor vehicle's painted surfaces. Automotive Wax, Polish, Sealant or Glaze includes, but is not limited to, products designed for use in autobody repair shops and drive-through car washes, as well as products designed for the general public. Automotive Wax, Polish, Sealant or Glaze does not include Automotive Rubbing or Polishing Compounds, automotive wash and wax products, surfactant-containing car wash products, and products designed for use on unpainted surfaces such as bare metal, chrome, glass, or plastic.

AUTOMOTIVE WINDSHIELD WASHER FLUID means any liquid designed for use in a motor vehicle windshield washer system either as antifreeze or for the purpose of cleaning, washing, or wetting the windshield. Automotive windshield washer fluid does not include fluids placed by the manufacturer in a new vehicle.

BATHROOM AND TILE CLEANER means a product designed to clean tile or surfaces in bathrooms. Bathroom and Tile Cleaner does not include products designed primarily to clean toilet bowls, toilet tanks, or urinals.

BUG AND TAR REMOVER means a product labeled to remove either or both of the following from painted motor vehicle surfaces without causing damage to the finish:

1. biological-type residues such as insect carcasses and tree sap; and
2. road grime, such as road tar, roadway paint markings, and asphalt.

CARB means the California Air Resources Board.

CARBURETOR OR FUEL-INJECTION AIR INTAKE CLEANERS means a product designed to remove fuel deposits, dirt, or other contaminants from a carburetor, choke, throttle body of a fuel-injection system, or associated linkages. Carburetor or fuel-injection air intake cleaners does not include products designed exclusively for direct introduction into the fuel lines or fuel storage tank prior to introduction into the carburetor or fuel injectors.

CARPET AND UPHOLSTERY CLEANER means a cleaning product designed for the purpose of eliminating dirt and stains on rugs, carpeting, and the interior of motor vehicles and/or on household furniture or objects upholstered or covered with fabrics such as wool, cotton, nylon or other synthetic fabrics. Carpet and Upholstery Cleaner includes, but is not limited to, products that make fabric protectant claims. Carpet and Upholstery Cleaner does not include General Purpose Cleaners, Spot Removers, vinyl or leather cleaners, dry cleaning fluids, or products designed exclusively for use at industrial facilities engaged in furniture or carpet manufacturing.

7.25: continued

CHARCOAL LIGHTER MATERIAL means any combustible material designed to be applied on, incorporated in, added to, or used with charcoal to enhance ignition. Charcoal Lighter Material does not include any of the following:

1. electrical starters and probes;
2. metallic cylinders using paper tinder;
3. natural gas;
4. propane; and
5. fat wood.

COLORANT means any pigment or coloring material used in a consumer product for an aesthetic effect, or to dramatize an ingredient.

CONSTRUCTION, PANEL, AND FLOOR COVERING ADHESIVE means any one component adhesive that is designed exclusively for the installation, remodeling, maintenance, or repair of:

1. structural and building components that include, but are not limited to, beams, trusses, studs, paneling (such as drywall or drywall laminates, fiberglass reinforced plastic (FRP), plywood, particle board, insulation board, pre-decorated hardboard or tileboard, *etc*.), ceiling and acoustical tile, molding, fixtures, countertops or countertop laminates, cover or wall bases, and flooring or subflooring; or
2. floor or wall coverings that include, but are not limited to, wood or simulated wood covering, carpet, carpet pad or cushion, vinyl backed carpet, flexible flooring material, non-resilient flooring material, mirror tiles and other types of tiles, and artificial grass. Construction, Panel, and Floor Covering Adhesive does not include Floor Seam Sealer.

CONSUMER means any person who purchases or acquires any product for personal, family, household, or institutional use. Persons acquiring a product for resale are not Consumers for that product.

CONSUMER PRODUCT means a chemically formulated product used by household and institutional consumers including, but not limited to, detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products; but does not include other paint products, furniture coatings, or architectural coatings. Consumer Product, as defined in 310 CMR 7.25, includes Aerosol Adhesives used for consumer, industrial, or commercial uses.

CONTACT ADHESIVE means an adhesive that:

1. is designed for application to both surfaces to be bonded together; and
2. is allowed to dry before the two surfaces are placed in contact with each other; and
3. forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other; and
4. does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces. Contact Adhesive does not include rubber cements that are primarily intended for use on paper substrates. Contact Adhesive also does not include vulcanizing fluids that are designed and labeled for tire repair only.

CONTACT ADHESIVE - GENERAL PURPOSE means any contact adhesive that is not a Contact Adhesive - Special Purpose.

CONTACT ADHESIVE - SPECIAL PURPOSE means a contact adhesive that:

1. is used to bond melamine-covered board, unprimed metal, unsupported vinyl, Teflon, ultra-high molecular weight polyethylene, rubber, high pressure laminate or wood veneer 1/16 inch or less in thickness to any porous or nonporous surface, and is sold in units of product, less packaging, that contain more than eight fluid ounces; or
2. is used in automotive applications that are:
   a. automotive under-the-hood applications requiring heat, oil or gasoline resistance; or
   b. body-side molding, automotive weather-strip or decorative trim.

7.25: continued

CONTAINER/PACKAGING means the part or parts of the consumer or institutional product that serve only to contain, enclose, incorporate, deliver, dispense, wrap or store the chemically formulated substance or mixture of substances which is solely responsible for accomplishing the purposes for which the product was designed or intended. Container/ Packaging includes any article onto or into which the principal display panel and other accompanying literature or graphics are incorporated, etched, printed or attached.

CRAWLING BUG INSECTICIDE means any insecticide product that is designed for use against ants, cockroaches, or other household crawling arthropods, including, but not limited to, mites, silverfish or spiders. Crawling Bug Insecticide does not include products designed to be used exclusively on humans or animals, or any house dust mite product. For the purposes of 310 CMR 7.25(11)(b): CRAWLING BUG INSECTICIDE only:

1. HOUSE DUST MITE PRODUCT means a product whose label, packaging, or accompanying literature states that the product is suitable for use against house dust mites, but does not indicate that the product is suitable for use against ants, cockroaches, or other household crawling arthropods.
2. HOUSE DUST MITE means mites that feed primarily on skin cells shed in the home by humans and pets and which belong to the phylum Arthropoda, the subphylum Chelicerata, the class Arachnida, the subclass Acari, the order Astigmata, and the family Pyroglyphidae.

DATE-CODE means the day, month and year on which the product was manufactured, filled, or packaged, or a code indicating such a date.

DEODORANT means any product including, but not limited to, aerosols, roll-ons, sticks, pumps, pads, creams, and squeeze bottles, that indicates or depicts on the container or packaging, or any sticker or label affixed thereto, that the product can be used on or applied to the human axilla to provide a scent and or minimize odor. A Deodorant Body Spray product that indicates or depicts on the container or packaging, or any sticker or label affixed thereto, that it can be used on or applied to the human axilla is a Deodorant as defined in 310 CMR 7.25(12)(b).

DEODORANT BODY SPRAY is a Personal Fragrance Product, as defined in 310 CMR 7.25(12)(b), with 20% or less fragrance that is designed for application all over the human body to provide a scent. A Deodorant Body Spray product that indicates or depicts on the container or packaging, or any sticker or label affixed thereto, that it can be used on or applied to the human axilla is a Deodorant as defined in 310 CMR 7.25(12)(b).

DEVICE means any instrument or contrivance other than a firearm that is designed for trapping, destroying, repelling, or mitigating any pest or any other form of plant or animal life (other than human and other than bacterium, virus, or another microorganism on or in living human or other living animals); but not including equipment used for the application of pesticides when sold separately therefrom.

DISINFECTANT means any product intended to destroy or irreversibly inactivate infectious or other undesirable bacteria, pathogenic fungi, or viruses on surfaces or inanimate objects and whose label is registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 7 U.S.C. 136, *et seq.*). Disinfectant does not include any of the following:

1. products designed solely for use on humans or animals;
2. products designed for agricultural use;
3. products designed solely for use in swimming pools, therapeutic tubs, or hot tubs;
4. products which, as indicated on the principal display panel or label, are designed primarily for use as bathroom and tile cleaners, glass cleaners, general purpose cleaners, toilet bowl cleaners, or metal polishes.

DISTRIBUTOR means any person to whom a consumer product is sold or supplied for the purposes of resale or distribution in commerce, except that manufacturers, retailers, and consumers are not distributors.

7.25: continued

DOUBLE PHASE AEROSOL AIR FRESHENER means an aerosol air freshener with the liquid contents in two or more distinct phases that requires the product container be shaken before use to mix the phases, producing an emulsion.

DRY CLEANING FLUID means any non-aqueous liquid product designed and labeled exclusively for use on:

1. fabrics that are labeled "for dry clean only," such as clothing or drapery; or
2. S-coded fabrics. Dry Cleaning Fluid includes, but is not limited to, those products used by commercial dry cleaners and commercial businesses that clean fabrics such as draperies at the customer's residence or work place. Dry Cleaning Fluid does not include Spot Remover or Carpet and Upholstery Cleaner. For the purposes of 310 CMR 7.25(11)(b): DRY CLEANING FLUID, S-coded fabric means an upholstery fabric that is designed to be cleaned only with water-free spot cleaning products as specified by the Joint Industry Fabric Standards Committee.

DUSTING AID means a product designed to assist in removing dust and other soils from floors and other surfaces without leaving a wax or silicone based coating. Dusting Aid does not include Pressurized Gas Duster.

ELECTRICAL CLEANER means a product labeled to remove heavy soils such as grease, grime, or oil from electrical equipment, including, but not limited to, electric motors, armatures, relays, electric panels, or generators. Electrical Cleaner does not include General Purpose Cleaner, General Purpose Degreaser, Dusting Aid, Electronic Cleaner, Energized Electrical Cleaner, Pressurized Gas Duster, Engine Degreaser, Anti-static Product, or products designed to clean the casings or housings of electrical equipment.

ELECTRONIC CLEANER means a product labeled for the removal of dirt, moisture, dust, flux, or oxides from the internal components of electronic or precision equipment such as circuit boards, and the internal components of electronic devices, including but not limited to, radios, compact disc (CD) players, digital video disc (DVD) players, and computers. Electronic Cleaner does not include General Purpose Cleaner, General Purpose Degreaser, Dusting Aid, Pressurized Gas Duster, Engine Degreaser, Electrical Cleaner, Energized Electrical Cleaner, Anti-static Product, or products designed to clean the casings or housings of electronic equipment.

ENERGIZED ELECTRICAL CLEANER means a product that meets both of the following criteria:

1. the product is labeled to clean and/or degrease electrical equipment, where cleaning and/or degreasing is accomplished when electrical current exists, or when there is a residual electrical potential from a component such as a capacitor; and
2. the product label clearly displays the statements: "For Energized Equipment use only. Not to be used for motorized vehicle maintenance, or their parts." Energized Electrical Cleaner does not include Electronic Cleaner.

ENGINE DEGREASER means a cleaning product designed to remove grease, grime, oil and other contaminants from the external surfaces of engines and other mechanical parts.

EXISTING PRODUCT means any formulation of the same product category and form sold, supplied, manufactured, or offered for sale in Massachusetts prior to January 1, 2009, or any subsequently introduced identical formulation.

FABRIC PROTECTANT means a product designed to be applied to fabric substrates to protect the surface from soiling from dirt and other impurities or to reduce absorption of liquid into the fabric's fibers. Fabric Protectant does not include waterproofers, products designed for use solely on leather, or products designed for use solely on fabrics that are labeled for dry clean only and sold in containers of ten fluid ounces or less.

7.25: continued

FABRIC REFRESHER means a product labeled to neutralize or eliminate odors on non-laundered fabric including, but not limited to, soft household surfaces, rugs, carpeting, draperies, bedding, automotive interiors, footwear, athletic equipment, clothing and/or on household furniture or objects upholstered or covered with fabrics such as, but not limited to, wool, cotton, or nylon. Fabric Refresher does not include Anti-static Product, Carpet and Upholstery Cleaner, soft household surface sanitizers, Footwear or Leather Care Product, Spot Remover, or Disinfectant, or products labeled for application to both fabric and human skin. For the purposes of 310 CMR 7.25(11)(b): FABRIC REFRESHER only, soft household surface sanitizer means a product labeled to neutralize or eliminate odors on surfaces whose label is registered as a sanitizer under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 7 U.S.C. 136 *et seq.*).

FACIAL CLEANER OR SOAP means a cleaner or soap designed primarily to clean the face. Facial Cleaner or Soap includes, but is not limited to, facial cleansing creams, semisolids, liquids, lotions, and substrate-impregnated forms. Facial Cleaner or Soap does not include prescription drug products, Antimicrobial Hand or Body Cleaner or Soap, Astringent/Toner, General-use Hand or Body Cleaner or Soap, Medicated Astringent/Medicated Toner, or Rubbing Alcohol.

FAT WOOD means pieces of wood kindling with high naturally occurring levels of sap or resin that enhance ignition of the kindling. Fat wood does not include any kindling with substances added to enhance flammability, such as wax-covered or wax-impregnated wood-based products.

FLEA AND TICK INSECTICIDE means any insecticide product that is designed for use against fleas, ticks, their larvae, or their eggs. Flea and Tick Insecticide does not include products that are designed to be used exclusively on humans or animals and their bedding.

FLEXIBLE FLOORING MATERIAL means asphalt, cork, linoleum, no-wax, rubber, seamless vinyl, and vinyl composite flooring.

FLOOR COATING means an opaque coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, and other horizontal surfaces that may be subjected to foot traffic.

FLOOR POLISH OR WAX means a wax, polish, or any other product designed to polish, protect, or enhance floor surfaces by leaving a protective coating that is designed to be periodically replenished. Floor Polish or Wax does not include spray buff products, products designed solely for the purpose of cleaning floors, floor finish strippers, products designed for unfinished wood floors, and coatings subject to architectural coatings regulations.

FLOOR SEAM SEALER means any product designed and labeled exclusively for bonding, fusing, or sealing (coating) seams between adjoining rolls of installed flexible sheet flooring.

FLOOR WAX STRIPPER means a product designed to remove natural or synthetic floor polishes or waxes through breakdown of the polish or wax polymers, or by dissolving or emulsifying the polish or wax. Floor Wax Stripper does not include aerosol floor wax strippers or products designed to remove floor wax solely through abrasion.

FLYING BUG INSECTICIDE means any insecticide product that is designed for use against flying insects or other flying arthropods, including but not limited to flies, mosquitoes, moths, or gnats. Flying Bug Insecticide does not include wasp and hornet insecticide, products that are designed to be used exclusively on humans or animals, or any mothproofing product. For the purposes of 310 CMR 7.25(11)(b): FLYING BUG INSECTICIDE only, moth-proofing product means a product whose label, packaging, or accompanying literature indicates that the product is designed to protect fabrics from damage by moths, but does not indicate that the product is suitable for use against flying insects or other flying arthropods.

7.25: continued

FOOTWEAR OR LEATHER CARE PRODUCT means any product designed or labeled to be applied to footwear or to other leather articles/components, to maintain, enhance, clean, protect, or modify the appearance, durability, fit, or flexibility of the footwear or leather article/component. Footwear includes both leather and non-leather foot apparel. Footwear or Leather Care Product does not include Fabric Protectant, General Purpose Adhesive, Contact Adhesive, Vinyl/Fabric/Leather/Polycarbonate Coating, Rubber and Vinyl Protectant, Fabric Refresher, products solely for deodorizing, or sealant products with adhesive properties used to create external protective layers greater than two millimeters thick.

FORM-RELEASE COMPOUND means a coating labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal, or some material other than concrete.

FRAGRANCE means a substance or complex mixture of aroma chemicals, natural essential oils, and other functional components with a combined vapor pressure not in excess of two millimeters of mercury at 20ºC, the sole purpose of which is to impart an odor or scent, or to counteract a malodor.

FURNITURE COATING means any paint designed for application to room furnishings including, but not limited to, cabinets (such as kitchen, bath and vanity cabinets), tables, chairs, beds, and sofas.

FURNITURE MAINTENANCE PRODUCT means a wax, polish, conditioner, or any other product designed for the purpose of polishing, protecting or enhancing finished wood surfaces other than floors. Furniture Maintenance Product does not include Dusting Aids, Wood Cleaners and products designed solely for the purpose of cleaning, and products designed to leave a permanent finish such as stains, sanding sealers and lacquers.

GEL means a colloid in which the disperse phase has combined with the continuous phase to produce a semisolid material, such as jelly.

GENERAL PURPOSE ADHESIVE means any non-aerosol adhesive designed for use on a variety of types of substrates. General Purpose Adhesive does not include:

1. contact adhesives;
2. construction, panel, and floor covering adhesives;
3. adhesives designed exclusively for application on one specific category of substrates (*i.e.*, substrates that are composed of similar materials, such as different types of metals, paper products, ceramics, plastics, rubbers, or vinyls); or
4. adhesives designed exclusively for use on one specific category of articles (*i.e.*, articles that may be composed of different materials but perform a specific function, such as gaskets, automotive trim, weather-stripping, or carpets).

GENERAL PURPOSE CLEANER means a product designed for general all-purpose cleaning, in contrast to cleaning products designed to clean specific substrates in certain situations. General Purpose Cleaner includes products designed for general floor cleaning, kitchen or countertop cleaning, and cleaners designed to be used on a variety of hard surfaces and does not include general purpose degreasers and electronic cleaners.

GENERAL PURPOSE DEGREASER means any product labeled to remove or dissolve grease, grime, oil and other oil-based contaminants from a variety of types of substrates, including automotive or miscellaneous metallic parts. General Purpose Degreaser does not include Engine Degreaser, General Purpose Cleaner, Adhesive Remover, Electronic Cleaner, Electrical Cleaner, Energized Electrical Cleaner, Metal Polish/Cleanser, products used exclusively in solvent cleaning tanks or related equipment, or products that are:

1. sold exclusively to establishments that manufacture or construct goods or commodities; and
2. labeled “not for retail sale”. Solvent cleaning tanks or related equipment includes, but is not limited to, cold cleaners, vapor degreasers, conveyorized degreasers, film cleaning machines, or products designed to clean miscellaneous metallic parts by immersion in a container.

7.25: continued

GENERAL-USE HAND OR BODY CLEANER OR SOAP means a cleaner or soap designed to be used routinely on the skin to clean or remove typical or common dirt and soils. General-use Hand or Body Cleaner or Soap includes, but is not limited to, hand or body washes, dual-purpose shampoo-body cleaners, shower or bath gels, and moisturizing cleaners or soaps. General-use Hand or Body Cleaner or Soap does not include prescription drug products, Antimicrobial Hand or Body Cleaner or Soap, Astringent/Toner, Facial Cleaner or Soap, Hand Dishwashing Detergent, Heavy-duty Hand Cleaner or Soap, Medicated Astringent/Medicated Toner, or Rubbing Alcohol.

GLASS CLEANER means a cleaning product designed primarily for cleaning surfaces made of glass. Glass cleaner does not include products designed solely for the purpose of cleaning optical materials used in eyeglasses, photographic equipment, scientific equipment and photocopying machines.

GRAFFITI REMOVER means a product labeled to remove spray paint, ink, marker, crayon, lipstick, nail polish, or shoe polish, from a variety of non-cloth or non-fabric substrates. Graffiti Remover does not include Paint Remover or Stripper, Nail Polish Remover, or Spot Remover. Products labeled for dual use as both a paint stripper and graffiti remover are considered Graffiti Removers.

GRAPHIC ARTS COATING OR SIGN PAINT means a coating labeled and formulated for hand-application by artists using brush or roller techniques to indoor and outdoor signs (excluding structural components) and murals including letter enamels, poster colors, copy blockers, and bulletin enamels.

HAIR MOUSSE means a hair-styling foam designed to facilitate styling of a coiffure and provide limited holding power.

HAIR SHINE means any product designed for the primary purpose of creating a shine when applied to the hair. Hair Shine includes, but is not limited to, dual-use products designed primarily to impart sheen to the hair. Hair Shine does not include Hair Spray, Hair Mousse, Hair Styling Product, or products whose primary purpose is to condition or hold the hair.

HAIR SPRAY means a product that is applied to styled hair, and is designed or labeled to provide sufficient rigidity to hold, retain and/or (finish) the style of the hair for a period of time. Hair Spray includes aerosol hair sprays, pump hair sprays, spray waxes; color, glitter, or sparkle hairsprays that make finishing claims; and products that are both a styling and finishing product. Hair Spray does not include spray products that are intended to aid in styling but do not provide finishing of a hairstyle.

For the purposes of 310 CMR 7.25(11)(b): HAIR SPRAY, “finish” or “finishing” means the maintaining and/or holding of previously styled hair for a period of time. For the purposes of 310 CMR 7.25(11)(b): HAIR SPRAY, “styling” means the forming, sculpting, or manipulating of the hair to temporarily alter the hair's shape.

HAIR STYLING PRODUCT means a product manufactured on or after January 1, 2009, that is designed or labeled for the application to wet, damp, or dry hair to aid in defining, shaping, lifting, styling and/or sculpting the hair. Hair Styling Product includes, but is not limited to, hair balm, clay, cream, creme, curl straightener, gel, liquid, lotion, paste, pomade, putty, root lifter, serum, spray gel, stick, temporary hair straightener, wax, spray products that aid in styling but do not provide finishing of a hairstyle, and leave-in volumizers, detanglers and/or conditioners that make styling claims. Hair Styling Product does not include Hair Mousse, Hair Shine, Hair Spray, or shampoos and/or conditioners that are rinsed from the hair prior to styling.

For the purposes of 310 CMR 7.25(11)(b): HAIR STYLING PRODUCT, “finish” or “finishing” means the maintaining and/or holding of previously styled hair for a period of time, and "styling" means the forming, sculpting, or manipulating of the hair to temporarily alter the hair's shape.

7.25: continued

HEAVY-DUTY HAND CLEANER OR SOAP means a product designed to clean or remove difficult dirt and soils such as oil, grease, grime, tar, shellac, putty, printer's ink, paint, graphite, cement, carbon, asphalt, or adhesives from the body with or without the use of water. Heavy-duty Hand Cleaner or Soap does not include prescription drug products, Antimicrobial Hand or Body Cleaner or Soap, Astringent/Toner, Facial Cleaner or Soap, General-use Hand or Body Cleaner or Soap, Medicated Astringent/Medicated Toner or Rubbing Alcohol.

HERBICIDE means a pesticide product designed to kill or retard a plant's growth, but excludes products that are:

1. for agricultural use; or
2. restricted materials that require a permit for use and possession.

HIGH VOLATILITY ORGANIC COMPOUND (HVOC) means any volatile organic compound that exerts a vapor pressure greater than 80 millimeters of mercury when measured at 20$^{o}$C.

HOUSEHOLD PRODUCT means any consumer product that is primarily designed to be used inside or outside of living quarters or residences that are occupied or intended for occupation by individuals, including the immediate surroundings.

INSECTICIDE means a pesticide product that is designed for use against insects or other arthropods, but excluding products that are:

1. for agricultural use; or
2. for a use that requires a structural pest control license under the Massachusetts Pesticide Control Act; or
3. restricted materials that require a permit for use and possession.

INSECTICIDE FOGGER means any insecticide product designed to release all or most of its content, as a fog or mist, into indoor areas during a single application.

INSTITUTIONAL PRODUCT OR INDUSTRIAL AND INSTITUTIONAL (I&I) PRODUCT means a consumer product that is designed for use in the maintenance or operation of an establishment that:

1. manufactures, transports, or sells goods or commodities, or provides services for profit; or
2. is engaged in the nonprofit promotion of a particular public, educational, or charitable cause. Establishments include, but are not limited to, government agencies, factories, schools, hospitals, sanitariums, prisons, restaurants, hotels, stores, automobile service and parts centers, health clubs, theaters, or transportation companies. Institutional Product does not include household products and products that are incorporated into or used exclusively in the manufacture or construction of the goods or commodities at the site of the establishment.

LABEL means any written, printed, or graphic matter affixed to, applied to, attached to, blown into, formed, molded into, embossed on, or appearing upon any product or product package, for purposes of branding, identifying, or giving information with respect to the product or to the contents of the package.

LAUNDRY PREWASH means a product that is designed for application to a fabric prior to laundering and that supplements and contributes to the effectiveness of laundry detergents and/or provides specialized performance.

LAUNDRY STARCH PRODUCT means a product that is designed for application to a fabric, either during or after laundering, to impart and prolong a crisp, fresh look and may also act to help ease ironing of the fabric. Laundry Starch Product includes, but is not limited to, fabric finish, sizing, and starch.

7.25: continued

LAWN AND GARDEN INSECTICIDE means an insecticide product labeled primarily to be used in household lawn and garden areas to protect plants from insects or other arthropods.

LIQUID means a substance or mixture of substances that is capable of a visually detectable flow as determined under ASTM D4359-90(2000)e1, D 4359 90 *Standard Test Method For Determining Whether A Material Is A Liquid Or A Solid,* ASTM International. Liquid does not include powders or other materials that are composed entirely of solid particles.

LVP-VOC or Low-Vapor-Pressure VOC means a chemical compound or mixture that contains at least one carbon atom and meets one of the following:

1. has a vapor pressure less than 0.1 millimeters of mercury at 20ºC, as determined by CARB Method 310; or
2. is a chemical compound with more than 12 carbon atoms, or a chemical mixture comprised solely of compounds with more than 12 carbon atoms as verified by formulation data, and the vapor pressure and boiling point are unknown; or
3. is a chemical compound with a boiling point greater than 216ºC, as determined by CARB Method 310; or
4. is the weight percent of a chemical mixture that boils above 216º C, as determined by CARB Method 310.

For the purposes of 310 CMR 7.25(11)(b): LVP-VOC, chemical compound means a molecule of definite chemical formula and isomeric structure, and chemical "mixture" means a substrate comprised of two or more chemical compounds.

MANUFACTURER means any person who manufactures, processes, imports, assembles, produces, packages, repackages, or re-labels a product.

MEDICATED ASTRINGENT/MEDICATED TONER means any product regulated as a drug by the FDA that is applied to the skin for the purpose of cleaning or tightening pores. Medicated Astringent/Medicated Toner includes, but is not limited to, clarifiers and substrate-impregnated products. Medicated Astringent/Medicated Toner does not include hand, face, or body cleaner or soap products, Astringent/Toner, cold cream, lotion, antiperspirants, or products that must be purchased with a doctor's prescription.

MEDIUM VOLATILITY ORGANIC COMPOUND (MVOC) means any volatile organic compound that exerts a vapor pressure greater than two millimeters of mercury and less than or equal to 80 millimeters of mercury when measured at 20ºC.

METAL POLISH/CLEANSER means any product designed primarily to improve the appearance of finished metal, metallic, or metallized surfaces by physical or chemical action. To improve the appearance means to remove or reduce stains, impurities, or oxidation from surfaces or to make surfaces smooth and shiny. Metal Polish/Cleanser includes, but is not limited to, metal polishes used on brass, silver, chrome, copper, stainless steel and other ornamental metals. Metal Polish/Cleanser does not include Automotive Wax, Polish, Sealant or Glaze, wheel cleaner, Paint Remover or Stripper, products designed and labeled exclusively for automotive and marine detailing, or products designed for use in degreasing tanks.

MIST SPRAY ADHESIVE means any aerosol that is not a special purpose spray adhesive and which delivers a particle or mist spray, resulting in the formation of fine, discrete particles that yield a generally uniform and smooth application of adhesive to the substrate.

MULTI-PURPOSE DRY LUBRICANT means any lubricant that is:

1. designed and labeled to provide lubricity by depositing a thin film of graphite, molybdenum disulfide (moly), or polytetrafluoroethylene or closely related fluoropolymer (teflon) on surfaces; and
2. designed for general purpose lubrication, or for use in a wide variety of applications.

7.25: continued

MULTI-PURPOSE LUBRICANT means any lubricant designed for general purpose lubrication, or for use in a wide variety of applications. Multi-purpose Lubricant does not include Multi-purpose Dry Lubricants, Penetrants, or Silicone-based Multi-purpose Lubricants.

MULTI-PURPOSE SOLVENT means any organic liquid designed to be used for a variety of purposes, including cleaning or degreasing of a variety of types of substrates, or thinning, dispersing or dissolving other organic materials. Multi-purpose Solvent includes solvents used in institutional facilities, except for laboratory reagents used in analytical, educational, research, scientific or other laboratories. Multi-purpose Solvent does not include solvents used in cold cleaners, vapor degreasers, conveyorized degreasers or film cleaning machines, or solvents that are incorporated into, or used exclusively in the manufacture or construction of, the goods or commodities at the site of the establishment.

NAIL POLISH means any clear or colored coating designed for application to the fingernails or toenails and including but not limited to, lacquers, enamels, acrylics, base coats, and top coats.

NAIL POLISH REMOVER means a product designed to remove nail polish and coatings from fingernails or toenails.

NON-AEROSOL PRODUCT means any consumer product that is not dispensed by a pressurized spray system.

NON-CARBON CONTAINING COMPOUND means any compound that does not contain any carbon atoms.

NON-RESILIENT FLOORING means flooring of a mineral content that is not flexible. Non-Resilient Flooring includes terrazzo, marble, slate, granite, brick, stone, ceramic tile and concrete.

NON-SELECTIVE TERRESTRIAL HERBICIDE means a terrestrial herbicide product that is toxic to plants without regard to species.

OVEN CLEANER means any cleaning product designed to clean and to remove dried food deposits from oven walls.

PAINT means any pigmented liquid, liquefiable, or mastic composition designed for application to a substrate in a thin layer that is converted to an opaque solid film after application and is used for protection, decoration or identification, or to serve some functional purpose such as the filling or concealing of surface irregularities or the modification of light and heat radiation characteristics.

PAINT REMOVER OR STRIPPER means any product designed to strip or remove paints or other related coatings, by chemical action, from a substrate without markedly affecting the substrate. Paint Remover or Stripper does not include Multi-purpose Solvents, paintbrush cleaners, products designed and labeled exclusively as Graffiti Removers, and hand cleaner products that claim to remove paints and other related coatings from skin.

PENETRANT means a lubricant designed and labeled primarily to loosen metal parts that have bonded together due to rusting, oxidation, or other causes. Penetrant does not include Multi-purpose Lubricants that claim to have penetrating qualities, but are not labeled primarily to loosen bonded parts.

PERSONAL FRAGRANCE PRODUCT means any product which is applied to the human body or clothing for primary purpose of adding a scent, or masking a malodor, including cologne, perfume, aftershave, and toilet water. Personal Fragrance Product does not include:

1. Deodorant;
2. medicated products designed primarily to alleviate fungal or bacterial growth on feet or other areas of the body;

7.25: continued

3. mouthwashes, breath fresheners and deodorizers;
4. lotions, moisturizers, powders or other skin care products used primarily to alleviate skin conditions such as dryness and irritations;
5. products designed exclusively for use on human genitalia;
6. soaps, shampoos, and products primarily used to clean the human body; and
7. fragrance products designed to be used exclusively on non-human animals.

PESTICIDE means and includes any substance or mixture of substances labeled, designed, or intended for use in preventing, destroying, repelling or mitigating any pest, or any substance or mixture of substances labeled, designed, or intended for use as a defoliant, desiccant, or plant regulator, provided that the term "pesticide" does not include any substance, mixture of substances, or device that the United States Environmental Protection Agency does not consider to be a pesticide.

PRESSURIZED GAS DUSTER means a pressurized product labeled to remove dust from a surface solely by means of mass air or gas flow, including surfaces such as photographs, photographic film negatives, computer keyboards, and other types of surfaces that cannot be cleaned with solvents. Pressurized Gas Duster does not include Dusting Aid.

PRINCIPAL DISPLAY PANEL OR PANELS means that part or those parts of a label that are so designed as to most likely be displayed, presented, shown or examined under normal and customary conditions of display or purchase. Whenever a principal display panel appears more than once, all requirements pertaining to the principal display panel shall pertain to all such principal display panels.

PRODUCT BRAND NAME means the name of the product exactly as it appears on the principal display panel of the product.

PRODUCT CATEGORY means the applicable category that best describes the product as listed in Definitions.

PRODUCT LINE means a group of products of identical form and function belonging to the same product category or categories.

PROPELLANT means a liquefied or compressed gas that is used in whole or in part, such as a co-solvent, to expel a liquid or any other material from the same self-pressurized container or from a separate container.

PUMP SPRAY means a packaging system in which the product ingredients within the container are not under pressure and in which the product is expelled only while a pumping action is applied to a button, trigger or other actuator.

RESPONSIBLE PARTY means the company, firm or establishment that is listed on the product label. If the label lists two companies, firms or establishments, the responsible party is the party that the product was manufactured for or distributed by, as noted on the label.

RESTRICTED MATERIALS means pesticides established as restricted materials under applicable Massachusetts laws or regulations.

RETAIL OUTLET means any establishment at which consumer products are sold, supplied, or offered for sale directly to consumers.

RETAILER means any person who sells, supplies, or offers consumer products for sale directly to consumers.

ROLLON PRODUCT means any antiperspirant or deodorant that dispenses active ingredients by rolling a wetted ball or wetted cylinder on the affected area.

7.25: continued

RUBBER AND VINYL PROTECTANT means any product designed to protect, preserve or renew vinyl, rubber, and plastic on vehicles, tires, luggage, furniture, and household products such as vinyl covers, clothing, and accessories. Rubber and Vinyl Protectant does not include products primarily designed to clean the wheel rim, such as aluminum or magnesium wheel cleaners, and tire cleaners that do not leave an appearance-enhancing or protective substance on the tire.

RUBBING ALCOHOL means any product containing isopropyl alcohol (also called isopropanol) or denatured ethanol and labeled for topical use, usually to decrease germs in minor cuts and scrapes, to relieve minor muscle aches, as a rubefacient, and for massage.

SEALANT AND CAULKING COMPOUND means any product with adhesive properties that is designed to fill, seal, waterproof, or weatherproof gaps or joints between two surfaces. Sealant and Caulking Compound does not include roof cements and roof sealants; insulating foams; removable caulking compounds; clear, paintable, or water resistant caulking compounds; floor seam sealers; products designed exclusively for automotive uses; or sealers that are applied as continuous coatings. Sealant and Caulking Compound also does not include units of product, less packaging, which weigh more than one pound and consist of more than 16 fluid ounces. For the purposes of 310 CMR 7.25(11)(b):

SEALANT AND CAULKING COMPOUND only, removable caulking compound means a compound that temporarily seals windows or doors for three to six month time intervals. For the purposes of 310 CMR 7.25(11)(b): SEALANT AND CAULKING COMPOUND only, clear/paintable/water resistant caulking compound means a compound that:

1. contains no appreciable level of opaque fillers or pigments;
2. transmits most or all visible light through the caulk when cured;
3. is paintable; and
4. is immediately resistant to precipitation upon application.

SEMISOLID means a product that, at room temperature, will not pour, but will spread or deform easily, including but not limited to gels, pastes, and greases.

SHAVING CREAM means an aerosol product that dispenses a foam lather intended to be used with a blade or cartridge razor, or other wet shaving system, in the removal of facial or other bodily hair. Shaving Cream does not include Shaving Gel.

SHAVING GEL means an aerosol product that dispenses a post-foaming semisolid designed to be used with a blade, cartridge razor, or other shaving system in the removal of facial or other bodily hair. Shaving Gel does not include Shaving Cream.

SILICONE-BASED MULTI-PURPOSE LUBRICANT means any lubricant that is:

1. signed and labeled to provide lubricity primarily through the use of silicone compounds including, but not limited to, polydimethylsiloxane; and
2. designed and labeled for general purpose lubrication, or for use in a wide variety of applications. Silicone-based Multi-purpose Lubricant does not include products designed and labeled exclusively to release manufactured products from molds.

SINGLE-PHASE AEROSOL AIR FRESHENER means an aerosol air freshener with the liquid contents in a single homogeneous phase and that does not require that the product container be shaken before use.

SOLID means a substance or mixture of substances that, either whole or subdivided (such as the particles comprising a powder), is not capable of visually detectable flow as determined under ASTM D4359-90(2000)e1, *Standard Test Method For Determining Whether A Material Is A Liquid Or A Solid*, ASTM International.

SPECIAL PURPOSE SPRAY ADHESIVE Means an aerosol adhesive that meets any of the following definitions:

1. MOUNTING ADHESIVE means an aerosol adhesive designed to permanently mount photographs, artwork, and any other drawn or printed media to a backing (such as paper, board, cloth, etc.) without causing discoloration to the artwork.

7.25: continued

2. FLEXIBLE VINYL ADHESIVE means an aerosol adhesive designed to bond flexible vinyl to substrates. Flexible vinyl means a non-rigid polyvinyl chloride plastic with at least 5%, by weight, of plasticizer content. A plasticizer is a material, such as a high boiling point organic solvent, that is incorporated into a plastic to increase its flexibility, workability, or distensibility, and may be determined using ASTM D1045-95(2001), "*Standard Test Methods for Sampling and Testing Plasticizers Used in Plastics*," ASTM International, or from product formulation data.

3. POLYSTYRENE FOAM ADHESIVE means an aerosol adhesive designed to bond polystyrene foam to substrates.

4. AUTOMOBILE HEADLINER ADHESIVE means an aerosol adhesive designed to bond together layers in motor vehicle headliners.

5. POLYOLEFIN ADHESIVE means an aerosol adhesive designed to bond polyolefins to substrates.

6. LAMINATE REPAIR/EDGEBANDING ADHESIVE means an aerosol adhesive designed for:

a. The touch-up or repair of items laminated with high-pressure laminates (*e.g.*, lifted edges, delaminates, *etc*.); or

b. The touch-up, repair, or attachment of edge-bonding materials, including but not limited to, other laminates, synthetic marble, veneers, wood molding, and decorative metals.

For the purposes of this definition, high pressure laminate means sheet materials that consist of paper, fabric, or other core material that have been laminated at temperatures exceeding 265° F, and at pressures between 1,000 and 1,400 psi.

7. AUTOMOTIVE ENGINE COMPARTMENT ADHESIVE means an aerosol adhesive designed for use in motor vehicle under-the-hood applications that require oil and plasticizer resistance, as well as high shear strength, at temperatures of 93ºC through 135ºC.

SPOT REMOVER means any product labeled to clean localized areas, or remove localized spots or stains on cloth or fabric such as drapes, carpets, upholstery, and clothing, that does not require subsequent laundering to achieve stain removal. Spot Remover does not include Dry Cleaning Fluid, Laundry Prewash, or Multi-purpose Solvent.

SPRAY BUFF PRODUCT means a product designed to restore a worn floor finish in conjunction with a floor buffing machine and special pad.

STICK PRODUCT means any antiperspirant or deodorant that contains active ingredients in a solid matrix form, and that dispenses the active ingredients by frictional action on the affected area.

STRUCTURAL WATERPROOF ADHESIVE means an adhesive whose bond lines are resistant to conditions of continuous immersion in fresh or salt water, and that conforms with Federal Specification MMM-A-181D (Type 1, Grade A).

TERRESTRIAL means to live on or grow from land.

TIRE SEALANT AND INFLATION means any pressurized product that is designed to temporarily inflate and seal a leaking tire.

TOILET/URINAL CARE PRODUCT means any product designed or labeled to clean and/or to deodorize toilet bowls, toilet tanks, or urinals. Toilet bowls, toilet tanks, or urinals include, but are not limited to, toilets or urinals connected to permanent plumbing in buildings and other structures, portable toilets or urinals placed at temporary or remote locations, and toilet or urinals in vehicles such as buses, recreational motor homes, boats, ships, and aircraft. Toilet/Urinal Care Product does not include Bathroom and Tile Cleaner or General Purpose Cleaner.

TYPE A PROPELLENT means a compressed gas such as $CO_2$, $N_2$, $N_2O$, or compressed air that is used as a propellant, and is either incorporated with the product or contained in a separate chamber within the product's packaging.

7.25: continued

TYPE B PROPELLENT means any halocarbon that is used as a propellant, including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs).

TYPE C PROPELLENT means any propellant that is not a Type A or Type B propellant, including propane, isobutane, n-butane, and dimethyl ether (also known as dimethyl oxide).

UNDERCOATING means any aerosol product designed to impart a protective, non-paint layer to the undercarriage, trunk interior, and/or firewall of motor vehicles to prevent the formation of rust or to deaden sound. Undercoating includes, but is not limited to, rubberized, mastic, or asphaltic products.

USAGE DIRECTIONS means the text or graphics on the product's principal display panel, label, or accompanying literature that describes to the end user how and in what quantity the product is to be used.

VINYL/FABRIC/LEATHER/POLYCARBONATE COATING means a coating designed and labeled exclusively to coat vinyl, fabric, leather, or polycarbonate substrates.

VOC CONTENT means except for charcoal lighter products, the total weight of VOC in a consumer product expressed as a percentage of the product weight (exclusive of the container or packaging), as determined pursuant to 310 CMR 7.25(12)(h)1.

For charcoal lighter material products only,

VOC CONTENT = Certified Emissions * 100 / Certified Use Rate.

Where:

Certified Emissions = the emissions level for products approved by the CARB and as determined pursuant to South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (February 27, 1991), expressed to the nearest 0.001 pound CH2 per start.

Certified Use Rate = the usage level for products approved by CARB and as determined pursuant to South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (February 27, 1991), expressed to the nearest 0.001 pound certified product used per start.

WASP AND HORNET INSECTICIDE means any insecticide product that is designed for use against wasps, hornets, yellow jackets or bees by allowing the user to spray from a distance a directed stream or burst at the intended insects, or their nest.

WATERPROOFER means a product designed and labeled exclusively to repel water from fabric or leather substrates. Waterproofer does not include Fabric Protectants.

WAX means a material or synthetic thermoplastic substance generally of high molecular weight hydrocarbons or high molecular weight esters of fatty acids or alcohols, except glycerol and high polymers (plastics). Wax includes, but is not limited to, substances derived from the secretions of plants and animals such as carnuba wax and beeswax, substances of a mineral origin such as ozocerite and paraffin, and synthetic polymers such as polyethylene.

WEB SPRAY ADHESIVE means any aerosol adhesive that is not a mist spray or special purpose spray adhesive.

WOOD CLEANER means a product labeled to clean wooden materials including, but not limited to, decking, fences, flooring, logs, cabinetry, and furniture. Wood Cleaner does not include Dusting Aid, General Purpose Cleaner, Furniture Maintenance Product, Floor Wax Stripper, Floor Polish or Wax, or products designed and labeled exclusively to preserve or color wood.

7.25: continued

WOOD FLOOR WAX means wax based products for use solely on wood floors.

(c) Standards.

1. VOC Content Limits. Except as provided in 310 CMR 7.25(12)(d) (Variances), 310 CMR 7.25(12)(e) (Innovative Products), and 310 CMR 7.25(12)(i) (Alternative Control Plans), no person subject to 310 CMR 7.25 shall:

a. manufacture for use within Massachusetts; or

b. sell, supply, or offer for sale within Massachusetts any consumer product that contains volatile organic compounds in excess of the limits specified in 310 CMR 7.25(11)(c)1.: *Table 2*.

Table 2. VOC Content Limits for Consumer Products Effective January 1, 2009

| **Product Category** | **Percent VOC by Weight (%W)** |
|---|---|
| Adhesive Removers | |
| Floor or Wall Covering | 5 |
| Gasket or Thread Locking | 50 |
| General Purpose | 20 |
| Specialty | 70 |
| Adhesives | |
| Aerosol: | |
| Mist Spray | 65 |
| Web Spray | 55 |
| Special Purpose Spray Adhesives: | |
| Mounting; Automotive Engine Compartment; Flexible Vinyl | 70 |
| Polystyrene Foam and Automobile Headliner | 65 |
| Polyolefin and Laminate Repair/Edgebanding | 60 |
| Construction, Panel, and Floor Covering | 15 |
| Contact: | |
| General Purpose | 55 |
| Special Purpose | 80 |
| General Purpose | 10 |
| Structural Waterproof | 15 |
| Air Fresheners | |
| Single-phase Aerosols | 30 |
| Double-phase Aerosols | 25 |
| Liquids/pump Sprays | 18 |
| Solids/Semisolid | 3 |
| Antiperspirants | |
| Aerosol | 40 HVOC<br>10 MVOC |
| Non-aerosol | 0 HVOC<br>0 MVOC |
| Anti-static | |
| Non-aerosol | 11 |
| Automotive Brake Cleaners | 45 |
| Automotive Rubbing or Polishing Compound | 17 |
| Automotive Wax, Polish, Sealant or Glaze | |
| Hard Paste Waxes | 45 |
| I Instant Detailers | 3 |
| All Other Forms | 15 |
| Automotive Windshield Washer Fluids | 35 |
| Bathroom and Tile Cleaners | |
| Aerosols | 7 |
| All Other Forms | 5 |
| Bug and Tar Remover | 40 |
| Carburetor or Fuel-injection Air Intake Cleaners | 45 |

| **Product Category** | **Percent VOC by Weight (%W)** |
|---|---|
| Carpet and Upholstery Cleaners | |
| Aerosols | 7 |
| Non-aerosols (Dilutables) | 0.1 |
| Non-aerosols (Ready-to-Use) | 3.0 |
| Charcoal Lighter Material | *See* 310 CMR 7.25(12)(c)8. |
| Cooking Spray Aerosols | 18 |
| Deodorants | |
| Aerosol | 0 HVOC<br>10 MVOC |
| Non-aerosol | 0 HVOC<br>0 MVOC |
| Dusting Aids | |
| Aerosols | 25 |
| All Other Forms | 7 |
| Engine Degreasers | |
| Aerosols | 35 |
| Non-aerosols | 5 |
| Electrical Cleaner | 45 |
| Electronic Cleaner | 75 |
| Fabric Protectants | 60 |
| Fabric Refresher | |
| Aerosol | 15 |
| Non-aerosol | 6 |
| Floor Polishes/ Waxes | |
| Products for Flexible Flooring Materials | 7 |
| Products for Non-resilient Flooring | 10 |
| Wood Floor Wax | 90 |
| Floor Wax Strippers | |
| Non-aerosol | *See* 310 CMR 7.25(12)(c)10. |
| Footwear or Leather Care Products | |
| Aerosol | 75 |
| Solid | 55 |
| All Other Forms | 15 |
| Furniture Maintenance Products | |
| Aerosols | 17 |
| All other Forms Except Solid or Paste | 7 |
| Graffiti Remover | |
| Aerosol | 50 |
| Non-aerosols | 30 |
| General Purpose Cleaners | |
| Aerosols | 10 |
| Non-aerosols | 4 |
| General Purpose Degreasers | |
| Aerosols | 50 |
| Non-aerosols | 4 |
| Glass Cleaners | |
| Aerosols | 12 |
| Non-aerosols | 4 |
| Hair Mousses | 6 |
| Hair Shines | 55 |
| Hair Sprays | 55 |
| Hair Styling Products | |
| Aerosol and Pump Sprays | 6 |
| All Other Forms | 2 |
| Heavy-duty Hand Cleaner or Soap | 8 |

| Product Category | Percent VOC by Weight (%W) |
|---|---|
| Insecticides | |
| Crawling Bug (Aerosol) | 15 |
| Crawling Bug (all other forms) | 20 |
| Flea and Tick | 25 |
| Flying Bug (Aerosol) | 25 |
| Flying Bug (all other forms) | 35 |
| Foggers | 45 |
| Lawn and Garden (all other forms) | 20 |
| Lawn and Garden (Non-Aerosol) | 3 |
| Wasp and Hornet | 40 |
| Laundry Prewash | |
| Aerosol / Solids | 22 |
| All Other Forms | 5 |
| Laundry Starch Products | 5 |
| Metal Polishes/ Cleansers | 30 |
| Multi-purpose Lubricant (Excluding Solid or Semi-solid Products) | 50 |
| Nail Polish Remover | 75 |
| Non-selective Terrestrial Herbicide | |
| Non-aerosols | 3 |
| Oven Cleaners | |
| Aerosols/Pump Sprays | 8 |
| Liquids | 5 |
| Paint Remover or Stripper | 50 |
| Penetrants | 50 |
| Rubber and Vinyl Protectants | |
| Aerosols | 10 |
| Non-aerosols | 3 |
| Sealants and Caulking Compounds | 4 |
| Shaving Creams | 5 |
| Shaving Gel | 7 |
| Silicone-based Multi-Purpose Lubricants (Excluding Solid or Semi-solid Products) | 60 |
| Spot Removers | |
| Aerosols | 25 |
| Non-aerosols | 8 |
| Tire Sealants and Inflators | 20 |
| Toilet/Urinal Care Products | |
| Aerosol | 10 |
| Non-aerosols | 3 |
| Undercoatings | |
| Aerosols | 40 |
| Wood Cleaner | |
| Aerosol | 17 |
| Non-aerosols | 4 |

2. Most Restrictive Limit. Notwithstanding the definition of product category in 310 CMR 7.25(12)(b), if anywhere on the container or packaging of any consumer product manufactured on or after January 1, 2009, or any FIFRA-registered insecticide manufactured on or after January 1, 2010, or on any sticker or label affixed thereto, any representation is made that the product may be used as, or is suitable for use as a consumer product for which a lower VOC limit is specified in 310 CMR 7.25(12)(c)1., then the lowest VOC limit shall apply. This requirement does not apply to general purpose cleaners, antiperspirant/deodorant products and insecticide foggers. This lowest VOC limit requirement shall apply to the consumer product irrespective of whether the definition of the consumer product category, as defined in 310 CMR 7.25(12)(b), explicitly excludes the other consumer product category or categories that have been represented in the product's labeling information.

7.25: continued

3. Sell-through of Consumer Products.

a. A consumer product listed in 310 CMR 7.25(12)(c)1.: *Table 2* and manufactured prior to the effective date specified in 310 CMR 7.25(12)(c)1., may be sold, supplied, or offered for sale after the effective date specified in 310 CMR 7.25(12)(c)1.: *Table 2*, so long as the consumer product complied with the VOC content standards and other applicable requirements in effect at the time the consumer product was manufactured. This does not apply to the following:

i. Any consumer product that does not display on the product container or package the date on which the product was manufactured, or a code indicating such date, in accordance with 310 CMR 7.25(12)(f)1.

ii. Any consumer product on which the manufacturer has used a code indicating the date of manufacture that is different than the code specified in 310 CMR 7.25(12)(f)1.e.ii., but an explanation of the code has not been filed with the Department by the deadlines specified in 310 CMR 7.25(12)(f)1.e.i.

iii. Solid Air Fresheners and Toilet/Urinal Care Products that contain para-dichlorobenzene. These products are subject to a one-year sell-through period as provided in 310 CMR 7.25(12)(c)13.b.

4. Exclusions.

a. The VOC content standards specified in 310 CMR 7.25(12)(c)1. shall not apply to:

i. Any LVP-VOC.

ii. Fragrances up to a combined level of 2% by weight contained in any consumer product, and colorants up to a combined level of 2% by weight contained in any antiperspirant or deodorant.

iii. VOCs that contain more than ten carbon atoms per molecule and for which the vapor pressure is unknown, or that have a vapor pressure of two mm Hg or less at 20$^{o}$C in antiperspirants or deodorants.

iv. Air fresheners that are comprised entirely of fragrance, less compounds not defined as VOCs in 310 CMR 7.25(12)(b) or exempted under 310 CMR 7.25(12)(c)4.a.i.

v. Insecticides containing at least 98% paradichlorobenzene.

vi. Adhesives sold in containers of one fluid ounce or less.

vii. Bait Station Insecticides. For the purpose of 310 CMR 7.25(11)(c)4., bait station insecticides are containers enclosing an insecticidal bait that is not more than 0.5 ounce by weight, where the bait is designed to be ingested by insects and is composed of solid material feeding stimulants with less than 5% active ingredients.

b. The medium volatility organic compound (MVOC) content standards specified in 310 CMR 7.25(12)(c)1. for antiperspirants or deodorants shall not apply to ethanol.

5. Use of Toxic Air Contaminants in Antiperspirant or Deodorant. No person shall sell, supply, offer for sale, or manufacture any antiperspirant or deodorant for use in Massachusetts that contains any compound that has been identified by the CARB in Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 7, Section 93000, as a toxic air contaminant.

6. Products that are Diluted Prior to Use.

a. For consumer products for which the label, packaging, or accompanying literature specifically states that the product should be diluted with water or non-VOC solvent prior to use, the limits specified in 310 CMR 7.25(12)(c)1. shall apply to the product only after the minimum recommended dilution has taken place. For purposes of 310 CMR 7.25(11)(c)6., minimum recommended dilution shall not include recommendations for incidental use of a concentrated product to deal with limited special applications such as hard-to-remove soils or stains.

b. For consumer products for which the label, packaging, or accompanying literature states that the product should be diluted with any VOC solvent prior to use, the limits specified in 310 CMR 7.25(12)(c)1. shall apply to the product only after the maximum recommended dilution has taken place.

7.25: continued

7. Products Registered Under FIFRA.

a. For consumer products registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA; 7 U.S.C. § 136-136y), the effective date of the VOC standards is one year after the date specified in 310 CMR 7.25(12)(c)1.: *Table 2* Such products shall also be registered under the Massachusetts Pesticide Control Act.

b. The labeling requirements of 310 CMR 7.25(12)(f) do not apply to products that are registered as pesticides under FIFRA and under the Massachusetts Pesticide Control Act.

8. Charcoal Lighter Materials. No person shall sell, supply, offer for sale or manufacture for use in Massachusetts any charcoal lighter materials as defined in 310 CMR 7.25(12)(b) unless the manufacturer of that product has been granted a currently effective charcoal lighter materials certification (Executive Order) for that product by CARB under the Consumer Products provisions of Title 17 California Code of Regulations, § 94509(h). A copy of the certification decision by CARB, including all conditions established by CARB applicable to the certification, shall be submitted to the Department within 30 days upon the Department's written request.

9. Aerosol Adhesives.

a. These standards apply to all uses of aerosol adhesives, including consumer, industrial, and commercial uses. Except as otherwise provided in 310 CMR 7.25(12)(c)3. (Sell-Through of Consumer Products), 310 CMR 7.25(12)(d) (Variances), 310 CMR 7.25(12)(e) (Innovative Products), and 310 CMR 7.25(12)(i) (Alternative Control Plans), no person shall sell, supply, offer for sale, or manufacture any aerosol adhesive for use in Massachusetts that, at the time of sale, use, or manufacture, contains VOCs in excess of the specified standard.

b. No person shall sell, supply, offer for sale, or manufacture any aerosol adhesive for use in Massachusetts that, at the time of sale, use, or manufacture, contains any of the following compounds: methylene chloride, perchloroethylene, or trichloroethylene.

c. If a product meets more than one of the definitions specified in 310 CMR 7.25(12)(b) for Special Purpose Spray Adhesive, then the VOC limit for the product shall be the lowest applicable VOC limit specified in 310 CMR 7.25(12)(c)1.: *Table 2*.

10. Floor Wax Strippers. Effective January 1, 2009, no person shall sell, supply, offer for sale or manufacture any floor wax stripper for use in Massachusetts unless the following requirements are met:

a. The label of each non-aerosol floor wax stripper must specify a dilution ratio for light or medium build-up of polish that results in an as-used VOC concentration of 3% by weight or less.

b. If a non-aerosol floor wax stripper is also intended to be used for removal of heavy build-up of polish, the label of that floor wax stripper must specify a dilution ratio for its use on heavy build-up of polish that results in an as-used VOC concentration of 12% by weight or less.

c. The term "light build-up", "medium build-up", or "heavy build-up" is not specifically required, as long as comparable terminology is used.

11. Contact Adhesives, Electronic Cleaners, Footwear or Leather Care Products, and General Purpose Degreasers.

a. Except as provided in 310 CMR 7.25(12)(c)11.b., 310 CMR 7.25(12)(c)11.c., and 310 CMR 7.25(12)(c)11.d., effective January 1, 2009, no person shall sell, supply, offer for sale, or manufacture for use in Massachusetts any contact adhesive, electronic cleaner, footwear or leather care product, or general purpose degreaser that contains any of the following compounds: methylene chloride, perchloroethylene, or trichloroethylene.

b. Impurities. The requirements of 310 CMR 7.25(12)(c)11.a. shall not apply to any contact adhesive, electronic cleaner, footwear or leather care product, or general purpose degreaser containing methylene chloride, perchloroethylene, or trichloroethylene that is present as an impurity in a combined amount equal to or less than 0.01% by weight.

7.25: continued

c. Sell-through of Products. Contact adhesives, electronic cleaners, footwear or leather care products, and general purpose degreasers that contain methylene chloride, perchloroethylene, or trichloroethylene and were manufactured before January 1, 2009, may be sold, supplied, or offered for sale until January 1, 2012, so long as the product container or package displays the date on which the product was manufactured, or a code indicating such date, in accordance with 310 CMR 7.25(12)(f).

d. Notification for products sold during the sell-through period. Any person who sells or supplies a consumer product subject to standards in 310 CMR 7.25(12)(c)11.a. shall notify, in writing, the purchaser that the sell-through period for that product will end on January 1, 2012 if both of the following conditions are met:

(i) the product is sold or supplied to a distributor or retailer; and

(ii) the product is sold or supplied on or after June 30, 2012.

12. Adhesive Removers, Electrical Cleaners, and Graffiti Removers.

a. Except as provided below in 310 CMR 7.25(12)(c)12.b., effective January 1, 2009, no person shall sell, supply, offer for sale, or manufacture for use in Massachusetts any adhesive remover, electrical cleaner, or graffiti remover that contains any of the following compounds: methylene chloride, perchloroethylene, or trichloroethylene.

b. Impurities. The requirements of 310 CMR 7.25(12)(c)12.a. shall not apply to any adhesive remover, electrical cleaner, or graffiti remover containing methylene chloride, perchloroethylene, or trichloroethylene that is present as an impurity in a combined amount equal to or less than 0.01% by weight.

c. Sell-through of Products. adhesive removers, electrical cleaners, and graffiti removers that contain methylene chloride, perchloroethylene, or trichloroethylene and were manufactured before January 1, 2009, may be sold, supplied, or offered for sale until January 1, 2012, so long as the product container or package displays the date on which the product was manufactured, or a code indicating such date, in accordance with 310 CMR 7.25(12)(f).

d. Notification for Products Sold During the Sell-through Period. Any person who sells or supplies a consumer product subject to standards in 310 CMR 7.25(12)(c)12.a. shall notify, in writing, the purchaser that the sell-through period for that product will end on January 1, 2012 if both of the following conditions are met:

(i) the product is sold or supplied to a distributor or retailer; and

(ii) the product is sold or supplied on or after June 30, 2012.

13. Solid Air Fresheners and Toilet/Urinal Care Products.

a. Effective January 1, 2009, no person shall sell, supply, offer for sale, or manufacture for use in Massachusetts any solid air freshener or toilet/urinal care products that contain para-dichlorobenzene.

b. Solid air fresheners and toilet/urinal care products that contain para-dichlorobenzene and were manufactured before January 1, 2009 may be sold, supplied, or offered for sale until January 1, 2010, so long as the product container or package displays the date on which the product was manufactured, or a code indicating such date, in accordance with 310 CMR 7.25(12)(f).

14. Products Containing Ozone-depleting Compounds.

a. Effective January 1, 2009, no person shall sell, supply, offer for sale or manufacture for use in Massachusetts any consumer product that contains any of the following ozone-depleting compounds:

CFC-11 (trichlorofluoromethane), CFC-12 (dichlorodifluoromethane),
CFC-113 (1,1,1-trichloro-2,2,2-trifluoroethane),
CFC-114 (1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane),
CFC-115 (chloropentafluoroethane), halon 1211 (bromochlorodifluoromethane),
halon 1301 (bromotrifluoromethane), halon 2402 (dibromotetrafluoroethane),
HCFC-22 (chlorodifluoromethane),
HCFC-123 (2,2-dichloro-1,1,1-trifluoroethane),
HCFC-124 (2-chloro-1,1,1,2-tetrafluoroethane),
HCFC-141b (1,1-dichloro-1-fluoroethane), HCFC-142b
(1-chloro-1,1-difluoroethane), 1,1,1-trichloroethane, and carbon tetrachloride.

7.25: continued

b. The requirements of 310 CMR 7.25(12)(c)14.a. shall not apply to any ozone depleting compounds that may be present as impurities in a consumer product in an amount equal to or less than 0.01% by weight of the product.

c. The requirements of 310 CMR 7.25(12)(c)14.a. shall not apply to any existing product formulation that complies with the requirements in 310 CMR 7.25(12)(c)1. or any existing product formulation that is reformulated to meet the requirements in 310 CMR 7.25(12)(c)1., provided that ozone depleting compound content of the reformulated product does not change.

(d) Variances.

1. Any person who cannot comply with the requirements set forth in 310 CMR 7.25(12)(c)1., because of extraordinary reasons beyond the person's reasonable control may apply in writing to the Department for a variance. The variance application shall set forth the following:

a. the specific grounds upon which the variance is sought;

b. the proposed dates by which compliance with the provisions of 310 CMR 7.25(12)(c)1. will be achieved;

c. a compliance report detailing the methods by which compliance will be achieved.

d. information to support criteria in 310 CMR 7.25(12)(d)3.

2. Upon receipt of a variance application containing the information required in 310 CMR 7.25(12)(d)1., the Department shall hold a public hearing to determine whether, under what conditions, and to what extent, a variance from the requirements in 310 CMR 7.25(12)(c)1. is necessary and will be permitted. A hearing shall be initiated no later than 75 days after receipt of a variance application. Notice of the time and place of the hearing shall be sent to the applicant by certified mail not less than 30 days prior to the hearing. Notice of the hearing shall also be submitted for publication in the *Massachusetts Register* and sent to every person who requests such notice, not less than 30 days prior to the hearing. The notice shall state that the parties may, but need not be, represented by counsel at the hearing. At least 30 days prior to the hearing, the variance application shall be made available to the public for inspection. Information submitted to the Department by a variance applicant may be claimed as confidential, and such information shall be handled in accordance with the Department's confidentiality procedures. The Department may consider such confidential information in reaching a decision on a variance application. Interested members of the public shall be allowed a reasonable opportunity to testify at the hearing and their testimony shall be considered.

3. No variance shall be granted unless all of the following findings are made:

a. that because of reasons beyond the reasonable control of the applicant, requiring compliance with 310 CMR 7.25(12)(c)1. would result in extraordinary economic hardship;

b. that the public interest in mitigating the extraordinary hardship to the applicant by issuing the variance outweighs the public interest in avoiding any increased emissions of air contaminants which would result from issuing the variance;

c. that the compliance report proposed by the applicant can reasonably be implemented, and will achieve compliance as expeditiously as possible.

4. Any variance order shall specify a final compliance date by which the requirements of 310 CMR 7.25(12)(c)1. will be achieved. Any variance order shall contain a condition that specifies increments of progress necessary to assure timely compliance, and any other conditions that the Department deems necessary.

5. A variance shall cease to be effective upon failure of the party to whom the variance was granted to comply with any term or condition of the variance.

6. Upon the application of any person, the Department may review, and for good cause, modify or revoke a variance from requirements of 310 CMR 7.25(12)(c)1.

7. All variances, or modifications to variances, shall be approved by EPA.

7.25: continued

(e) Innovative Products.

1. Any manufacturer of a consumer product which has been granted an Innovative Product exemption by CARB under the Innovative Products provisions in Subchapter 8.5, Article 2, Section 94511, or Subchapter 8.5, Article 1, Section 94503.5 of Title 17 of the California Code of Regulations, and such Innovative Products Exemption has been approved by EPA, shall be, for that product, exempt from the VOC limits in 310 CMR 7.25(12)(c)1.: *Table 2* for the period of time that the CARB Innovative Product exemption remains in effect. Any manufacturer claiming an Innovative Product exemption on this basis must submit to the Department a copy of the CARB Innovative Product exemption decision (*i.e.*, the Executive Order), including all conditions established by CARB applicable to the exemption.

2. Manufacturers of consumer products that have been granted an Innovative Products exemption under the Innovative Products provisions in Subchapter 8.5, Article 2, Section 94511, or Subchapter 8.5, Article 1, Section 94503.5 of Title 17 of the California Code of Regulations based on California specific data, or that have not been granted an exemption by CARB, may seek an Innovative Products exemption in accordance with the following criteria:

a. The Department shall exempt a consumer product from the VOC limits specified in 310 CMR 7.25(12)(c)1. if a manufacturer demonstrates by clear and convincing evidence that, due to some characteristic of the product formulation, design, delivery systems or other factors, the use of the product will result in less VOC emissions as compared to:

i. the VOC emissions from a representative consumer product which complies with the VOC limits specified in 310 CMR 7.25(12)(c)1., or

ii. the calculated VOC emissions from a non-complying representative product, if the product had been reformulated to comply with the VOC limits specified in 310 CMR 7.25(12)(c)1. VOC emissions shall be calculated using the following equation:

ER = ENC x VOCSTD / VOCNC

where:

ER = the VOC emissions from the non-complying representative product, had it been reformulated

ENC = the VOC emissions from the non-complying representative product in its current formulation

VOCSTD = the VOC limit specified in the table of standards in 310 CMR 7.25(12)(c)1.

VOCNC = the VOC content of the non-complying product in its current formulation

If a manufacturer demonstrates that this equation yields inaccurate results due to some characteristic of the product formulation or other factors, an alternative method that accurately calculates emissions may be used upon approval of the Department.

b. For the purposes 310 MR 7.25(11)(e)2.b., "representative consumer product" means a consumer product that meets all of the following criteria:

i. the representative product shall be subject to the same VOC limit in 310 CMR 7.25(12)(c)1. as the innovative product.

ii. the representative product shall be of the same product form as the innovative product, unless the innovative product uses a new form that does not exist in the product category at the time the application is made.

iii. the representative product shall have at least similar efficacy as other consumer products in the same product category based on tests generally accepted for that product category by the consumer products industry.

7.25: continued

c. A manufacturer shall apply in writing to the Department for any exemption claimed under 310 CMR 7.25(12)(e)2.a. The application shall include the supporting documentation that demonstrates the emissions from the innovative product, including the actual physical test methods used to generate the data and, if necessary, the consumer testing undertaken to document product usage. In addition, the applicant shall provide any information necessary to enable the Department to establish enforceable conditions for granting the exemption including the VOC content for the innovative product and test methods for determining the VOC content. All information submitted by a manufacturer pursuant to 310 CMR 7.25(11)(e)2.c. shall be handled in accordance with the procedures specified in applicable Massachusetts confidentiality requirements.

d. Within 30 days of receipt of the exemption application, the Department shall determine whether an application is complete.

e. Within 90 days after an application has been deemed complete, the Department shall determine whether, under what conditions, and to what extent, an exemption from the requirements of 310 CMR 7.25(12)(c) will be permitted. The applicant and the Department may mutually agree to a longer time period for reaching a decision, and additional supporting documentation may be submitted by the applicant before a decision has been reached. The Department shall notify the applicant of the decision in writing and specify such terms and conditions that are necessary to insure that emissions from the product will meet the emissions reductions specified in 310 CMR 7.25(e)2.a.

f. In granting an exemption for a product, the Department shall establish conditions that are enforceable. These conditions shall include the VOC content of the innovative product, dispensing rates, application rates and any other parameters determined by the Department to be necessary. The Department shall also specify the test methods for determining conformance to the conditions established. The test methods shall include criteria for reproducibility, accuracy, sampling and laboratory procedures.

g. For any product for which an exemption has been granted pursuant to this section, the manufacturer shall notify the Department in writing within 30 days of any change in the product formulation or recommended product usage directions, and shall also notify the Department within 30 days if the manufacturer learns of any information which would alter the emissions estimates submitted to the Department in support of the exemption application.

h. If the VOC limits specified in 310 CMR 7.25(12)(c)1. are lowered for a product category through any subsequent rule making, all innovative product exemptions granted for products in the product category, except as provided in 310 CMR 7.25(12)(e)2.h., shall have no force and effect as of the effective date of the modified VOC standard. 310 CMR 7.25(12)(e)2.h. shall not apply to those innovative products which have VOC emissions less than the applicable lowered VOC limit and for which a written notification of the product's emissions status versus the lowered VOC limit has been submitted to and approved by the Department at least 60 days before the effective date of such limits.

i. If the Department determines that a consumer product for which an exemption has been granted no longer meets the criteria for an innovative product specified in 310 CMR 7.25(12)(e)2.a., the Department may modify or revoke the exemption as necessary to assure that the product will meet these criteria.

(f) Labeling Requirements.

1. Product Dating.

a. No person shall sell, supply, offer for sale, or manufacture a consumer product subject to 310 CMR 7.25(12)(c) for use in Massachusetts unless each consumer product container or package clearly displays the day, month, and year on which the product was manufactured, or a code indicating such date.

b. For products manufactured on or after January 1, 2009, the date-code shall be displayed on the product container or package such that it is readily observable without irreversibly disassembling any portion of the product container or packaging. For the purposes of 310 CMR 7.25(11)(f)1.b., information may be displayed on the bottom of a container as long as it is clearly legible without removing any product packaging.

7.25: continued

c. No person shall erase, alter, deface or otherwise remove or make illegible any date or code indicating the date of manufacture from any regulated product container without the express authorization of the manufacturer.

d. Explanation of the Code.

i. If a manufacturer uses a code indicating the date of manufacture for any consumer product subject to 310 CMR 7.25(12)(c), an explanation of the code shall be filed with the Department no later than 12 months prior to:

- the effective date of the applicable standard specified in 310 CMR 7.25(12)(c)1.; or, the date on which the product first becomes available for sale, distribution, or use within Massachusetts, whichever is later; and

-- any date on which the product first becomes available for sale, distribution, or use within Massachusetts after any modification to an existing product's date-code format.

ii. A manufacturer who uses the following code to indicate the date of manufacture shall not be subject to the requirements of 310 CMR 7.25(12)(f)1.d.i., if the code is represented separately from other codes on the product container so that it is easily recognizable:

YY DDD

where:

YY = two digits representing the year in which the product was manufactured

DDD = three digits representing the day of the year on which the product was manufactured, with "001" representing the first day of the year, "002" representing the second day of the year, and so forth (*i.e.*, the "Julian date").

e. The requirements of 310 CMR 7.25(12)(f)1. shall not apply to products containing no VOCs, as defined in 310 CMR 7.25(12)(b), or containing VOCs at 0.10 percent by weight or less.

f. Codes indicating the date of manufacture are public information and may not be claimed as confidential.

2. Additional Labeling Requirements for Aerosol Adhesives, Adhesive Removers, Electronic Cleaners, Electrical Cleaners, Energized Electrical Cleaners, and Contact Adhesives.

a. In addition to the requirements specified in 310 CMR 7.25(12)(f)1., the manufacturer and responsible party for each aerosol adhesive, adhesive remover, electronic cleaner, electrical cleaner, energized electrical cleaner, and contact adhesive product subject to 310 CMR 7.25 shall ensure that all products clearly display the following information on each product container that is manufactured on or after January 1, 2009:

i. The product category as specified in 310 CMR 7.25(12)(c)1. or an abbreviation of the category shall be displayed;

ii. The applicable VOC standard for the product that is specified in 310 CMR 7.25(12)(c)1., except for energized electrical cleaner, expressed as a percentage by weight, shall be displayed;

iii. If the product is classified as a special purpose spray adhesive, the applicable substrate and/or application or an abbreviation of the substrate or application that qualifies the product as special purpose shall be displayed;

iv. If the manufacturer or responsible party uses an abbreviation as allowed under 310 CMR 7.25(12)(f)2.a.i. and 310 CMR 7.25(12)(f)2.a.iii., an explanation of the abbreviation must be filed with the Department no later than 90 days prior to:

- the effective date of the applicable standard specified in 310 CMR 7.25(12)(c)1.; or, the date on which the product first becomes available for sale, distribution, or use within Massachusetts, whichever date is later; and

-- any date on which the product first becomes available for sale, distribution, or use within Massachusetts after any modification to an existing product's abbreviation.

7.25: continued

b. The information required in 310 CMR 7.25(12)(f)3.a., shall be displayed on the product container such that it is readily observable without removing or disassembling any portion of the product container or packaging. For the purposes of this subsection, information may be displayed on the bottom of a container as long as it is clearly legible without removing any product packaging.

c. No person shall remove, alter, conceal, or deface the information required in 310 CMR 7.25(12)(f)2.a. prior to final sale of the product.

(g) Recordkeeping and Reporting Requirements.

1. Each responsible party for a product subject to a VOC content limit in 310 CMR 7.25(12)(c) shall keep records demonstrating compliance with the VOC content limits in accordance with 310 CMR 7.25(12)(h). If the Department requests such information and the responsible party does not have or does not provide the information requested by the Department, the Department may require the reporting of this information by the person that has the information, including, but not limited to, any formulator, manufacturer, supplier, parent company, private labeler, distributor, or repackager. All records for compliance determination, including 310 CMR 7.25(12)(g)2. and 310 CMR 7.25(12)(g)3., shall be kept on site for a period of time not less than three years and shall be made available to the Department within 90 days of request.

2. Upon a written request by the Department, a responsible official from each responsible party shall provide, to the Department within 90 days, the information for any consumer product or products that the Department may specify including, but not limited to, all or part of the following information:

a. the company name, telephone number, and designated contact person;

b. any claim of confidentiality made pursuant to applicable Massachusetts confidentiality requirements, 310 CMR 3.00;

c. the product brand name for each consumer product subject to recordkeeping and reporting requirements and the product label;

d. the product category to which the consumer product belongs;

e. the applicable product form(s) listed separately;

f. an identification of each product brand name and form as a Household Product or Industrial and Institutional Product, or both;

g. for reporting information submitted by multiple companies, an identification of each company that is submitting relevant data separate from that submitted by the responsible party.

h. for each product brand name and form, the net percent by weight of the total product, less container and packaging, comprised of the following, rounded to the nearest 0.1%:

i. Total Exempt Compounds

i. Total LVP-VOCs that are not fragrances

iii. Total All Other Carbon-Containing Compounds that are not fragrances

iv. Total All Non-Carbon-Containing Compounds

v. Total Fragrance

vi. For products containing greater than two percent by weight fragrance:

- the percent of fragrance that are LVP-VOCs, and

-- the percent of fragrance that are All Other Carbon-Containing Compounds

vii. Total Paradichlorobenzene

i. for each product brand name and form, the identity, including the specific chemical name and associated Chemical Abstract Services (CAS) number, of the following:

i. Each Exempt Compound

ii. Each LVP-VOC that is not a fragrance

j. if applicable, the weight percent comprised of propellant for each product;

k. If applicable, an identification of the type of propellant (Type A, Type B, Type C, or a blend of the different types);

l. If applicable, the net percent by weight of each ozone-depleting compound that is listed in 310 CMR 7.25(12)(c)14. and is contained in a product subject to reporting under 310 CMR 7.25(12)(g) in any amount greater than 0.1% by weight.

7.25: continued

(h) Compliance Testing Requirements.

1. The responsible party shall determine compliance with the VOC content requirements of this regulation according to one of the following:

a. CARB Method 310 Determination of Volatile Organic Compounds (VOC) in *Consumer Products and Reactive Organic Compounds in Aerosol Coating Products*, adopted September 25, 1997, and as last amended on May 5, 2005;

b. An alternative test method to CARB Method specified in 310 CMR 7.25(12)(h)1.a. that is shown to accurately determine the concentration of VOCs in a subject product, or its emissions, if the applicant has received an approval from CARB for the alternative test method for determining the VOC content of the subject product and the applicant submits to the Department a copy of the CARB Executive Order, including all applicable conditions and limitations;

c. VOC content determination using product formulation and records.

i. Testing to determine compliance with the requirements of 310 CMR 7.25 may be demonstrated through calculation of the VOC content from records of the amounts of constituents used to make the product pursuant to the following equation:

VOC Content = (B-C) x 100 /A

where,

A = total net weight of unit (excluding container and packaging)

B = total weight of all VOCs, as defined in 310 CMR 7.25(12)(b), per unit

C = total weight of VOCs exempted under 310 CMR 7.25(12)(c)4., per unit

ii. If product records demonstrate compliance with the VOC limits, but these records are contradicted by product testing performed using CARB Method 310, the results of CARB Method 310 shall take precedence over the product records and may be used to establish a violation of the requirements of 310 CMR 7.25.

iii. Compliance determinations based on product formulation records may not be used unless the manufacturer of a consumer product keeps accurate records for each day of production of the amount and chemical composition of the individual product constituents. These records shall be kept for at least three years.

2. Testing to determine whether a product is a liquid or solid shall be performed using ASTM D4359-90(2000)e1, *Standard Test Method for Determining Whether a Material Is a Liquid or a Solid*, ASTM International.

3. Testing to determine compliance with the certification requirements for charcoal lighter material shall be performed using the procedures specified in the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (Table 1, Section 200.9)(February 28, 1991).

4. Testing to determine distillation points of petroleum distillate-based charcoal lighter materials shall be performed using ASTM D86-04b, *Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure*, ASTM International.

5. Testing to determine plasticizer in flexible vinyl adhesive shall be performed using ASTM D1045-95(2001), *Standard Test Methods for Sampling and Testing Plasticizers Used in Plastics*, ASTM International.

6. Records shall accurately reflect the constituents used to manufacture a product, the chemical composition of the individual product, and any other test, processes, or records used in connection with product manufacture.

(i) Alternative Control Plans.

1. The VOC content limits specified in 310 CMR 7.25(12)(c)1.: Table 2. shall not apply to any manufacturer for any consumer product that is subject to an ACP for the period of time that the ACP remains in effect provided that the manufacturer complies with all conditions and requirements of the ACP Executive Order.

7.25: continued

2. Any manufacturer who claims an exemption pursuant to 310 CMR 7.25(12)(i)1. shall submit to the Department a copy of the ACP Executive Order within 30 days of receiving the ACP Executive Order from CARB

3. Any manufacturer who claims an exemption pursuant to 310 CMR 7.25(12)(i)1. shall notify the Department within 30 days of any violation of the ACP as determined by CARB pursuant to California Code of Regulations, Title 17, Subchapter 8.5, Article 4, Section 94546.

7.26: Industry Performance Standards

((1) - (9) RESERVED)

(10) Perchloroethylene Air Emissions Standards for Dry Cleaning Facilities - Applicability.

(a) Except as provided in 310 CMR 7.26(12)(a) and (b), each dry cleaning facility shall comply with the provisions of 310 CMR 7.26(10) through (16) beginning on May 2, 1997 or immediately upon startup, whichever is later. All coin-operated dry cleaning machines are exempt from the requirements of 310 CMR 7.26(10) through (16).

(b) The provisions of 310 CMR 7.26(10) through (16) apply to the owner or operator of a dry cleaning facility that has:

1. Only dry-to-dry machine(s) and has perchloroethylene consumption equal to or less than 2,100 gallons per 12-month rolling period as determined in accordance with 310 CMR 7.26(10)(c); or

2. Only a transfer machine system(s) or both dry-to-dry machine(s) and transfer machine system(s) and has perchloroethylene consumption equal to or less than 1,800 gallons per 12-month rolling period as determined in accordance with 310 CMR 7.26(10)(c).

(c) When calculating the perchloroethylene consumption for each 12-month rolling period for the purpose of determining applicability under 310 CMR 7.26(10)(a), the owner or operator shall sum on the first day of every month the volume of all perchloroethylene purchases made in each of the previous 12 months, as recorded in the log described in 310 CMR 7.26(15)(d)1.

(d) Notwithstanding the forgoing, 310 CMR 7.26 does not apply to dry-to-dry perchloroethylene dry cleaning facilities co-located with a residence, installed between December 21, 2005 through July 13, 2006. *N.B.* These dry-to-dry facilities are subject to the federal Maximum Available Control Technology (MACT) standards for perchloroethylene dry cleaning facilities (40 CFR Part 63, Subpart M).

(11) Definitions. The definitions found in 310 CMR 7.00 apply to 310 CMR 7.26(10) through (16). The following words and phrases shall have the following meanings as they appear in 310 CMR 7.26(10) through (16). Where a term is defined in the 310 CMR 7.00: *Definitions* and the definition also appears in 310 CMR 7.26(11), the definition in 310 CMR 7.26(11) controls for 7.26(10) through (16).

Ancillary Equipment means the equipment used with a dry cleaning machine in a dry cleaning system including, but not limited to, emission control devices, pumps, filters, muck cookers, stills, solvent tanks, solvent containers, water separators, exhaust dampers, diverter valves, interconnecting piping, hoses, and ducts.

Articles mean clothing, garments, textiles, fabrics, leather goods, and the like, that are drycleaned.

Carbon Adsorber means a bed of activated carbon into which an air-perchloroethylene gas-vapor stream is routed and which adsorbs the perchloroethylene on the carbon.

Co-located means a dry cleaning facility located in a building with a residence, a licensed day care center, a health care facility, a prison, an elementary school, a middle or high school, a children's pre-school, a senior center or a youth center.

Coin-operated Dry Cleaning Machine means a dry cleaning machine that is operated by the customer (that is, the customer places articles into the machine, turns the machine on, and removes articles from the machine).

Colorimetric Detector Tube means a glass tube (sealed prior to use), containing material impregnated with a chemical that is sensitive to perchloroethylene and is designed to measure the concentration of perchloroethylene in air.

Construction means the fabrication (onsite), erection, or installation of a dry cleaning system subject to 310 CMR 7.26(10) through (16).

Desorption means regeneration of a carbon adsorber by removal of the perchloroethylene adsorbed on the carbon.

Diverter Valve means a flow control device that prevents room air from passing through a refrigerated condenser when the door of the dry cleaning machine is open.

7.26: continued

Dry Cleaning means the process of cleaning articles using perchloroethylene.

Dry Cleaning Cycle means the washing and drying of articles in a dry-to-dry machine or transfer machine system.

Dry Cleaning Facility means an establishment with one or more dry cleaning systems.

Dry Cleaning Machine means a dry-to-dry machine or each machine of a transfer machine system.

Dry Cleaning Machine Drum means the perforated container inside the dry cleaning machine that holds the articles during dry cleaning.

Dry Cleaning System means a dry-to-dry machine and its ancillary equipment or a transfer machine system and its ancillary equipment.

Dryer means a machine used to remove perchloroethylene from articles by tumbling them in a heated air stream (see reclaimer).

Dry-to-dry Machine means a one-machine dry cleaning operation in which washing and drying are performed in the same machine.

Exhaust Damper means a flow control device that prevents the air-perchloroethylene gas-vapor stream from exiting the dry cleaning machine into a carbon adsorber before room air is drawn into the dry cleaning machine.

Filter means a porous device through which perchloroethylene is passed to remove contaminants in suspension. Examples include, but are not limited to, lint filter, button trap, cartridge filter, tubular filter, regenerative filter, prefilter, polishing filter, and spin disc filter.

Halogenated Hydrocarbon Detector means a portable device capable of detecting vapor concentrations of perchloroethylene of 25 parts per million by volume and indicating a concentration of 25 parts per million by volume or greater by emitting an audible or visual signal that varies as the concentration changes.

Heating Coil means the device used to heat the air stream circulated from the dry cleaning machine drum, after perchloroethylene has been condensed from the air stream and before the stream reenters the dry cleaning machine drum.

Muck Cooker means a device for heating perchloroethylene-laden waste material to volatilize and recover perchloroethylene.

PCE (Perchloroethylene)-gas Analyzer means a flame ionization detector, photoionization detector, or infrared analyzer capable of detecting vapor concentrations of perchloroethylene of 25 parts per million by volume.

Perceptible Leaks mean any perchloroethylene vapor or liquid leaks that are obvious from:

(a) the odor of perchloroethylene;
(b) visual observation, such as pools or droplets of liquid; or
(c) the detection of gas flow by passing the fingers over the surface of equipment.

Perchloroethylene Consumption means the total volume of perchloroethylene purchased based upon purchase receipts or other reliable measures.

Reclaimer means a machine used to remove perchloroethylene from articles by tumbling them in a heated air stream (see dryer).

Reconstruction means replacement of a washer, dryer, or reclaimer; or replacement of any components of a dry cleaning system to such an extent that the fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable new source.

7.26: continued

Refrigerated Condenser means a vapor recovery system into which an air-perchloroethylene gas-vapor stream is routed and the perchloroethylene is condensed by cooling the gas-vapor stream.

Refrigerated Condenser Coil means the coil containing the chilled liquid used to cool and condense the perchloroethylene.

Residence means any dwelling or housing in which people reside excluding short-term housing that is occupied by the same person for a period of less than 180 days (such as a hotel room).

Secondary Carbon Adsorber means a carbon adsorber into which the air-perchloroethylene gas vapor stream from inside the dry cleaning machine drum is routed immediately before the door of the dry cleaning machine is opened.

Source means each dry cleaning system.

Still means any device used to volatilize and recover perchloroethylene from contaminated perchloroethylene.

Temperature Sensor means a thermometer or thermocouple used to measure temperature.

Transfer Machine System means a multiple-machine dry cleaning operation in which washing and drying are performed in different machines. Examples include, but are not limited to:

(a) a washer and dryer(s);
(b) a washer and reclaimer(s); or
(c) a dry-to-dry machine and reclaimer(s).

Vapor Leak means a perchloroethylene vapor concentration exceeding 25 parts per million by volume (50 parts per million by volume as methane) as indicated by a halogenated hydrocarbon detector or PCE gas analyzer.

Washer means a machine used to clean articles by immersing them in perchloroethylene. This includes a dry-to-dry machine when used with a reclaimer.

Water Separator means any device used to recover perchloroethylene from a water-perchloroethylene mixture.

Year or Yearly means any consecutive 12-month period of time.

(12) Perchloroethylene Dry Cleaning Systems.

(a) Dry-to-dry Machine. An owner or operator of a dry-to-dry machine shall comply with the following requirements:

1. A dry-to-dry machine installed prior to December 9, 1991, shall be equipped with either a carbon adsorber or refrigerated condenser by September 22, 1993.
2. A dry-to-dry machine installed on or after December 9, 1991, shall be equipped with a refrigerated condenser.
3. A dry-to-dry machine installed on or after December 21, 2005 shall be equipped with a refrigerated condenser and a secondary carbon adsorber on or before November 5, 2008.
4. The installation of a co-located dry-to-dry machine, except those co-located with a residence is prohibited as of November 5, 2008.
5. The installation of a dry-to-dry machine(s) co-located with a residence is prohibited as of September 5, 2008.
6. All co-located dry-to-dry machines shall cease operation on or before December 21, 2020.
7. All dry-to-dry machines co-located with a residence installed after July 13, 2006 shall cease operation on September 5, 2008.[1]

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1 Under the federal MACT, dry cleaners co-located with a residence were prohibited from operating as of July 13, 2006. On September 5, 2008, 310 CMR 7.26(10) through (16) also become a state requirement.

7.26: continued

8. The operation, maintenance, testing, monitoring, recordkeeping and reporting requirements of 310 CMR 7.26(13) through (15), as applicable.

(b) Transfer Machine System. The installation of transfer machine(s) is prohibited as of May 2, 1997. On or before September 22, 1993, all transfer machine systems shall be equipped with a carbon adsorber or a refrigerated condenser.

1. The owner or operator of a transfer machine system equipped with a refrigerated condenser shall:

a. Not vent the air-perchloroethylene gas-vapor contained within the washer to the atmosphere until the washer door is opened;

b. Monitor in accordance with 310 CMR 7.26(12)(b)2.;

c. Not use the same refrigerated condenser coil for the washer that is used by a dry-to-dry machine, dryer, or reclaimer; and

d. Ensure the temperature difference between the air-perchloroethylene gas-vapor stream entering the refrigerated condenser on a washer and the air-perchloroethylene gas-vapor stream exiting the refrigerated condenser on the washer is greater than or equal to 20˚F (11.1˚C).

2. The owner or operator shall calculate, on a weekly basis, the difference between the temperature of the air-perchloroethylene gas-vapor streams entering and exiting the refrigerated condenser on a washer and the temperature of the air-perchloroethylene gas-vapor stream. The owner or operator shall measure the inlet and outlet streams with a temperature sensor. Each temperature sensor shall be used according to the manufacturer's instructions, and designed to measure at least a temperature range from 32˚F (0˚C) to 120˚F (48.9˚C) to an accuracy of ± 2˚F (± 1.1˚C).

3. The owner or operator shall comply with the operation, maintenance, testing, monitoring, recordkeeping and reporting requirements of 310 CMR 7.26(13) through (15), as applicable

4. The owner or operator shall cease operation of their transfer machines on or before September 5, 2008.

(13) Operation and Maintenance Requirements.

(a) The owner or operator shall close the door of each dry cleaning machine immediately after transferring articles to or from the machine, and shall keep the door closed at all other times except to the extent necessary during maintenance operations.

(b) The owner or operator of each dry cleaning system shall operate and maintain the system according to the manufacturers' specifications and recommendations.

(c) The owner or operator of a dry cleaning system equipped with a refrigerated condenser shall:

1. Not vent or release the air-perchloroethylene gas-vapor stream contained within the dry cleaning machine to the atmosphere while the dry cleaning machine drum is rotating;

2. Monitor the refrigerated condenser in accordance with 310 CMR 7.26(14)(a);

3. Operate the dry cleaning system with a diverter valve or equivalent design so as to prevent air drawn into the dry cleaning machine when the door of the machine is open from passing through the refrigerated condenser; and

4. Maintain the temperature of the air-perchloroethylene gas-vapor stream at the end of the cool down cycle on the outlet side of the refrigerated condenser on a dry-to-dry machine, dryer, or reclaimer at equal to or less than 45˚F (7.2˚C).

(d) The owner or operator of a dry cleaning system equipped with a primary or secondary carbon adsorber shall:

1. Not bypass the carbon adsorber or secondary carbon adsorber to vent or release any air-perchloroethylene gas-vapor stream to the atmosphere at any time; and

2. Monitor the carbon adsorber in accordance with the requirements in 310 CMR 7.26(14)(b) as applicable.

7.26: continued

(e) If parameter values monitored under 310 CMR 7.26(13)(c) or (d), do not meet the values specified in 310 CMR 7.26(14)(a), or (b), the owner or operator shall make adjustments or repairs to the dry cleaning system or control device to meet those values. If repair parts must be ordered, either a written or verbal order for such parts shall be initiated within two working days of detecting such a parameter value. Such repair parts shall be installed as soon as possible, but in no case later than, five working days after receipt of the parts.

(f) The owner or operator of a dry cleaning system shall drain all cartridge filters in their housing, or other sealed container, for a minimum of 24 hours, or shall treat such filters in an equivalent manner, before removal from the dry cleaning facility.

(g) The owner or operator of a dry cleaning system shall store all perchloroethylene and wastes that contain perchloroethylene in solvent tanks or solvent containers with no perceptible leaks.

(h) The owner or operator of a dry cleaning system shall inspect the following components weekly for perceptible leaks while the dry cleaning system is operating:

1. Hose and pipe connections, fittings, couplings, and valves;
2. Door gaskets and seatings;
3. Filter gaskets and seatings;
4. Pumps;
5. Solvent tanks and containers;
6. Water separators;
7. Muck cookers;
8. Stills;
9. Exhaust dampers;
10. Diverter valves (if required); and
11. All filter housings.

(i) The owner or operator of a dry cleaning system shall inspect the components identified in 310 CMR 7.26(13)(h), at least weekly for vapor leaks. The operator shall place the probe inlet near the surface of each component interface where leakage could occur and move it slowly along the interface periphery. One of the following methods or devices, operated in accordance with the manufacturer's instructions shall be used:

1. a halogenated-hydrocarbon detector;
2. a PCE gas analyzer; or
3. an alternative method approved by the Department. Sufficient documentation shall be provided to the Department to demonstrate that the alternative method is capable of detecting vapor concentrations of PCE of 25 ppm by volume.

(j) The owner or operator of a dry cleaning system shall repair all leaks detected under 310 CMR 7.26(13)(h) and (i) within 24 hours. If repair parts must be ordered, either a written or verbal order for those parts shall be initiated within two working days of detecting such a leak. Such repair parts shall be installed as soon as possible but in no case later than five working days after receipt of the parts.

(k) Each owner or operator of a dry cleaning facility shall retain onsite a copy of the design specifications and the operating manuals for each dry cleaning system and each emission control device located at the dry cleaning facility.

(14) Test Methods and Monitoring.

(a) The owner or operator of a dry cleaning system equipped with a refrigerated condenser shall either:

1. Monitor, on a weekly basis, the refrigeration system high pressure and low pressure during the drying phase to determine if they are in the range specified in the manufacturers operating instructions; or
2. Measure the temperature of the air-perchloroethylene gas-vapor stream on the outlet side of the refrigerated condenser on a dry-to-dry machine, dryer, or reclaimer weekly with a temperature sensor to determine if it is equal to or less than 45˚F (7.2˚C). The temperature sensor shall be used according to the manufacturer's instructions and shall be designed to measure a temperature of 45˚F (7.2˚C) to an accuracy of ± 2 ˚F (± 1.1˚C).

7.26: continued

(b) The owner or operator of a dry cleaning system equipped with a primary carbon adsorber shall measure, on a weekly basis, the concentration of perchloroethylene in the exhaust of the carbon adsorber to determine that the perchloroethylene concentration in the exhaust is equal to or less than 100 parts per million by volume. The measurement shall be taken while the dry cleaning machine is venting to the carbon adsorber at the end of the last dry cleaning cycle prior to desorption of the carbon adsorber. The owner or operator shall:

1. Use a colorimetric detector tube designed to measure a concentration of 100 parts per million by volume of perchloroethylene in air to an accuracy of ± 25 parts per million by volume; and
2. Use the colorimetric detector tube according to the manufacturer's instructions; and
3. Provide a sampling port for monitoring within the exhaust outlet of the carbon adsorber that is easily accessible and located at least eight stack or duct diameters downstream from any flow disturbance such as a bend, expansion, contraction, or outlet; downstream from no other inlet; and two stack or duct diameters upstream from any flow disturbance such as a bend, expansion, contraction, inlet, or outlet.

(c) The owner or operator of a dry cleaning system equipped with a secondary carbon adsorber shall operate and maintain the system in accordance with the manufacturers specifications.

(15) Recordkeeping and Reporting Requirements.

(a) Each owner or operator of a dry cleaning facility shall submit to the Department a compliance certification in accordance with 310 CMR 70.00.

(b) Compliance Notification. Each owner or operator of a dry cleaning facility shall notify the Department, on forms provided by the Department, on or before September 15, 2008, either electronically utilizing the electronic form via eDEP or by submitting a paper form by registered mail, and subsequently as required by 310 CMR 70.03, of the facility's compliance with the requirements contained in 310 CMR 7.26(10) through(16) and provide the following information:

1. The name and address of the owner or operator;
2. The name and address (that is, physical location) of the dry cleaning facility;
3. The type of each dry cleaning machine(s) and its serial number;
4. The installation date of each dry cleaning machine;
5. A description of the type of air pollution control device(s) used to comply with 310 CMR 7.26(12)(a) or (b) as applicable;
6. The most recent 12-month perchloroethylene quantity purchased, based on invoices or receipts;
7. Whether or not the dry cleaning facility is located in a building with a residence;
8. Whether or not the dry cleaning facility is located in a building with a leased space, another tenant, or owner occupant(s);
9. Whether or not the dry cleaning facility is co-located with sensitive populations such as a licensed day care centers, a health care facility, a prison, an elementary school, middle school or high school, a children's pre-school, a senior center or a youth center.
10. The compliance status of the facility; and
11. That all information submitted is in accordance with 310 CMR 7.01(2)(a) through (c).

(c) Change in Status Notification. Each owner or operator of a dry cleaning facility shall notify the Department, on forms provided by the Department, when there is a change in ownership, a cessation of dry cleaning operations, or a change to a non-perchloroethylene solvent, and provide the following information where applicable.

1. Change in Ownership. The specific date for transfer of responsibility, coverage, and liability between the current and new owner and operator. The new owner shall notify within 60 days of the sale of the operation.
2. Cessation of Operation. The specific date that operation of the dry cleaning system(s) ceased at the facility within 60 days of ceasing operation. This notification is also necessary when the facility changes to a "drop off" facility.
3. Cessation of Perchloroethylene as the Dry Cleaning Solvent. The specific date that perchloroethylene was no longer used as the dry cleaning solvent, the manufacturer of and type of cleaning solvent within 60 days of the change.

7.26: continued

(d) Recordkeeping. Each owner or operator of a dry cleaning facility shall keep receipts of perchloroethylene purchases and a log of the following information, as applicable, and maintain such information up to date so the 12-month rolling period compliance can be determined, and on site for at least one year, and show it upon request for a period of at least three years:

1. The volume of perchloroethylene purchased each month for the dry cleaning facility as recorded from perchloroethylene invoices or receipts of purchases; if no perchloroethylene is purchased during a given month then the owner or operator would enter zero gallons into the log;
2. The calculation and result of the 12-month rolling period perchloroethylene consumption determined on the first day of each month as specified in 310 CMR 7.26(10)(c);
3. The dates when the dry cleaning system components were inspected for leaks, as specified in 310 CMR 7.26(13)(h) and (i), and the name or location of dry cleaning system components where leaks were detected;
4. The dates of repair and records of written or verbal orders for repair parts to demonstrate compliance with 310 CMR 7.26(13)(e) or (j);
5. The date and refrigeration system pressures or temperature sensor monitoring results, as specified in 310 CMR 7.26(14) if a refrigerated condenser is used to comply with 310 CMR 7.26(12)(a) or (b); and
6. The date and colorimetric detector tube monitoring results, as specified in 310CMR7.26(14), if a carbon adsorber is used to comply with 310 CMR 7.26(12)(a) or (b).

(16) Determination of Equivalent Emission Control Technology.

(a) Any person requesting that the use of certain equipment or procedures be considered equivalent to the requirements under 310 CMR 7.26(12) and (13) shall collect, verify, and submit to the Administrator the following information to show that the alternative achieves equivalent emission reductions:

1. Diagrams, as appropriate, illustrating the emission control technology, its operation and integration into or function with dry-to-dry machine(s) or transfer machine system(s) and their ancillary equipment during each portion of the normal dry cleaning cycle;
2. Information quantifying vented perchloroethylene emissions from the dry-to-dry machine(s) or transfer machine system(s) during each portion of the dry cleaning cycle with and without the use of the candidate emission control technology;
3. Information on solvent mileage achieved with and without the candidate emission control technology. Solvent mileage is the average weight of articles cleaned per volume of perchloroethylene used. Solvent mileage data must be of continuous duration for at least one year under the conditions of a typical dry cleaning operation. This information on solvent mileage must be accompanied by information on the design, configuration, operation, and maintenance of the specific dry cleaning system from which the solvent mileage information was obtained;
4. Identification of maintenance requirements and parameters to monitor to ensure proper operation and maintenance of the candidate emission control technology;
5. Explanation of why this information is considered accurate and representative of both the short-term and the long-term performance of the candidate emission control technology on the specific dry cleaning system examined;
6. Explanation of why this information can or cannot be extrapolated to dry cleaning systems other than the specific system(s) examined; and
7. Information on the cross-media impacts (to water and solid waste) of the candidate emission control technology and demonstration that the cross-media impacts are less than or equal to the cross-media impacts of a refrigerated condenser.

(b) Prior to operation of the dry cleaning system, an owner or operator shall receive approval of an equivalency determination of their emission control equipment from the Administrator and shall notify the Department of the Administrator's determination.

(20) Environmental Results Program: Lithographic, Graphic Arts, and Screen Printing.

(a) 310 CMR 7.26(20) through (29) sets forth performance standards and recordkeeping requirements for lithographic, graphic arts and screen printing at facilities subject to 310 CMR 7.26(20) through (29) pursuant to 310 CMR 7.26(21).

(b) Facilities subject to 310 CMR 7.26(20) through (29) are not subject to 310 CMR 7.18(12), (14) and (25).

7.26: continued

(c) By complying with the recordkeeping requirements contained in 310 CMR 7.26(20) through (29), and with the certification requirements contained in 310 CMR 70.00, and by maintaining actual emissions below the levels contained in 310 CMR 7.26(20)(c)1. through 4., the owner/operator of a facility subject to 310 CMR 7.26(20) through (29) restricts the federal potential emissions of the facility to below the applicable major source thresholds. As such, the operations will not be subject to 310 CMR 7.00: *Appendix A* (Emission Offsets and Nonattainment Review), 310 CMR 7.00: *Appendix C* (Operating Permit Program), 40 CFR 52.21 (Prevention of Significant Deterioration), and 40 CFR 63 (Maximum Achievable Control Technology). For every rolling 12-month period as defined in 310 CMR 7.26(22), the potential and actual emissions of the facility shall be less than the following limitations:

1. 50 tons of VOC or $NO_x$, or 100 tons of any other regulated air pollutant;
2. 10 tons per year of any HAP;
3. 25 tons per year of a combination of HAPs; and
4. Any lesser threshold for a single HAP that the EPA may establish by rule.

(21) Applicability.

(a) The provisions of 310 CMR 7.26(20) through (29) apply to the owner or operator of each facility, except those facilities subject to 310 CMR 7.00: *Appendix C*:

1. with one or more screen or lithographic printing presses with a primary Standard Industrial Classification code of 23, 27 or under the new North American Industry Classification System (NAICS); 323110, or 323119,
2. with one or more gravure, flexographic, or letterpress printing presses with a primary Standard Industrial Classification code of 27 or under the new NAICS; 323111, 323112, or 323119, or,
3. with one or more printing presses with a primary Standard Industrial Classification code of 26 or under the new NAICS; 323113 or 323119.

(b) The provisions of 310 CMR 7.26(20) through (29) do not apply to the owner or operator of a facility that performs lithographic, gravure, flexographic, letterpress, or screen printing with a primary Standard Industrial Classification code or NAICS code different from those listed in 310 CMR 7.26(21)(a).

(22) Definitions: The definitions found in 310 CMR 7.00 apply to 310 CMR 7.26(20) through (29). The following words and phrases shall have the following meanings as they appear in 310 CMR 7.26(20) through (29). Where a term is defined in the 310 CMR 7.00 Definitions section and the definition also appears in 310 CMR 7.26(22), the definition found in 310 CMR 7.26(22) controls.

Adhesive means any substance that is used to bond one surface to another surface.

Alcohol means any of the following compounds, when used as a fountain solution additive for offset lithographic printing: ethanol, n-propanol, and isopropanol.

Conforming operation means a press or presses that meet the standards established in 310 CMR 7.26(24)(d), 310 CMR 7.26(25)(a) or 310 CMR 7.26(26)(a).

Conductive Ink means an ink which transmits electricity and is used in the production of electronic circuits.

Extreme Performance Ink or Extreme Performance Coating means an ink or coating used in screen printing on a non-porous substrate that is designed to resist or withstand any of the following: more than two years of outdoor exposure or exposure to industrial-grade chemicals, solvents, acids, or detergents, oil products, cosmetics, temperatures exceeding 76°C (170°F), vacuum forming, embossing or molding.

Flexographic printing means a printing system utilizing a flexible rubber or elastomeric image carrier in which the image area is raised relative to the non-image area. The image is transferred to the substrate through first applying ink to a smooth roller which in turn rolls the ink onto the raised pattern of a rubber or elastomeric pad fastened around a second roller, which then rolls the ink onto the substrate.

7.26: continued

Gravure Printing means an intaglio printing operation in which the ink is transferred from wells on a plate to the substrate by pressure, with excess ink removed from the surface of the plate, which is supported by an impression roller, by a doctor blade.

HAP means an air contaminant listed by EPA as a HAP, pursuant to 42 U.S.C. 7401, § 112. That list is incorporated by reference herein, together with all amendments and supplements thereto.

Heatset Inks means inks used to set or fix the ink pigment and binding resins to the substrate.

Heatset Press means an offset lithographic printing press, where the solvent component of the ink is driven off with the use of heat from dryers or ovens. Thermography is not included in this definition.

Incidental Material(s) means one or more VOC containing material(s) which do not, in total, exceed 55 gallons per rolling 12 month period, and which do not comply with an applicable standard set forth in 310 CMR 7.26(20) through (29).

Large Printer means a printer that uses a total of more than 3,000 gallons of cleanup solution and inks/coatings/adhesives with a VOC content greater than 10% by weight as applied, per rolling 12 month period. Incidental material, ink used in non-heatset offset lithographic printing, water-based ink/coating/adhesive, plastisol and ultraviolet ink are excluded from this calculation.

Letterpress Printing means a method where the image area is raised relative to the non-image area and the ink is transferred to the paper directly from the image surface.

Metallic Ink means an ink that contains greater than 50 grams of metal per liter (0.4 lb/gal) of ink.

MSDS means a Material Safety Data Sheet.

Midsize Printer means a printer that uses a total of more than 275 and no more than 3000 gallons of cleanup solution and inks/coatings/adhesives with a VOC content greater than 10% by weight as applied, per rolling 12 month period, or that uses a total of more than 55 gallons of alcohol per rolling 12 month period and a total of no more than 3000 gallons of cleanup solution, and inks/coatings/adhesives with a VOC content greater than 10% by weight as applied, per rolling 12 month period. Incidental material, ink used in non-heatset offset lithographic printing, water-based ink/coating/adhesive, plastisol and ultraviolet ink are excluded from this calculation.

Non-conforming Operation means a press or presses that use ink, coating, or adhesive which do not meet the standards established in 310 CMR 7.26(24)(d), 310 CMR 7.26(25)(a), or 310 CMR 7.26(26)(a) at a printer who has demonstrated that it is technically or economically infeasible to use ink, coating, or adhesive that meets those standards.

Non-heatset Offset Lithographic Printing means offset lithographic printing in which the ink dries by oxidation and absorption into the substrate without the use of heat from dryers or ovens.

Offset Lithographic Printing means a planeographic method in which the image and non-image areas are on the same plane.

Plastisol Ink(s) means a dispersion of finely divided resin in a plasticizer.

Printer means the owner or operator of a facility subject to 310 CMR 7.26(20) through (29) pursuant to 310 CMR 7.26(21).

Rolling 12 Month Period or Rolling 12 Month Period means any consecutive 12 month period of time.

Screen Printing means a process where the printing ink passes through a web or a fabric to which a refined form of stencil has been applied. The stencil openings determine the form and dimensions of the imprint.

7.26: continued

Small Printer means a printer that uses a total of no more than 275 gallons of cleanup solution and inks/coatings/adhesives with a VOC content greater than 10% by weight as applied per rolling 12 month period, and that uses less than or equal to 55 gallons of alcohol per rolling 12 month period. Incidental material, ink used in non-heatset offset lithographic printing, water-based ink/coating/adhesive, plastisol and ultraviolet ink are excluded from this calculation.

Solvent means organic compounds which are used as adhesives, diluents, thinners, dissolvers, viscosity reducers, cleaning agents or for other similar uses.

Thermography means a process for simulating a raised printed surface by dusting the wet ink with a resinous material and then fusing it to the ink with heat to produce a raised effect.

Ultraviolet Inks mean inks which dry by a polymerization reaction induced by ultraviolet energy.

Water-based Ink/Coating/Adhesives means an ink, coating, or adhesive with a VOC content less than or equal to 10% by weight as applied.

(23) Rules for Permitted Facilities:

(a) Each printing press shall be operated on or after May 1, 1998 in compliance with the standards and requirements set forth in 310 CMR 7.26(20) through (29) except in the following situations:

1. if a non-heatset press or conforming operation is covered by a plan approval pursuant to 310 CMR 7.02(1) or a permit pursuant to 310 CMR 7.02(9) issued prior to May 1, 1998, then the non-heatset press or conforming operation may be operated in compliance with that plan approval or permit in *lieu* of operating in compliance with 310 CMR 7.26(20) through (28) until May 1, 2001, at which time the non-heatset press or conforming operation shall be operated in compliance with 310 CMR 7.26(20) through (29), and the conditions of the plan approval or permit as it pertains to the non-heatset or conforming operation shall automatically expire.
2. if a heatset press or non-conforming operation at a facility that, based on materials used before the application of air pollution control equipment, emits no more than ten tons of VOCs facility-wide on a rolling 12 month period, is covered by a plan approval pursuant to 310 CMR 7.02(1) issued prior to May 1, 1998, then the heatset press or non-conforming operation may either be operated in compliance with that plan approval or operated in compliance with the applicable requirements set forth in 310 CMR 7.26(27)(a)1. and 2..
3. if a heatset press or non-conforming operation at a facility that, based on materials used before the application of air pollution control equipment, emits more than ten tons of VOCs facility-wide on a rolling 12 month period, is covered by a plan approval pursuant to 310 CMR 7.02(1) or a permit pursuant to 310 CMR 7.02(9), then that heatset press or non-conforming operation shall be operated in compliance with the terms and conditions of that plan approval or permit.

(24) Standards for Non-heatset Offset Lithographic Printing:

(a) Fountain solution standards for midsize and large printers: The following standards apply to midsize and large printers, except that they do not apply to the fountain solution in a press with a fountain solution reservoir that holds less than or equal to one gallon. Printers may calculate the percent of alcohol in fountain solution using the methodology set forth in 310 CMR 7.26(24)(a)3.:

1. For Web-fed Presses: fountain solution shall not contain any alcohol.
2. For Sheet-fed Presses:
   a. unrefrigerated fountain solution containing alcohol shall contain no more than 5% VOC by weight, including but not limited to alcohol, and;
   b. refrigerated fountain solution containing alcohol shall contain no more than 8% VOC by weight, including but not limited to alcohol, and shall be refrigerated to a temperature of less than 60° F.

7.26: continued

3. Fountain Solution Weekly Averaging: A printer may elect to meet a calendar week average VOC content for fountain solution at an individual press in demonstrating compliance with 310 CMR 7.26(24)(a)2.. In doing so, a printer shall calculate the average VOC content for fountain solution per calendar week using the following formula:

$$VOC_w = \frac{W_1Voc + W_2Voc + W_3Voc}{W_T}$$

where: $VOC_w$ = Weight percent of VOC
$W_1Voc$ = Weight of VOC in Concentrate
$W_2Voc$ = Weight of VOC in Additive
$W_3Voc$ = Weight of VOC added
$W_T$ = Total Weight of fountain solution

(b) Fountain solution tank standard: Fountain solution mixing and storage tanks shall be covered, except when adding or removing solution.

(c) Cleanup solution standard: Cleanup solution used to clean an offset lithographic printing press shall meet the following standards, except that these standards do not apply to incidental materials:

1. cleanup solution either shall not exceed 30% VOC by weight as applied, calculated pursuant to EPA test method 24, or shall have a VOC composite partial pressure of 10 mmHg or less at 20°C (68°F),
2. cleanup solution shall be kept in covered containers during transport and storage, and
3. shop towels contaminated with cleanup solution shall be kept, when not in use, in covered containers.

(d) Adhesive standard for midsize and large printers: Adhesives shall meet the following limit for VOC content, expressed in grams VOC per liter of product as applied (pounds per gallon), less water:

Adhesive 300 (2.5)

(25) Graphic Arts Printing: Gravure, Letterpress, and Flexographic Printing:

(a) Ink, coating, and adhesive standards for midsize and large printers: The following standards apply to midsize and large printers. Inks, coatings, and adhesives, except incidental materials, shall meet the following limits for VOC content, expressed in grams VOC per liter of product as applied (pounds per gallon), less water:

Ink 300 (2.5)
Coating 300 (2.5)
Adhesive 150 (1.25)

(b) Cleanup solution standard: Cleanup solution used to clean a flexographic, gravure, or letterpress printing press shall meet the following standards, except that these standards do not apply to incidental materials:

1. cleanup solution shall have a VOC composite partial pressure of 25 mm Hg or less at 20° C (68°F),
2. cleanup solution shall be kept in covered containers during transport and storage, and
3. shop towels contaminated with cleanup solution shall be kept, when not in use, in covered containers.

(26) Screen Printing:

(a) Ink, coating, and adhesive standards for midsize and large printers: The following standard applies to midsize and large printers. Inks, coatings, and adhesives, except incidental materials, used in screen printing shall meet the following limits for VOC content, expressed in grams VOC per liter of product as applied (pounds per gallon), less water:

| | |
|---|---|
| Ink | 400 (3.3) |
| Coating | 400 (3.3) |
| Adhesive | 400 (3.3) |
| Extreme Performance Ink/Coating | 800 (6.7) |
| Metallic Ink | 400 (3.3) |
| Conductive Ink | 850 (7.1) |

7.26: continued

(b) Cleanup Solution Standard: Cleanup solution used in screen printing shall meet the following standards, except that these standards do not apply to incidental materials:

1. cleanup solution shall have a VOC composite partial pressure of 5.0 mm Hg or less at 20°C (68°F),
2. cleanup solution shall be kept in covered containers during transport and storage, and
3. shop towels contaminated with cleanup solution shall be kept, when not in use, in covered containers.

(27) Printers with Heatset Presses or Non-conforming Operations:

(a) A printer that emits no more than ten tons of actual VOC emissions facility-wide on a rolling 12 month period based on raw material inputs may operate a heatset press(es) or non-conforming operation(s) without a plan approval or permit pursuant to 310 CMR 7.02(1) or 310 CMR 7.02(9), provided that:

1. with respect to the heatset press(es), the printer operates such presses in compliance with cleanup solution standards set forth in 310 CMR 7.26(24)(c), the fountain solution requirement for web-fed lithographic presses set forth in 310 CMR 7.26(24)(a)1., and applicable recordkeeping requirements set forth in 310 CMR 7.26(28). In addition, the printer shall calculate and keep records of actual VOC and HAP emissions per calendar month based on each VOC and each HAP containing compound used at the facility pursuant to 310 CMR 7.26(28)(c)3..
2. with respect to the non-conforming operation(s), the printer operates in compliance with applicable cleanup solution standards set forth in 310 CMR 7.26(25)(b) and 310 CMR 7.26(26)(b), and applicable recordkeeping requirements set forth in 310 CMR 7.26(28). In addition, the printer shall calculate and keep records of actual VOC and HAP emissions per calendar month based on each VOC and each HAP containing compound used at the facility pursuant to 310 CMR 7.26(28)(c)3..

(b) A printer that emits no more than ten tons of actual VOCs facility-wide on a rolling 12 month period based on approved control equipment or other enforceable restrictions contained in a plan approval or permit issued pursuant to 310 CMR 7.02(1) or 310 CMR 7.02(9), including but not limited to production and operational restrictions, may install one or more heatset presses or non-conforming operations without obtaining a plan approval or permit pursuant to 310 CMR 7.02(1) or 310 CMR 7.02(9) for the new press(es) or operation(s) provided that:

1. installation of the new heatset press(es) or non-conforming operation(s) will not result in more than ten tons per year (TPY) of actual VOC emissions facility-wide on a rolling 12 month period based on:
   i. raw material inputs associated with the new press(es) or operation(s); and
   ii. with respect to existing heatset press(es) or non-conforming operation(s), approved control equipment or other enforceable restrictions, including but not limited to production and operational restrictions; and,
2. with respect to the new press(es) or operation(s), the printer complies with the requirements set forth in 310 CMR 7.26(27)(a)1. and 2..

(c) A printer that emits more than ten tons of actual VOCs facility-wide on a rolling 12 month period based on raw material inputs or enforceable restrictions contained in a plan approval or permit issued pursuant to 310 CMR 7.02(1) or 310 CMR 7.02(9), including but not limited to production and operational restrictions, shall, with respect to heatset press(es) or non-conforming operation(s), comply with the terms and conditions of a plan approval or permit issued pursuant to 310 CMR 7.02(1) or 310 CMR 7.02(9).

(d) Notwithstanding 310 CMR 7.26(27)(c), a printer that emits more than ten tons of actual VOCs facility-wide on a rolling 12 month period based on raw material inputs or enforceable restrictions contained in a plan approval or permit issued pursuant to 310 CMR 7.02(1) or 310 CMR 7.02(9), including but not limited to production and operational restrictions, need not obtain a plan approval or permit pursuant to 310 CMR 7.02(1) or 310 CMR 7.02(9) for existing press(es) or operation(s) provided that:

1. installation of the existing heatset press(es) or non-conforming operation(s) occurred such that the actual VOC emissions facility-wide on a rolling 12 month period based on raw material inputs or enforceable restrictions contained in a plan approval or permit issued pursuant to 310 CMR 7.02(1) or 310 CMR 7.02(9), including but not limited to production and operational restrictions were less than or equal to ten tons per year; and,

7.26: continued

2. such presses or operations comply with the requirements set forth in 310 CMR 7.26(27)(a)1. and 2..

(28) Recordkeeping: Each printer shall maintain records sufficient to demonstrate compliance. Such records shall be kept on-site for at least three years, and shall be made available to representatives of the Department upon request. Such records shall include, but are not limited to, the following:

(a) Each small printer shall maintain:

1. monthly purchase or usage records sufficient to demonstrate that the printer is a small printer, including but not limited to records concerning cleanup solutions, alcohol, inks, coatings, adhesives and incidental materials, excluding water-based inks/coatings/ adhesives, ultraviolet inks, plastisol inks, and inks used in non-heatset offset lithographic printing;

2. records demonstrating that cleanup solutions are in compliance with applicable standards set forth in 310 CMR 7.26(20) through (29) according to EPA test method 24 or 24A, as applicable, or an equivalent test methodology as determined by the Department and EPA, and appropriate documentation indicating compliance with the VOC composite partial pressure as defined in 310 CMR 7.00; and,

3. for water-based inks/coatings/adhesives, ultraviolet inks, and plastisol inks, MSDSs or other records demonstrating that the ink/coating/adhesive is water-based, ultraviolet, or plastisol as applicable.

(b) Each midsize printer shall maintain:

1. monthly purchase or usage records sufficient to demonstrate that the printer is a midsize printer, including but not limited to records concerning cleanup solutions, inks, coatings, adhesives, and incidental materials, excluding water-based inks/coatings/ adhesives, ultraviolet inks, plastisol inks, and inks used in non-heatset offset lithographic printing;

2. records demonstrating that cleanup solutions, inks, coatings, and adhesives are in compliance with applicable standards set forth in 310 CMR 7.26(20) through (29) according to EPA test method 24 or 24A, as applicable, or an equivalent test methodology as determined by the Department and EPA, and appropriate documentation indicating compliance with the VOC composite partial pressure as defined in 310 CMR 7.00;

3. records of the percent by weight of VOC in fountain solution as measured each time alcohol or alcohol mix is used to mix a new batch of fountain solution and each time it is added to fountain solution on-press, based on analytical data, and the proportions of the constituents mixed;

4. calculations performed pursuant to 310 CMR 7.26(24)(a)3;

5. the daily temperature of fountain solutions required to be refrigerated pursuant to 310 CMR 7.26(24)(a)2.b. when alcohol content is greater than 5% by weight;

6. for water-based inks/coatings/adhesives, ultraviolet inks, and plastisol inks, MSDSs or other records demonstrating that the ink/coating/adhesive is water-based, ultraviolet, or plastisol as applicable; and,

7. printers using alcohol-free fountain solution on web-fed or sheetfed non-heatset offset lithographic printing presses, records (*e.g.*, MSDSs) demonstrating that the fountain solution constituents are alcohol-free.

(c) Each large printer shall maintain:

1. monthly purchase or usage records sufficient to demonstrate that the printer is a large printer, including but not limited to records concerning cleanup solutions, inks, coatings, adhesives and incidental materials, excluding water based inks/coatings/adhesives, ultraviolet inks, plastisol inks, and inks used in non-heatset offset lithographic printing;

2. records demonstrating that cleanup solutions, inks, coatings, and adhesives are in compliance with applicable standards set forth in 310 CMR 7.26(20) through (29) according to EPA test method 24 or 24A, as applicable, or an equivalent test methodology as determined by the Department and EPA, and appropriate documentation indicating compliance with the VOC composite partial pressure as defined in 310 CMR 7.00;

7.26: continued

3. a calculation of actual emissions per calendar month based of all VOC and each HAP containing compounds used at the facility. VOC emissions from non-heatset inks used in lithography shall be calculated by assuming that 5% of the inks' VOCs are emitted to the atmosphere and 95% are retained in the paper. VOC emissions from heatset inks used in lithography shall be calculated by assuming that 80% of the inks' VOCs are emitted to the atmosphere and 20% are retained in the paper;

4. the percent by weight of VOC in fountain solution as measured each time alcohol or alcohol mix is used to mix a new batch of fountain solution and each time it is added to fountain solution on-press, based on analytical data and the proportions of the constituents mixed;

5. calculations performed pursuant to 310 CMR 7.26(24)(a)3.;

6. the daily temperature of fountain solutions required to be refrigerated pursuant to 310 CMR 7.26(24)(a)2.b. when alcohol content is greater than 5% by weight;

7. for water-based inks/coatings/adhesives, ultraviolet inks, and plastisol inks, MSDSs or other records demonstrating that the ink/coating/adhesive is water-based, ultraviolet, or plastisol as applicable; and,

8. printers using alcohol-free fountain solution on web-fed or sheetfed non-heatset offset lithographic printing presses, records (*e.g.*, MSDSs) demonstrating that the fountain solution constituents are alcohol-free.

(29) Compliance Certification Requirement:

(a) Beginning on September 15, 2006, each printer shall submit to the Department a compliance certification in accordance with 310 CMR 70.00 and 310 CMR 7.26(29). As part of the certification, each large printer shall submit information the Department may specify, including:

1. the nature and amounts of emissions from the facility,

2. information which may be needed to determine the nature and amounts of emissions from the facility, and

3. any other information pertaining to the facility which the Department requires.

(b) If, during the course of the certification period, a printer installs a new printing press or makes operational changes which will cause a modification of its size classification, the printer shall, within 60 days of operation of the new press or actual operational changes respectively, notify the Department in writing. Such printer shall comply with 310 CMR 7.26(20) through (29) based on the applicable new size classification as soon as the new press is operating or the operational change is made.

(c) If, during the course of the certification period, a printer relinquishes an existing plan approval in accordance with 310 CMR 7.26(23)(a)(1) or (2), then within 30 days of such change the printer shall notify the Department in writing.

(30) U Boilers - Applicability. Except as provided in 310 CMR 7.26(30)(a) and (b), the provisions of 310 CMR 7.26(30) through (37) apply to any person who owns or operates a boiler installed on or after September 14, 2001, with a heat input rating equal to or greater than 10,000,000 Btu per hour but less than 40,000,000 Btu per hour. Complying with the criteria in 310 CMR 7.26(30) through (37) does not relieve the owner or operator from his or her applicability to the requirements of 40 CFR 60 Subpart Dc - Standards of Performance for Small Industrial - Commercial Steam Generating Units or 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters.

(a) The provisions of 310 CMR 7.26(30) through (37) do not apply to any person who is an owner or operator of a facility:

1. who has secured an operating permit pursuant to 310 CMR 7.00: *Appendix C*.; however, 310 CMR 7.02(4) or (5) do apply;

2. who proposes to install a wood fuel-fired boiler with a heat input rating equal to or greater than 10,000,000 Btu per hour but less than 40,000,000 Btu per hour; however, 310 CMR 7.02(5) does apply; or

3. who installs a temporary boiler in accordance with 310 CMR 7.03(23).

(b) If the installation of the boiler(s) causes the facility to be subject to 310 CMR 7.00: *Appendix C*, or to exceed an emission cap contained in a written Department approval, or notification pursuant to 310 CMR 7.02(11), the person who is an owner or operator of the facility shall, as applicable:

7.26: continued

1. file either a Limited Plan Application pursuant to 310 CMR 7.02(4) or Comprehensive Plan Application pursuant to 310 CMR 7.02(5) to increase the facility-wide cap or to establish an emission cap to avoid applicability to Non-Attainment Review at 310 CMR 7.00: *Appendix A*, Operating Permit and Compliance Program at 310 CMR 7.00: *Appendix C* or federal PSD(40 CFR 52.21); or

2. comply with 310 CMR 7.26(30) through (37) and comply with the requirements of Non-Attainment Review at 310 CMR 7.00: *Appendix A*, the Operating Permit and Compliance Program at 310 CMR 7.00: *Appendix C* and federal PSD (40 CFR 52.21) as applicable; or

3. comply with 310 CMR 7.26(30) through (37) and submit a notification establishing an emission cap under 310 CMR 7.02(11), or a higher emissions cap under 310 CMR 7.02(11) where the installation would otherwise violate an emissions cap pursuant to 310 CMR 7.02(11); or

4. comply with 310 CMR 7.26(30) through (37) and comply with the requirements of 310 CMR 7.02(10): *Modification of a Restricted Emission Status (RES).*

(c) Any person who is the owner/operator of a boiler installed in accordance with 310 CMR 7.26(30) shall continue to comply with 310 CMR 7.26(31) and (33) through (37) even if the facility later becomes subject to 310 CMR 7.00: *Appendix C.*

(31) Definitions. Terms used in 310 CMR 7.26(30) through (37) are defined in 310 CMR 7.00 or in 310 CMR 7.26(31). Where a term is defined in both 310 CMR 7.00 and in 310 CMR 7.26(31), the definition in 310 CMR 7.26(31) is applicable.

ADJACENT STRUCTURE means a structure that is within 5L of the stack. 5L means five times the lesser dimension (height or maximum projected width) of the structure.

AUTOMATED COMBUSTION CONTROL SYSTEM means a system that self adjusts burner/boiler operation to maximize energy efficiency. It must include at least the following capabilities: fuel/air ratio adjusted automatically, fuel flow metered/monitored, and continuous monitoring of nitrogen oxides (NOx) and carbon monoxide.

BOILER means a device that combusts any fuel and produces steam or heats water.

DISTILLATE FUEL OIL for the purposes of 310 CMR 7.26(30) means fuel oil that complies with the specifications for fuel oil numbers 1 or 2 as defined by the American Society for Testing and Materials in ASTM D396-98, "Standard Specification for Fuel Oil" dated September 1998 and has a sulfur content not to exceed 0.05% by weight or D6751 for bio-diesel and has a sulfur content not to exceed 0.0015% by weight.

INSTALL or INSTALLATION as used in 310 CMR 7.26(30) means to set an emission unit in position for use. A relocation of a previously approved boiler, provided that it is relocated within the facility or to a contiguous property, owned and operated by the same owner is not an installation.

ULTRA-LOW SULFUR DISTILLATE FUEL OIL (ULSD) means any fuel oil or other fuel, excluding used oil fuel and hazardous waste fuel, which complies with the applicable U.S. Environmental Protection Agency sulfur limits for fuel pursuant to 40 CFR 80.29, 40 CFR 80.500, and 40 CFR 80.520(a) and (b) as in effect on January 18,2001 and either complies with the specifications for fuel oil numbers 1 or 2 as defined by the American Society for Testing and Materials (ASTM) in ASTM D-396-98 or D6751 for bio-diesel.

SUPPLIER means a person or persons who manufactures, provides, assembles, or installs for use a boiler subject to 310 CMR 7.26(30) through (37) for the person who is the owner or operator.

(32) Certification.

(a) An owner or operator of a boiler subject to 310 CMR 7.26(30) shall submit to the Department an initial compliance certification form within 60 days of the date on which the boiler commences operation.

7.26: continued

(b) Effective December 28, 2007, prior to installation and operation, a person who is an owner or operator of a boiler subject to 310 CMR 7.26(30) shall certify to the Department, in compliance with 310 CMR 70.00, that the boiler is in compliance with 310 CMR 7.26(30) through (37).

(33) Fuel of Use/Emission Limitations.

(a) Fuel of Use.

1. Only natural gas and distillate fuel oil(s) may be used, as specified in 310 CMR 7.26(33)(a)2. through (a)4. Used oil fuel and Hazardous Waste Fuel as defined under 310 CMR 30.000 cannot be burned in boilers subject to 310 CMR 7.26(30).

2. NATURAL GAS – Prior to July 1, 2009:

a. a boiler subject to 310 CMR 7.26(30) shall burn natural gas as the primary fuel of use where the boiler is located on a property adjacent to a street or sidewalk underlain by a natural gas pipeline having sufficient pressure and capacity to supply natural gas to the boiler.

b. a natural gas fired boiler may burn distillate fuel oil for a maximum of 180 days per calendar year. Total annual distillate fuel use (gallons/year) is calculated by multiplying 90 days/yr x 24 hours/day x maximum firing rate (gals/hour) per boiler. Records must be established and maintained up to date in accordance with 310 CMR 7.26(36): *Recordkeeping and Reporting*.

3. DISTILLATE – Prior to July 1, 2009, a boiler subject to 310 CMR 7.26(30) may burn distillate fuel oil as the primary fuel of use when conditions for natural gas use, as specified in 310 CMR 7.26(33)(a)2., cannot reasonably be met.

4. On and after July 1, 2009, there is no restriction on the gallons of distillate fuel oil burned in a boiler subject to 310 CMR 7.26(30) through (37). The owner or operator of a boiler subject to 310 CMR 7.26(30) shall accept for delivery only natural gas or ultra-low sulfur distillate fuel oil.

5. On and after July 1, 2009, an owner or operator of a boiler subject to 310 CMR 7.26(30) shall accept for delivery only natural gas or ultra-low sulfur distillate fuel oil.

(b) Emission Limitations. Each boiler shall comply with the following emission limitations in pounds per million Btu heat input for the fuel of use.

| POLLUTANT | Fuel of Use | Emission limitation (lbs. per million Btu) |
|---|---|---|
| Nitrogen Oxides | Natural Gas | 0.0350 |
| | Distillate | 0.150 |
| | Ultra-low Sulfur Distillate Fuel Oil | |
| Particulate Matter | Natural Gas | 0.010 |
| | Distillate and Ultra-low Sulfur Distillate Fuel Oil | 0.020 |
| Carbon Monoxide | Natural Gas | 0.080 |
| | Distillate and Ultra-low Sulfur Distillate Fuel Oil | 0.080 |
| Volatile Organic Compounds | Natural Gas | 0.030 |
| | Distillate and Ultra-low Sulfur Distillate Fuel Oil | 0.030 |

(c) The sulfur dioxide emissions are limited by the sulfur content of the distillate fuel oil. The sulfur content of the distillate fuel oil is limited to 0.05% by weight and the sulfur content of the ULSD fuel oil is limited to 0.0015% by weight.

(d) The carbon monoxide emission limitation specified in 310 CMR 7.26(33)(b) does not apply to high turndown boilers while operating at less than 25% of the maximum input rating.

(e) Visible Emissions (excluding water vapor) may not exceed 10% opacity at any time during boiler operation.

(34) Operational Requirements.

(a) The boiler and appurtenances shall be operated in accordance with the manufacturer's standard operating and maintenance procedures.

7.26: continued

(b) A boiler tune-up shall be performed annually. A boiler tune-up shall include an inspection for proper operation, any other maintenance recommended by the manufacturer, and an efficiency test. An efficiency test shall include at least a smoke spot reading, flue gas temperature measurement and a measure of carbon dioxide, oxygen, and carbon monoxide. A written record of the efficiency test and any maintenance performed shall be kept on site in accordance with the record keeping provisions contained 310 CMR 7.26(36).

(c) Fuel additives shall only be used in accordance with the manufacturer's instructions.

(35) Stack Requirements.

(a) Minimum stack height shall be 1.5 times the height of the building on which the stack is located. If the stack height is:

1. lower than 1.5 times the building height; or
2. lower than the height of an adjacent structure, an EPA Guideline air quality model shall be run to document that the operation of the applicable boiler(s) will not cause National Ambient Air Quality Standards exceedances. The air quality model documentation must be retained on site for as long as the boiler(s) are operational.

(b) Stacks shall not be equipped with rain protection of a type that restricts the vertical exhaust flow of the combustion gases as they are emitted to the ambient air. "Shanty caps", "egg beaters" and the like are prohibited.

(c) The stack shall be configured to discharge the combustion gases vertically upwards.

(36) Recordkeeping and Reporting.

(a) A recordkeeping system shall be established and implemented onsite and shall provide sufficient detail to document compliance.

(b) Recordkeeping shall include the following:

1. dates of boiler installation and first operation;
2. a monthly record of fuel type, fuel additives, fuel usage in gallons or cubic feet, and sulfur content, as certified by the fuel supplier;
3. a written record of all tune-ups, including inspections, maintenance, and results of the efficiency tests, and;
4. all purchase orders and invoices related to boiler combustion or emission rate.

(c) Documentation shall be maintained onsite that the boiler and its appurtenances, as designed and installed, will comply with the emission limitations when operated in accordance with the manufacturer’s instructions. This documentation, including the manufacturer’s operating instructions, shall be retained for as long as the boiler operates.

(d) All records shall be maintained up-to-date such that year-to-date information is readily available for Department examination. Records shall be kept for at least three calendar years.

(e) The person who is the owner or operator of an applicable boiler is subject to the reporting requirements of 310 CMR 7.12: *U Source Registration*.

(37) Prohibitions.

(a) Concealing of emissions is prohibited.

(b) Removal of air pollution control or monitoring equipment is prohibited.

(c) Natural draft rotary cup burners are prohibited.

(40) Engines and Combustion Turbines - Applicability.

(a) 310 CMR 7.26(40) through (44) in its entirety shall apply to any person who owns or operates engines and combustion turbines installed on and after March 23, 2006 and are not subject to Prevention of Significant Deterioration (40 CFR 52.21) or Non-attainment Review at 310 CMR 7.00: *Appendix A*.

(b) Owners and operators of engines regulated under 40 CFR 89, 90, 91, and 92 are exempt from the requirements of 310 CMR 7.26(40) through (44) in its entirety.

(41) Definitions. Terms used in 310 CMR 7.26(40) through (44) are defined in 310 CMR 7.00 and 310 CMR 7.26(41). When a term is defined in both 310 CMR 7.00 and 310 CMR 7.26(41), the definition in 310 CMR 7.26(41) shall govern.

Combined Heat and Power and CHP means a system consisting of an engine or turbine in combination with a heat recovery system such as a boiler that sequentially produces both electric power and thermal energy for use.

Design System Efficiency means the sum of the full load design thermal output and electric output divided by the heat input, all in consistent units of measurement.

7.26: continued

Emergency means an electric power outage due to failure of the grid, in whole or in part, on-site disaster, local equipment failure, flood, fire, or natural disaster. Emergency shall also mean when the imminent threat of a power outage is likely due to failure of the electrical supply or when capacity deficiencies result in a deviation of voltage from the electrical supplier to the premises of 3% above or 5% below standard voltage, or periods during which the regional transmission organization directs the implementation of voltage reductions, voluntary load curtailments by customers, or automatic or manual load shedding within Massachusetts in response to unusually low frequency, equipment overload, capacity or energy deficiency, unacceptable voltage levels, or other such emergency conditions.

Engines mean spark ignition and compression ignition stationary reciprocating internal combustion engines.

Power-to-heat Ratio means the design electrical output divided by the design-recovered thermal output in consistent units of measurement.

Rated Power Output means the maximum electrical or equivalent mechanical power output stated on the nameplate affixed to the engine or turbine by the manufacturer.

Supplier means a person that manufactures, assembles, or otherwise supplies engines or turbines.

Turbine means a stationary combustion turbine.

(42) Emergency Engines and Turbines.

(a) Applicability. 310 CMR 7.26(42) shall apply to any person who owns or operates an emergency or standby engine with a rated power output equal to or greater than 37kW and emergency turbines with a rated power output less than one MW that are constructed, substantially reconstructed or altered after March 23, 2006. Owners and operators of peaking power units, load shaving units or units in an energy assistance program are subject to the requirements of 310 CMR 7.26(43).

1. Owners and operators of emergency turbines with a rated power output equal to or greater than one MW shall comply with the provisions of 310 CMR 7.02(5).

2. Owners and operators of emergency engines and turbines that are subject to 310 CMR 7.02(8)(i) or 310 CMR 7.03(10) shall continue to be subject to such requirements.

3. Owners and operators of emergency engines and turbines subject to 310 CMR 7.26(42) are not subject to the requirements of 310 CMR 7.02(5).

4. Owners and operators of emergency or standby engines and turbines used as mechanical power sources for water pumping activities such as, but not limited to, firefighting, flood control, waste water flow, are subject 310 CMR 7.26(42) in its entirety.

5. Owners and operators of emergency engines or turbines approved prior to September 23, 2005 under the requirements of 310 CMR 7.02(5) may operate during an emergency as defined in 310 CMR 7.26(41).

(b) Emission Limitations. Owners and operators of emergency engines and turbines must comply with the emission limitations set forth in 310 CMR 7.26(42).

1. Engines with a rated power output equal to or greater than 37 kW must comply with the applicable emission limitations set by the US EPA for non-road engines (40 CFR 89 as in effect October 23, 1998) at the time of installation. The owner or operator of an engine subject to the requirements of 310 CMR 7.26(42)(b)1. shall obtain from the supplier a statement that a certificate of conformity has been obtained from the Administrator pursuant to 40 CFR 89.105 as in effect October 23, 1998. Any engine certified under the US EPA non-road standards is automatically certified to operate as an emergency engine pursuant to 310 CMR 7.26(42). For units that burn natural gas exclusively, a letter or other documentation from the supplier stating that the engine meets the applicable non-road emission limitation will satisfy the certificate of conformity requirement.

2. All emergency turbines with a rated power output less than one MW shall comply with the emission limitations contained in 310 CMR 7.26(42): *Table 1*.

7.26: continued

Table 1.

Emission Limitations – Emergency Turbines

| Rated Power Output | Oxides of Nitrogen |
|---|---|
| < 1 MW | 0.60 pounds/MW - hr |

(c) Fuel Requirements. On and after July 1, 2007, no person shall accept delivery for burning in any engine or turbine subject to 310 CMR 7.26(42) diesel or any other fuel that does not meet the applicable U.S. Environmental Protection Agency sulfur limits for fuel pursuant to 40 CFR 80.29, 40 CFR 80.500, and 40 CFR 80.520(a) and (b) as in effect January 18, 2001.

(d) Operational Requirements. Any person who owns or operates an emergency or standby engine or emergency turbine subject to 310 CMR 7.26(42) shall comply with the following requirements:

1. Hours of Operation. The engine and turbine shall not be operated more than 300 hours during any rolling 12-month period. This operating restriction includes normal maintenance and testing procedures as recommended by the manufacturer. A non-turnback hour counter shall be installed, operated and maintained in good working order on each unit.

2. Operation and Maintenance. The engine(s) or turbine(s) shall be operated and maintained in accordance with the manufacturer's recommended operating and maintenance procedures.

3. Sound. Engines, turbines and associated equipment shall be constructed, located, operated and maintained in a manner to comply with the requirements of 310 CMR 7.10: *Noise*.

4. Stack Height and Emission Dispersion.

a. All engines or turbines shall utilize an exhaust stack that discharges so as to not cause a condition of air pollution (310 CMR 7.01(1)). Exhaust stacks shall be configured to discharge the combustion gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted combustion gases, including but not limited to rain protection devices "shanty caps" and "egg beaters". Any emission impacts of exhaust stacks upon sensitive receptors including, but not limited to, people, windows and doors that open, and building fresh air intakes shall be minimized by employing good air pollution control engineering practices. Such practices include without limitation:

i. Avoiding locations that may be subject to downwash of the exhaust; and

ii. installing stack(s) of sufficient height in locations that will prevent and minimize flue gas impacts upon sensitive receptors.

b. Engines or turbines with a rated power output equal to or greater than 300 kw, but less than 1 MW, shall have a minimum stack height of ten feet above the facility rooftop or the emergency engine or turbine enclosure, whichever is lower.

c. Engines with a rated power output equal to or greater than one MW shall be equipped with a stack with a minimum stack height of 1.5 times the height of the building on which the stack is located. If the stack is lower than 1.5 times the building height or lower than the height of a structure that is within 5L of the stack (5L being five times the lesser of the height or maximum projected width of the structure), an EPA Guideline air quality model shall be run to document that the operation of the applicable emergency engine or turbine will not cause an exceedance of any National Ambient Air Quality Standard.

5. Visible Emissions. Emergency engines and turbines shall comply with all the requirements of 310 CMR 7.06(1)(a) and (b).

7.26: continued

(e) Emission Certification, Monitoring and Testing.

1. Certification. No person shall cause, suffer, allow, or permit the installation and subsequent operation of an engine or turbine unless said person has certified compliance with the requirements of 310 CMR 7.26(42) in its entirety in accordance with the provisions of 310 CMR 70.00: *Environmental Results Program Certification*. Certification shall include a statement from the supplier that the installed engine or turbine is capable of complying with the emission limitations for the first three years of operation. A one time certification shall be made to the Department within 60 days of commencement of operation; annual certification is not required.

2. Monitoring. The Department may require emission or other monitoring to assure compliance with the requirements of 310 CMR 7.26(42).

3. Testing. Any testing when required shall comply with the following:

a. Tests to certify compliance with emission limitations must be performed in accordance with EPA reference Methods, California Air Resources Board Methods approved by EPA, or equivalent methods as approved by the Department and EPA.

b. Particulate matter from liquid fuel reciprocating engines shall be determined using Method 8178 D2 of the International Organization for Standardization.

c. Testing shall be conducted at full the design load of the emergency engine or turbine.

d. The Department may require emission or other testing to assure compliance with the emission limitations or fuel requirements.

(f) Recordkeeping and Reporting. The owner or operator shall maintain records described in 310 CMR 7.26(42)(f)1. through 4. Such records shall be maintained on site or for remote locations, at the closest facility where records can be maintained and shall be made available to the Department or its designee upon request. The owner or operator shall certify that records are accurate and true in accordance with 310 CMR 7.01(2)(a) through (c).

1. Information on equipment type, make and model, and rated power output; and

2. A monthly log of hours of operation, fuel type, heating value and sulfur content for fuel oil. A monthly calculation of the total hours operated in the previous 12 months; and

3. Purchase orders, invoices, and other documents to substantiate information in the monthly log; and

4. Copies of certificates and documents from the manufacturer related to certificates.

(43) Engines and Turbines.

(a) Applicability. 310 CMR 7.26(43) in its entirety shall apply to any person who owns or operates engines with a rated power output equal to or greater than 50kW and to turbines with a rated power output less than or equal to ten MW that are constructed, substantially reconstructed, or altered on or after March 23, 2006.

1. Engines and turbines subject to 310 CMR 7.26(42) are not subject to the requirements of 310 CMR 7.26(43).

2. The owner or operator of any engine or turbine subject to 310 CMR 7.26(43) to be operated as a peaking power production unit, a load shaving unit, a unit in an energy assistance program, a unit that produces mechanical power to run pumps, a unit used to compress natural gas at a pipeline compressor station, a unit burning landfill, digester, or biogas, or other biofuels, may comply with the requirements of 310 CMR 7.02(5)(c) for such unit in *lieu* of complying with the requirements of 310 CMR 7.26(43). Application must be made and written approval granted by the Department prior to construction, substantial reconstruction, or alteration of such engines or turbines.

3. Turbines with a rated output of less than one MW burning fuel oil, or greater than ten MW burning any fuel, shall comply with the requirements of 310 CMR 7.02(5)(c) for such unit in *lieu* of complying with the requirements of 310 CMR 7.26(43). Application must be made and written approval granted by the Department prior to construction, substantial reconstruction, or alteration of such turbines.

4. On and after January 17, 2009, any owner/operator who constructs, substantially reconstructs or alters an engine or turbine that is part of a combined heat and power system, may satisfy 310 CMR 7.26(43)(b) by complying with the requirements of 310 CMR 7.26(45).

(b) Emission Limitations. Owners and operators of engines or turbines subject to 310 CMR 7.26(43) shall comply with the emission limitations established in 310 CMR 7.26(43): *Table 2*, *3* and *4*.

7.26: continued

1. A supplier of an engine or turbine may seek to certify that an engine or turbine meet the emission limitations established in 310 CMR 7.26(43): *Table 2*, *3* and *4*. All such certifications shall specify the make and model number of the engine or turbine. Certification means that the engine or turbine is capable of meeting the emission limitations for the lesser of 15,000 hours of operation or the first three years of operation. Supplier certification shall be on forms provided by the Department.
2. On or before December 31, 2010, the Department will complete a review of the state of, and expected changes in, technology and emission rates. The purpose of this review will be to determine whether the 310 CMR 7.26(43): *Table 2* emission limitations for engines to be installed on and after January 1, 2012, should be amended.
3. Beginning in 2017 and every five years thereafter, the Department shall review the state of technology and emission rates and determine whether the emission limits defined in 310 CMR 7.26(43): *Table 2*, *3* or *4*. should be amended.
4. The Department may at other times review the state of technology and emission rates to determine whether the emission limits defined in 310 CMR 7.26(43): *Table 3* or *4* should be amended.

Table 2
Emission Limitations – Engines

| Installation Date | Oxides of Nitrogen | Particulate Matter (Liquid Fuel Only) | Carbon Monoxide |
|---|---|---|---|
| On and after 3/23/06 | 0.6 lbs/MWh | ≤ 1MW 0.7 lbs/MWh; > 1 MW 0.09 lbs/MW | 10 lbs/MWh |
| On and after 1/1/08 | 0.3 lbs/MWh | 0.07 lbs/MWh | 2 lbs/MWh |
| On and after 1/1/12 | 0.15 lbs/MWh | 0.03 lbs/MWh | 1 lb/MWh |

Table 3
Emission Limitations – Turbines

| Rated Power Output | Oxides of Nitrogen | Ammonia | Carbon Monoxide |
|---|---|---|---|
| Less than 1 MW | 0.47 lbs/MW-hr Natural Gas | N/A | 0.47 lbs/MW-hr Natural Gas |
| 1 to 10 MW | 0.14 lbs/MW-hr Natural Gas<br>0.34 lbs/MW-hr Oil | 2.0 ppm 15% $O_2$ Dry Basis | 0.09 lbs/MW-hr Natural Gas<br>0.18 lbs/MW-hr Oil |

Table 4
Emission Limitations – Engines and Turbines

| Installation Date | Carbon Dioxide |
|---|---|
| On and after 3/23/06 | 1900 lbs/MWh |
| On and after 1/1/08 | 1900 lbs/MWh |
| On and after 1/1/12 | 1650 lbs/MWh |

(c) Fuel Requirements. On or after July 1, 2007, no person shall accept delivery for burning in any engine or turbine subject to 310 CMR 7.26(43) diesel or any other fuel that does not meet the applicable U.S. Environmental Protection Agency sulfur limits for fuel pursuant to 40 CFR 80.29, 40 CFR 80.500, and 40 CFR 80.520(a) and (b) as in effect January 18, 2001.
(d) Operational Requirements. Any person who owns or operates an engine or turbine subject to 310 CMR 7.26(43) shall comply with the following operational requirements:

7.26: continued

1. Operation and Maintenance. The engine(s) and turbine(s) shall be operated and maintained in accordance with the manufacturers recommended operating and maintenance procedures.

2. Sound. Engines, turbines and associated equipment shall be constructed, located, operated and maintained in a manner to comply with the requirements of 310 CMR 7.10: *Noise*.

3. Stack Height and Emission Dispersion.

a. All engines or turbines shall utilize an exhaust stack that discharges so as to not cause a condition of air pollution (310 CMR 7.01(1)). Exhaust stacks shall be configured to discharge the combustion gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted combustion gases, including but not limited to, rain protection devices such as "shanty caps" and "egg beaters". Any emission impacts exhaust stacks upon sensitive receptors such as people, windows and doors that open, and building fresh air intakes shall be minimized by employing good air pollution control engineering practices. Such practices include without limitation:

i. Avoiding locations that may be subject to downwash of the exhaust; and

ii. installing stack(s) of sufficient height in locations that will prevent and minimize flue gas impacts upon sensitive receptors.

b. Engines and turbines burning liquid fuel and with a rated power output of less than 300 kw shall be equipped with an exhaust stack with a minimum stack height of five feet above the rooftop or the engine or turbine enclosure, whichever is lower.

c. Engines and turbines with a rated power output equal to or greater than 300kw, but less than one MW shall be equipped with an exhaust stack with a minimum stack height of ten feet above the rooftop or the engine or turbine enclosure, whichever is lower.

d. Engines and turbines with a rated power output equal to or greater than one MW shall be equipped with a stack with a minimum stack height of 1.5 times the height of the building on which the stack is located. If the stack is lower than 1.5 times the building height or lower than the height of a structure that is within 5L of the stack (5L being five times the lesser of the height or maximum projected width of the structure), an EPA Guideline air quality model shall be run to document that the operation of the applicable engine or turbine will not cause an exceedance of any National Ambient Air Quality Standard.

4. Visible Emissions. Engines and turbines must comply with all the requirements of 310 CMR 7.06(1)(a) and (b).

(e) Emission Certification, Monitoring and Testing.

1. Certification. No person shall cause, suffer, allow, or permit the installation and subsequent operation of an engine or turbine unless said person has certified compliance with the requirements of 310 CMR 7.26(43) in its entirety in accordance with the provisions of 310 CMR 70.00: *Environment Results Program Certification* (initial and annual certification). Certification by such person shall include a statement from the supplier that the installed engine or turbine is capable of complying with the emission limitations for the lesser of 15,000 hours of operation or the first three years of operation.

2. Monitoring. The Department may require emission or other monitoring to assure compliance with the requirements of 310 CMR 7.26(43).

3. Testing. Any testing when required shall comply with the following:

a. Tests to certify compliance with emission limitations must be performed in accordance with EPA reference Methods, California Air Resources Board Methods as approved by EPA, or equivalent methods as approved by the Department and EPA.

b. Particulate matter, from liquid fuel reciprocating engines, shall be determined using Method 8178 D2 of the International Organization for Standardization.

c. Testing shall be conducted at full design load of the engine or turbine.

7.26: continued

d. The Department may require emission or other testing to assure compliance with the emission limitations or fuel requirements.

(f) Record Keeping and Reporting. The owner or operator shall maintain records described in 310 CMR 7.26(43)(f)1. through 4. Such records shall be made available to the Department or its designee upon request. The owner or operator shall certify that records are accurate and true in accordance with 310 CMR 7.01(2)(a) through (c).

1. Information on equipment type, make and model, and maximum power output; and
2. A monthly log of hours of operation, gallons of fuel used, fuel type, heating value, and sulfur content. A monthly calculation of the total hours operated and gallons of fuel used in the previous 12 months shall be kept on site; and
3. Purchase orders, invoices, and other documents to support information in the monthly log.
4. Copies of certificates and documents from the manufacturer related to certificates.

(44) Change in Operational Status. An owner or operator of an engine or turbine subject to the requirements of 310 CMR 7.26(42): *Emergency Engines and Turbines* may elect to remove the hours of operation restriction to operate in a non-emergency by complying with either of the two following methods.

(a) Submit an application for approval and receive approval under the requirements of 310 CMR 7.02(5); or

(b) Certify to the Department that the engine or turbine meets all applicable requirements of 310 CMR 7.26(43).

(45) Combined Heat and Power (CHP). The purpose of 310 CMR 7.26(45) is to encourage the installation of CHP systems. A methodology is set forth whereby emission credits are utilized in determining compliance of a CHP installation with the emission limitations contained in 310 CMR 7.26(43)(b).

(a) Eligibility. CHP installations shall meet the following requirements to be eligible for emission credits related to thermal output:

1. The power-to-heat ratio must be between 4.0 and 0.15.
2. The design system efficiency must be at least 55%.
3. The CHP project must comply with the requirements of 310 CMR 7.02(5)(c).
4. The engine has a rated power output equal to or greater than 50 kW or the turbine has a rated power output less than or equal to ten MW.

(b) Emission Credits. A CHP system that meets these requirements may receive a compliance credit against its actual emissions based on the emissions that would have been created by a conventional separate system used to generate the same thermal output. The credit will be subtracted from the actual CHP system emissions for the purpose of calculating compliance with the emission limitations contained in 310 CMR 7.26(43)(b). The credit will be calculated according to the following assumptions and procedures:

1. The emission rates for the displaced thermal system *(e.g.* boiler) will be:
   a. For CHP installed in new facilities, the emissions limits applicable to new natural gas-fired boilers in 310 CMR 7.26(33) in lb/MMBtu.
   b. For CHP systems that replace existing thermal systems for which historic emission rates can be documented, the historic emission rates in lbs/MMBtu, but not more than:

| Emissions | Maximum Rate |
|---|---|
| Nitrogen oxides | 0.3 lbs/MMBtu |
| Carbon monoxide | 0.008 lbs/MMBtu |
| Carbon dioxide | 117 lbs/MMbtu |

7.26: continued

2. The emission rate of the thermal system in lbs/MMBtu will be converted to an output-based rate by dividing by the thermal system efficiency. For new systems, the efficiency of the avoided thermal system will be assumed to be 80% for boilers or the design efficiency of other process heat systems. If the design efficiency of the other process heat system cannot be documented, an efficiency of 80% will be assumed. For retrofit systems, the historic efficiency of the displaced thermal system can be used if that efficiency can be documented and if the displaced thermal system is enforceably shut down and replaced by the CHP system, or if its operation is measureably and enforceably reduced by the operation of the CHP system.

3. The emissions per MMBtu of thermal energy output will be converted to emissions per MWh of thermal energy by multiplying by 3.412 $MMBtu/MWh_{thermal}$.

4. The emissions credits in $lbs/MWh_{thermal}$, as calculated in 310 CMR 7.26(45)(b)3., will be converted to emissions in $lbs/MWh_{emissions}$ by dividing by the CHP system power-to-heat ratio.

5. The credit, as calculated in 310 CMR 7.26(45)(b)4., will be subtracted from the actual emission rate of the CHP system to produce the emission rate for compliance purposes.

6. The mathematical calculations set forth in 310 CMR 7.26(45)(b)1. through 4. are expressed in the following formula:

$$\text{Credit lbs/MWh}_{\text{emissions}} = \frac{\text{(boiler limit lbs/MMBtu}}{\text{boiler efficiency)}} \times \frac{\text{3.412 MMBtu/W}_{\text{thermal}}}{\text{(power-to-heat ratio)}}$$

7. Emissions determined by this methodology for comparison with the emission limitations set forth in 310 CMR 7.26(43)(b) shall satisfy the requirements of 310 CMR 7.02(8)(a)2.

8. The amount of credit allowed for oxides of nitrogen shall be limited such that total emissions from the CHP system shall be no greater than the sum of emissions from two separate systems producing the amount of electrical and thermal output.

(c) Duct Burners. Emissions from duct burners installed in a CHP system shall comply with the emission limitations contained in 310 CMR 7.26(33).

(50) Outdoor Hydronic Heaters - Applicability.

(a) 310 CMR 7.26(50) through (54) applies to any person who owns, operates, manufactures, supplies, distributes or sells, or any person who intends to distribute or sell, or market an outdoor hydronic heater for use in the Commonwealth of Massachusetts (Commonwealth) , except outdoor hydronic heaters rated with a heat input of one MMBtu/hr or greater that are subject to the Comprehensive Plan Application provisions at 310 CMR 7.02(5)(a)4.

(b) In addition to 310 CMR 7.26(50) through (54), Outdoor hydronic heaters may also be required to comply with other regulations governing design, manufacture and installation of boilers, including, but not limited to:

1. 522 CMR 5.00, Heating Boilers;
2. 522 CMR 6.00, Low-pressure Heating Boilers;
3. 527 CMR 4.00, Oil Burning Equipment, for outdoor hydronic heaters that are dual-fuel units; and
4. 780 CMR 6007, Solid Fuel-burning Appliances of the State Building Code.

(51) Definitions. The following words and phrases shall have the following meanings as they appear in 310 CMR 7.26(50) through (54). Where a term is defined in 310 CMR 7.00: *Definitions* and the definition also appears in 310 CMR 7.26(51) for purposes of 310 CMR 7.26(50) through (54) interpretation, the definition found in 310 CMR 7.26(51) shall govern.

At Retail means the sale by a commercial proprietor of an outdoor hydronic heater.

Clean Wood means wood that has no paint, stains, or other types of coatings, and wood that has not been treated with preservatives, including but not limited to, copper chromium arsenate, creosote, or pentachlorophenol.

7.26: continued

Commercial-size Outdoor Hydronic Heater means a heater with a rated thermal output greater than 350,000 Btu/hr and a heat input design capacity less than one MMBtu/hr as rated by the test method identified in 310 CMR 7.26(54)(c)2.

Distribute or Sell means to distribute, sell, advertise for sale, offer for sale, lease, ship, deliver for shipment, release for shipment, or receive and (having so received) deliver or offer to deliver for use in the Commonwealth.

EPA's ETV Program means U.S. Environmental Protection Agency's Environmental Technology Verification Program.

Executive Summary means a report submitted to the Department that summarizes the results of testing compiled using tables 1, 2a and 2b, heating season and year-round weighted average, respectively, as incorporated in the EPA test method 28 for outdoor hydronic heaters for the applicable particulate matter standards.

Existing Unit or Existing Outdoor Hydronic Heater means an outdoor hydronic heater that is contracted to be paid in full, or installed and/or operated at the intended location of use prior to December 26, 2008.

Heater Efficiency means the ratio of the delivered useful heat output measured by the prescribed test method referenced in 310 CMR 7.26(54)(c)2. to the calculated heat input of the hydronic heater measured by the same test method.

Heating Season means the period beginning October 1st and ending May 15th.

Manufactured means built and operational, and subsequently ready for shipment (whether packaged or not).

Manufacturer means any person who constructs or imports into the United States an outdoor hydronic heater for use in the Commonwealth.

Model means all outdoor hydronic heaters offered for distribution or sale by a single manufacturer that are the same design and output capacity.

Opacity means the degree to which emissions other than water reduce the transmission of light and obscure the view of an object in the background.

Outdoor Hydronic Heater (OHH) or Heater means a fuel burning device:

(a) designated to burn wood or other approved solid fuels;

(b) that the manufacturer specifies for outdoor installation or installation in structures not normally occupied by humans (*e.g.*, garages); and

(c) heats building space and/or water via the distribution, typically through pipes, of a fluid heated in the device, typically water or a water/antifreeze mixture.

Operator means any person who owns or operates an outdoor hydronic heater in the Commonwealth.

Particulate Matter or PM means the total particulate matter measured in accordance with the test methods specified in 310 CMR 7.26(54)(c)2.

Residential-size Outdoor Hydronic Heater means a heater with a rated thermal output of 350,000 Btu/hr or less as rated by the test method identified in 310 CMR 7.26(54)(c)2.

Sale means the transfer of ownership or control.

Seller means any person who distributes or sells an outdoor hydronic heater for use in the Commonwealth.

Similar in All Material Respects means that the construction materials, exhaust and inlet air system, and other design features are within the allowed tolerances for components identified in 310 CMR 7.26(54)(e)1.

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Startup Period means the time period beginning with flame stability after first charge of wood fuel or other approved solid fuel and is no longer than a two-hour duration. 310 CMR 7.26: Startup Period only includes initial startup where no previous coal bed exists. This does not include refueling.

(52) Requirements for Operators.

(a) On and after December 26, 2008 no person shall:

1. Purchase, install or allow the installation of an outdoor hydronic heater unless it has been certified in accordance with 310 CMR 7.26(54)(a) to meet the applicable emission standard set forth in 310 CMR 7.26(53)(a) or 310 CMR7.26(53)(b).

2. Site or install a residential-size outdoor hydronic heater that meets the emission standard at 310 CMR 7.26(53)(a), unless it is installed at least 50 feet from any property line and 75 feet from any occupied dwelling that it is not serving at the time of installation.

3. Site or install a commercial-size outdoor hydronic heater that meets the emission standard defined in 310 CMR 7.26(53)(b), unless it is installed at least 275 feet or more from any property line and 300 feet from any occupied dwelling that it is not serving, at the time of installation, unless a variance has been granted pursuant to 310 CMR 7.26(52)3.a. through d. from the setback to the property line that allows a shorter distance than 275 feet.

a. Variance Procedure. An application for a variance from the setback to the property line shall be submitted to the Department by the owner prior to installation of the unit. The Department will not grant a variance from the required distance of 300 feet to the nearest occupied dwelling.

b. Prior to submitting an application to the Department, the applicant shall, at its sole expense, notify the following groups by certified mail of the request for a variance:

i. residents of any occupied dwelling within 500 feet of the proposed location of the unit;

ii. the board of health of the municipality in which the unit is to be located; and

iii. the board of health of the adjacent municipality if the unit is within 500 feet of an adjacent municipality.

c. Application Requirements. In the application for a variance, the owner shall:

i. Show that meeting the setback is not feasible, based solely on the size and configuration of the property on which the unit is to be installed. Feasibility shall not include consideration of cost to install the unit if the size of the property is sufficient to meet the setback.

ii. Include a detailed site plan that clearly shows the proposed location and distances of the unit relative to the applicant's property lines and the distances to all occupied dwellings or buildings within 500 feet of the unit, and the zoning of the adjacent properties;

iii. Include a copy of the notice and certified mail receipts showing the appropriate people were notified as required at 310 CMR 7.26(52)(a)3.b.

d. Criteria for Granting or not Granting the Variance.

i. Meeting the setback to the property line is not feasible based solely on the size and configuration of the property.

ii. In no case shall a variance be granted for a distance of less than 200 feet to the property line.

iii. Granting such a variance will not cause or contribute to a condition of air pollution.

e. Appeals of Determinations. The applicant or any party who is aggrieved by the decision issued by the Department may request an adjudicatory hearing on that determination in accordance with 310 CMR 1.00 and M.G.L. c. 30A.

4. Site or install an outdoor hydronic heater that meets the emission standard defined in 310 CMR 7.26(53)(a) or 310 CMR 7.26(53)(b), unless it has a permanent stack extending two feet higher than the peak of any roof structure located within 150 feet of the outdoor hydronic heater, if the outdoor hydronic heater is installed less than 150 feet from the nearest occupied dwelling that it is not serving.

(b) Existing Units. All operators of existing outdoor hydronic heaters shall comply with the following requirements:

1. 310 CMR 7.26(52)(c) through 310 CMR 7.26(52)(j); and

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2. have a permanent stack extending two feet higher than the peak of any roof structure located within 150 feet of the outdoor hydronic heater, if the outdoor hydronic heater is installed less than 150 feet from the nearest occupied dwelling that it is not serving. Such permanent stack shall be installed no later than March 1, 2009.

(c) Seasonal Limitations. No person shall cause, suffer, allow or permit the operation of an outdoor hydronic heater from May 16th to September 30th unless the outdoor hydronic heater has been certified in accordance with 310 CMR 7.26(54) to meet the emission standard set forth in 310 CMR 7.26(53)(a) or 310 CMR 7.26(53)(b) as applicable or it is on existing unit installed at least 500 feet from the nearest occupied dwelling that it is not serving.

(d) Prohibited Fuels. No person shall cause, suffer, allow or permit the burning of any of the following items in an outdoor hydronic heater:

1. Any wood that does not meet the definition of clean wood;
2. garbage;
3. tires;
4. lawn clippings, leaves, brush trimmings, or general yard waste;
5. materials containing asbestos,
6. materials containing lead, mercury, or other heavy or toxic metals;
7. materials containing plastic;
8. materials containing rubber;
9. waste petroleum products;
10. paints and paint thinners;
11. chemicals;
12. coal;
13. glossy or colored papers;
14. construction and demolition debris;
15. plywood;
16. particleboard;
17. salt water driftwood and other previously salt water saturated materials;
18. manure;
19. animal carcasses; and
20. asphalt products.

(e) Allowable Fuels. No person that operates an outdoor hydronic heater shall cause, suffer, allow or permit the use of a fuel other than the following:

1. Clean wood;
2. Wood pellets made from clean wood;
3. Home heating oil in compliance with the applicable sulfur content limit or natural gas may be used as starter fuels or substitute fuel in dual-fired outdoor hydronic heaters; and
4. Other biomass fuels as approved by the Department.

(f) Visible Emission Standard.

1. No person shall cause, suffer, allow or permit the emission of air contaminants from any residential-size outdoor hydronic heater or commercial-size outdoor hydronic heater to exceed an average of 20% opacity for two minutes in any one-hour period.

2. No person shall cause, suffer, allow or permit the emission of air contaminants from any commercial-size outdoor hydronic heater to exceed at any time 40% opacity for the first six minutes during the startup period of a new fire. For the remainder of the startup period no person shall cause or allow the emission of air contaminants from any outdoor hydronic heater to exceed a 20% opacity standard in any consecutive two minute average period. 310 CMR 7.26(52)(f)2. only applies to the initial firing of the unit where no coal bed exists and does not apply to refueling.

(g) No person shall cause, suffer, allow or permit the operation of any outdoor hydronic heater except in conformance with the manufacturer's operating and maintenance instructions.

(h) No person shall operate an outdoor hydronic heater using a rain cap unless this device is required by the manufacturer specifications.

(i) No person shall cause, suffer, allow or permit the operation of an outdoor hydronic heater in such a manner as to create a condition of air pollution as defined in 310 CMR 7.00.

(j) Enforcement. An operator of an outdoor hydronic heater shall comply with all applicable regulations, and state and local laws, including but not limited to local bylaws, regulations, and local ordinances. Operators are subject to the enforcement provisions specified at 310 CMR 7.52.

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(53) Requirements for Sellers.

(a) Particulate Matter Emission Standards for Residential-size Outdoor Hydronic Heaters. On and after December 26, 2008, no person shall import, distribute or sell, install or allow the installation of a residential-size outdoor hydronic heater for use in the Commonwealth unless it has been certified to meet a particulate matter emission limit of 0.32 lb/MMBtu heat output. In addition, within each of the burn rate categories as established in EPA test method 28 for OWHH, no individual test run shall exceed 18 grams per hour.

(b) Particulate Emission Standards Commercial-size Outdoor Hydronic Heaters. On and after December 26, 2008, no person shall import, distribute or sell, install or allow the installation of an outdoor hydronic heater for use in the Commonwealth unless it has been certified to meet a particulate matter emission standard of 0.32 lb/MMBtu heat output. In addition, within each of the burn rate categories as established in EPA test method 28 for OWHH, no individual test run shall exceed 20 grams per hour.

(c) Labeling. On and after December 26, 2008, no person shall import, distribute or sell, install or allow for installation an outdoor hydronic heater for use in the Commonwealth without meeting the labeling requirements in 310 CMR 7.26(54)(j).

(d) Notice to Buyers. No person shall distribute or sell an outdoor hydronic heater for use in the Commonwealth unless prior to any sale or lease agreement, the seller provides the buyer or lessee with a copy of 310 CMR 7.26(50) through (54), the owners manual, including operating and maintenance instructions, a written fact sheet provided by the Department and a copy of the certification as required by 310 CMR 7.26(54) of the model to be installed.

(e) Enforcement. Sellers shall comply with all applicable regulations, and state and local laws, including but not limited to local bylaws, regulations and ordinances. 310 CMR 7.26(53) is subject to the enforcement provisions specified at 310 CMR 7.52.

(54) Requirements for Manufacturers.

(a) Certification Requirement.

1. On and after December 26, 2008, no person shall import, distribute or sell, install or allow the installation of an outdoor hydronic heater for use in the Commonwealth unless the manufacturer has certified compliance with the requirements of 310 CMR 7.26(53)(a) or 310 CMR 7.26(53)(b) in accordance with the provisions of 310 CMR 7.26(54)(b). A certification submitted to the Department shall be valid for a period of five years unless revoked by the Department under 310 CMR 7.26(54)(g).

2. The date of certification shall be 30 days from the date postmarked on the envelope used to submit the certification to the Department, as required under 310 CMR 7.26(54)(b), unless the Department, within those 30 days, notifies the manufacturer that the date of certification shall be greater than 30 days.

(b) Certification Procedure. For each model, a manufacturer shall have at least one outdoor hydronic heater tested by an accredited laboratory in order to demonstrate that the model meets the applicable emission standard(s). The manufacturer shall submit an executive summary to the Department. The Department may request, at its discretion, the entire test report, including but not limited to, the raw data and notes taken at the applicable laboratory.

The certification shall include, but not be limited to, the following information that:

1. testing was conducted in accordance with EPA's test method 28 for OWHH or an alternative method approved by the Department;
2. testing was conducted by an accredited laboratory;
3. certification testing was performed for heating season use and/or year-round use;
4. testing results indicated that the outdoor hydronic heater meets the emission standards as defined in 310 CMR 7.26(53)(a) and 310 CMR 7.26(53)(b);
5. the manufacturer was not involved in conducting the testing procedures except for providing specifications and assembly drawings;
6. the accredited laboratory conducted a certification test on an outdoor hydronic heater similar in all material respects to other units of the model to be certified;
7. the test data was reviewed in accordance with EPA's ETV Program or, alternatively, an independent contractor approved by the Department who has no conflict of interest or financial gain in the outcome of the testing or by the Department in its discretion solely or in coordination with other NESCAUM state representatives; and
8. a responsible official certifies in accordance with 310 CMR 70.03(2) on forms prescribed and furnished by the Department.

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(c) Testing Requirements.

1. Test Facility.

a. All emissions testing shall be conducted by an accredited, qualified, and independent testing laboratory that has no conflict of interest or financial gain in the outcome of the testing.

b. Manufacturers of outdoor hydronic heaters shall not involve themselves in the conduct of any emissions testing under 310 CMR 7.26(54)(c) or in the operation of the unit being tested, once actual testing has begun.

2. Test Method. Emission tests shall be conducted using one of the following:

a. EPA Test Method 28 OWHH; or

b. An alternative method approved by the Department.

3. Btu Rating. Testing to determine the heat output in MMBtu/hr shall be conducted according to the test method defined in 310 CMR 7.26(54)(c)2.

4. Test Protocols. If there is any deviation from the test method defined in 310 CMR 7.26(54)(c)2.a., the manufacturer of the outdoor hydronic heater shall provide the Department, or equivalent authority approved by the Department, with a test protocol for approval in accordance with the testing requirements in 310 CMR 7.26(54)(c) 45 days prior to the emission testing for certification. The Department shall approve or disapprove the proposed test protocol in writing within 30 days.

(d) Approved Test Facilities. An accredited laboratory shall conduct all of the testing, test reporting, and product inspection requirements of 310 CMR 7.26(50) through (54), but the manufacturer shall be responsible for ensuring that all information required pursuant to 310 CMR 7.26(50) through (54) is provided to the Department. Emission test reviews for certification shall be conducted by EPA's ETV Program or, alternatively, an independent contractor approved by the Department, in writing who has no conflict of interest or financial gain in the outcome of the testing. The Department may in its discretion, with reasonable notice, perform the review of testing results for certification of a model or individual outdoor hydronic heater.

1. Laboratory Accreditation Requirements. A laboratory shall be accredited:

a. by the U.S. Environmental Protection Agency (EPA) for testing wood-burning residential space heaters in accordance with 40 CFR Part 60, Subpart AAA;

b. by the American National Standards Institute (ANSI) to the International Standards Organization (ISO) Standard ISO/IEC Guide 65 General Requirements for Bodies Operating Product Certification Systems; or

c. by a nationally recognized accreditation body to ISO/IEC 17025, General Requirements for the Competence of Testing and Calibration Laboratories.

i. The nationally recognized accrediting body itself shall be accredited to, and operate under ISO Guide 58 (Calibration and Testing Laboratory Accreditation Systems – General Requirements for Operation and Recognition), and

ii. by a nationally recognized accreditation body to the American Society for Testing and Materials (ASTM) Standard Practice D7036-04; Competence of Air Emission Testing Bodies.

(e) Change in Design Parameter. A model shall require a new certification whenever any change is made in the design that is presumed to affect the particulate emission rate for that model. Changes that are presumed to affect particulate emission rates for models include, but are not limited to:

1. Tolerance changes: any change in the indicated tolerances of any of the following components is presumed to affect particulate emission rates if that change exceeds ±0.64 cm (± ¼") for any linear dimension and ±5% for any cross-sectional area relating to air introduction systems and catalyst bypass gaps unless other dimensions and cross-sectional areas are previously approved by the Department;

2. Firebox: dimensions;

3. Air Inductions Systems. cross–sectional area of restrictive air inlets, outlets and location, and method of control;

4. Baffles: dimensions and location;

5. Refractory/insulation: dimensions and location;

6. Catalyst: dimensions and location;

7. Catalyst bypass mechanism: dimensions, cross-sectional area, and location;

8. Flue gas exit: dimension and location;

9. Door and catalyst bypass gaskets: dimension and fit;

10. Outer shielding and coverings: dimension and location;

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11. Fuel feed system;

12. Forced air combustion system: location and horsepower of blower motors and fan blade size.

(f) Change in Materials. A model shall require a new certification whenever any change is made in the materials that is presumed to affect the particulate emission rate for that model. Any change in the materials used, including but not limited to, the following components is presumed to affect emissions:

1. refractory/insulation;
2. door and catalyst bypass gaskets;
3. for catalyst equipped units – change in catalyst make, model or composition;
4. heat exchanger;
5. heating fluids.

(g) Revocation. Certification of an outdoor hydronic heater may be revoked by the Department for the following reasons, including but not limited to:

1. The outdoor hydronic heater does not meet the applicable particulate emission standard in 310 CMR 7.26(53)(a) or 310 CMR 7.26(53)(b) based on test data from retesting the original unit used for certification testing;
2. A finding that the certification test was not valid;
3. A finding that the unit does not comply with the labeling requirements detailed in 310 CMR 7.26(54)(j);
4. Failure to comply with recordkeeping requirements pursuant to 310 CMR 7.26(54)(l);
5. Physical examination showing that more than 20% of production units inspected are not similar in all material respects to the model used for certification testing;
6. Failure of the manufacturer to conduct a quality assurance program as detailed in 310 CMR 7.26(54)(h); or
7. Repeated field observed opacity violations of residential-size and commercial-size units and a determination by the Department that the model cannot consistently comply.

(h) Quality Assurance Program – 310 CMR 7.26(54)(h) shall only be effective if EPA's ETV Program is not the lead quality assurance verifier of outdoor hydronic heater lab certification testing procedures and emissions reporting for model/model line outdoor hydronic heater certifications. The manufacturer or its designee shall conduct a quality assurance program that, at a minimum, includes the following requirements:

1. The manufacturer or authorized representative shall have one in every 150 units produced of a model inspected to determine that the units are within applicable tolerances or to determine if there are any changes in material for all components that affect emissions as listed in 310 CMR 7.26(54)(e) and 310 CMR 7.26(54)(f). A qualified, independent third party contractor or consultant shall conduct the inspection.
2. The manufacturer or authorized representative shall be responsible for ensuring that an emission test is conducted by a qualified, independent third party testing contractor or consultant on a randomly selected unit produced of a model on the following schedule:

| If certification test results were: | If yearly production per model is: | |
|---|---|---|
| | <500 total production | ≥500 total production |
| >70% of the PM emission standard | When directed by the Department not to exceed one of every 500 units | Every 500 units or triennially (whichever is more frequent) |
| 70% or less of the PM emission standard | When directed by the Department not to exceed one of every 1,000 units | Every 1,000 units or triennially (whichever is more frequent) |
| 30% or less of the PM emission standard | Every 2,000 units | Every 2,000 units or annually (whichever is more frequent) |

3. The emission test shall be conducted in conformity with 310 CMR 7.26(54)(c)2.
4. If the manufacturer uses a different material for the firebox, firebox component, or hydronic heating mechanism than the one used for certification testing, the first test shall be performed before 500 units of the modified unit are produced. The manufacturer shall submit an executive summary or if requested by the Department the entire testing results, including but not limited to, the raw data and notes taken by the lab technicians, documenting the results of this emission test to the Department within 45 days of completion of testing.

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(i) Notification by Manufacturers.

1. By April 30th each year, and as outdoor hydronic heaters are certified, manufacturers shall provide the following information in writing to any person to whom the manufacturer has distributed, intends to distribute, or actually distributes or sells outdoor hydronic heaters for use in the Commonwealth:

a. A list of all models of outdoor hydronic heaters that it manufactures for use in the Commonwealth; and

b. A list of models that have received certification to meet the particulate matter emission standards as set forth in 310 CMR 7.26(53)(a) and 310 CMR 7.26(53)(b) and the certification requirements as set forth in 310 CMR 7.26(54)(b) for use in the Commonwealth.

2. This information shall be kept by the manufacturer in accordance with 310 CMR 7.26(54)(l).

(j) Labeling Requirements. On and after December 26, 2008, manufacturers of outdoor hydronic heaters shall meet the following labeling requirement for units distributed or sold, offered for sale or leased for use in the Commonwealth:

1. Permanent Label. Every outdoor hydronic heater shall have a permanent label that shall:

a. Be made of a material expected to last the lifetime of the outdoor wood boiler.

b. Be affixed in a readily visible or accessible location.

c. Be affixed in such a manner that it cannot be removed from the outdoor wood boiler without damage to the label.

d. Display the following information on the label:

i. name and address of the manufacturer;

ii. date of manufacture;

iii. model name and number;

iv. serial number;

v. thermal output rating in Btu/h;

vi. certified emission rate in heat output expressed as lb/MMBtu

vii. certified particulate emission rate in grams per hour; and

viii. a statement as to whether the unit is certified to be used year-round or only during the heating season or both.

2. Temporary Label. All units shall have attached to them a temporary label that shall contain the following:

a. A statement indicating the certification status of the model;

b. A graphic representation of the composite particulate matter emission rate as determined in the certification test, or as determined by the Department;

c. A graphic representation of the efficiency of the model;

d. A numerical expression of the heat output range in British thermal units per hour (Btu/hr) rounded to the nearest 100 Btu/hr; and

e. Statements regarding the importance of proper operation and maintenance.

3. The temporary label shall:

a. Not be combined with any other label or information; and

b. Be attached to the unit in such a manner that it can be easily removed by the consumer.

(k) Owner's Manual. On and after December 26, 2008, each outdoor hydronic heater offered for sale or lease for use in the Commonwealth shall be accompanied by an owner's manual that shall be published by the manufacturer and contain all the following information:

1. Proper thermal output capacity for matching with the building's thermal demands;
2. Proper installation information;
3. Operation and maintenance information;
4. Wood or other approved solid fuel loading procedures;
5. List of approved solid fuels;
6. List of prohibited fuels;
7. Recommendations on wood or other approved solid fuel selection;
8. Fire starting procedures;
9. Proper use of air flow devices, if applicable;
10. Ash removal procedures;
11. For catalytic models, information pertaining to maintaining catalyst performance, maintenance procedures, procedures for determining catalyst failure or deterioration, procedures for replacement, and information on warranty rights; and

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12. Persons operating this hydronic heater are responsible for operation of the hydronic heater so as not to cause a condition of air pollution as defined in 310 CMR 7.01(1).

(l) Recordkeeping. Every manufacturer of an outdoor hydronic heater shall keep records demonstrating compliance 310 CMR 7.26(54). These records shall be kept and maintained by the manufacturer. These records shall be kept on site for a period not less than five years and shall be made available to the Department within 30 days of a written request.

(m) Enforcement. A manufacturer of an outdoor hydronic heater shall comply with all applicable regulations, and state and local laws, including but not limited to local bylaws, regulations and ordinances. 310 CMR 7.26(54)(i) through (l) are subject to the enforcement provisions specified at 310 CMR 7.52.

## 7.27: NOx Allowance Program

(1) Purpose and Scope.

(a) The purpose of 310 CMR 7.27 is to control emissions of nitrogen oxides (NOx) during the summertime ozone season (May 1st through September 30th of each year). 310 CMR 7.27 accomplishes this by establishing an emissions budget for NOx during each ozone season, implemented through a NOx allowance program beginning May 1, 1999.

(b) The Massachusetts NOx emission budget was calculated by applying the control requirements of the September 1994 Ozone Transport Commission's Memorandum of Understanding (OTC MOU) to the 1990 baseline emissions level adopted by the Ozone Transport Commission on June 13, 1995.

(c) Any additional NOx control requirements beginning on May 1, 2003, may be modified before that date, if modeling and other analyses show that this program, and controls on volatile organic compound (VOC) emissions, will achieve attainment of the ozone National Ambient Air Quality Standard across the Ozone Transport Region. The Department has reserved 310 CMR 7.27(3)(b) to reflect any modifications needed to the Massachusetts NOx emission budget after 2003.

(d) The Department will allocate NOx allowances for each ozone season as described in 310 CMR 7.27(6) equal to the total Massachusetts NOx emissions budget in tons.

(e) NOx allowances from other states may be used to comply with 310 CMR 7.27, provided the other state has adopted and implemented a NOx allowance program consistent with 310 CMR 7.27 as determined by the Department.

(f) NOx allowances allocated by the Department may be used to comply with NOx allowance programs of other states, provided the other state has adopted and implemented a program consistent with 310 CMR 7.27 as determined by the Department.

(2) Definitions. The definitions in 310 CMR 7.00 apply to 310 CMR 7.27. However, the following terms have the following meanings when they appear in 310 CMR 7.27. If a term is defined in 310 CMR 7.00 and in 310 CMR 7.27(2), the definition in 310 CMR 7.27(2) applies.

Account Number means the identification number given by the Administrator to an account in the NOx Allowance Tracking System (NATS).

Account means a record in the NOx Allowance Tracking System where allowances are recorded, and includes both compliance accounts and general accounts.

Affected Unit means a fossil fuel fired boiler or indirect heat exchanger with a maximum heat input capacity of 250 MMBtu/Hour or more which operated at any time in calendar year 1990. The term affected unit is used only to establish the Massachusetts 1999 through 2002 NOx emissions budget.

Allocate or Allocation means the assignment of allowances by the Department to a NOx Allowance Tracking System account, as recorded by the Administrator

Allocation Period means any time period for which allowances are allocated during the period 1999 though 2002.

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Allowance means a limited authorization to emit one ton of NOx during a specified control period or any control period thereafter. An allowance is usable only for complying with the provisions of 310 CMR 7.27. The use of an allowance after its initial control period is subject to the terms and conditions for use of banked allowances in 310 CMR 7.27(9). All allowances are allocated, transferred, or used as whole allowances. To determine the number of whole allowances, the number of allowances is rounded down for decimals less than 0.5 and rounded up for decimals of 0.5 or greater.

Allowance Deduction means the withdrawal of allowances for permanent retirement by the Administrator from a NOx Allowance Tracking System account pursuant to 310 CMR 7.27(14).

Allowance Transfer means the transfer to another account of one or more allowances by whatever means, including but not limited to purchase, trade, auction, or gift, in accordance with the procedures established in 310 CMR 7.27(8).

NON-TEXT PAGE

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Allowance Transfer Deadline means midnight of December 31 of a given calendar year. It is the deadline by which allowances must have been transferred, or have been requested to be transferred, to a compliance account to comply with the requirements of 310 CMR 7.27 for the control period of that year.

Alternative Monitoring System means a system, or component of a system, designed to provide direct or indirect data on mass emissions per time period, pollutant concentrations, or volumetric flow as provided for in 310 CMR 7.27(11).

Authorized Account Representative (AAR) means the person who is authorized, in writing, to transfer or otherwise manage allowances for an account, as well as to certify any other reports to the NOx Allowance Tracking System (NATS) and the NOx Emissions Tracking System (NETS).

Banked Allowance means an allowance which is not used to reconcile emissions in the designated year of allocation but which is carried forward and marked in the compliance or general account as "banked".

Banking means the retention of allowances from one control period for use in a future control period.

Baseline means the NOx emission inventory approved by the Ozone Transport Commission on June 13, 1995, as the official 1990 baseline emissions for May 1 through September 30, 1990 for purposes of 310 CMR 7.27.

Budget or Emissions Budget means the allowable emissions of NOx per season in tons. It is the maximum amount of NOx emissions which may be released from all budget units during a given control period.

Budget Unit means a fossil fuel fired boiler or indirect heat exchanger with a maximum rated heat input capacity of 250 MMBtu/Hour, or more; an electric generating unit with a rated output of 15 MW, or more; any unit which has opted in to 310 CMR 7.27 when the Department approves the opt in application; and any unit the Department chooses to include in 310 CMR 7.27 under 310 CMR 7.27(4)(d).

Compliance Account means the account for each budget unit in the NOx Allowance Tracking System which holds allowances used to determine compliance with 310 CMR 7.27.

Continuous Emissions Monitoring System (CEMS) means the equipment required by 310 CMR 7.27(11) used to sample, analyze, and measure emissions, and which provides a permanent record of emissions expressed in pounds per million British Thermal Units (Btu) or ppm, and pounds per day. The following systems are component parts included in a continuous emissions monitoring system:

Nitrogen oxides pollutant concentration monitor
Diluent gas monitor (oxygen or carbon dioxide)
A data acquisition and handling system
Flow monitoring systems (where appropriate)

Control Period means the period beginning May 1st of each calendar year and ending on September 30 of the same year, inclusive.

Current Year means the calendar year in which the action takes place or for which an allowance was originally designated. For example, an allowance allocated for use in 1999 which goes unused and becomes a banked allowance on Jan 1, 2000 can be used in the "Current Year" 2000 or later, subject to the conditions for banked allowance use, as stated in 310 CMR 7.27(9).

Curtailment means a reduction from the representative utilization or capacity factor at a budget unit.

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Early Reduction Credit means credit for NOx emission reductions achieved during the control periods of 1997 or 1998 and approved by the Department under 310 CMR 7.27(9).

Electric Generating unit means any fossil fuel fired combustion unit of 15 MW electric generating capacity or greater which provides electricity for sale or use.

Excess Emissions means emissions of NOx reported by a budget unit during the control period, rounded to the nearest whole ton, which are greater than the number of current year and banked allowances in the budget unit's NOx Allowance Tracking System compliance account at the allowance transfer deadline for that year.

Fossil Fuel means natural gas, petroleum, coal or any form of solid, liquid or gaseous fuel derived wholly, or in part, from such material.

Fossil Fuel Fired means the combustion of fossil fuel or any derivative of fossil fuel alone, or, in combination with any other fuel, if fossil fuel comprises 51% or greater of the annual heat input on a Btu basis.

General Account means an account in the NOx Allowance Tracking System (NATS) that is not a compliance account.

Heat Input means heat derived from the combustion of fuel in a budget unit and does not include the heat derived from preheated combustion air, recirculated flue gas, or exhaust from other sources.

Indirect Heat Exchanger means combustion equipment in which the flame or the products of combustion are separated from any contact with the principal material in the process by metallic or refractory walls. It includes, but is not limited to, steam boilers, vaporizers, melting pots, heat exchangers, column reboilers, fractioning column feed preheaters, reactor feed preheaters, fuel-fired reactors such as steam hydrocarbon reformer heaters and pyrolysis heaters.

Maximum Heat Input Capacity means the maximum amount of fuel a budget unit can combust on a steady state basis, as determined by the physical and operational design and characteristics of the budget unit. Maximum heat input capacity is expressed in millions of British Thermal Units (MMBtu) per unit of time. It is the product of the gross caloric value (Higher Heating Value) of the fuel (expressed in Btu/pound) multiplied by the maximum fuel feed rate for the combustion device (expressed in mass of fuel/time).

Nox Allowance Tracking System (NATS) means the computer system used by the EPA to track the number of allowances held and used by any account.

Nox Allowance Tracking System Administrator means the Administrator of the computer system used by the EPA to track the number of allowances held and used by any account.

Nox Emissions Tracking System (NETS) means the computer system used by the EPA to track the NOx emissions from budget units.

Nox Emissions Tracking System Administrator means the Administrator of the computer system used by the EPA to track the NOx emissions from budget units.

Non-Part 75 Budget Unit means a budget unit which is not subject to the requirements for emissions monitoring in 40 CFR Part 75.

Opt in means that a person who owns, leases, operates or controls a unit complies with 310 CMR 7.27 even though the unit does not meet the definition of a budget unit as of April 1, 1997.

OTC MOU means the Memorandum of Understanding signed by the representatives of eleven states and the District of Columbia as members of the Ozone Transport Commission on September 27, 1994.

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OTR means the Ozone Transport Region as designated by Section 184(a) of the Clean Air Act Amendments of 1990.

Quantifiable means a reliable and replicable method for calculating the amount of an emission reduction acceptable to the Department and to the EPA.

Real means a reduction in emissions, quantified retrospectively, net of any consequential increase in emissions due to shifting demand determined using the New England Power Pool's marginal emission rate.

Recorded with regard to an allowance transfer or allowance deduction, means an account in the NATS has been updated by the NATS Administrator with the details of an allowance transfer or allowance deduction.

Repowering means

(a) Qualifying Repowering Technology as defined by 40 CFR Part 72 or,

(b) The replacement of a budget unit by either a new combustion unit or the purchase of heat or power from the owner of a new combustion unit, provided the replacement unit:

1. (regardless of owner) is on the same, or contiguous property as the budget unit being replaced;

2. has a maximum heat output rate or power output rate equal to or greater than the maximum heat output rate or power output rate of the budget unit replaced;

3. incorporates technology capable of controlling multiple combustion pollutants simultaneously with improved fuel efficiency and significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

Representative Emissions for units which opt in to 310 CMR 7.27, or for full-allocation units which reclassify to special units, are an average of the units' actual emissions in a control period over two representative, consecutive control periods within the five years preceding the opt in or reclassification. In no event may representative emissions be greater than the allowable emissions for that unit established by any permit or regulation.

Submitted means sent to the appropriate authority under the signature of the Authorized Account Representative. For purposes of determining when something is submitted, an official U.S. Postal Service postmark or electronic time stamp establishes the date of submittal.

Surplus means an emission reduction which is not required by the Massachusetts SIP at the time the reduction was made, relied upon in an applicable attainment demonstration, or required by a state or federal permit or order.

(3) The Massachusetts NOx Emission Budget.

(a) For each year from 1999 through and including 2002, the Massachusetts NOx Emission Budget is 18,146 tons of NOx for each control period.

(b) Reserved

(c) The Massachusetts NOx emissions budget established in 310 CMR 7.27(3)(a) or (b) may be modified by the Department to include emissions from units which opt in to 310 CMR 7.27 pursuant to 310 CMR 7.27(4)(c), or which the Department opts in under 310 CMR 7.27(4)(d). The Department will record any modification to the emissions budget, and submit it by January 1 of each year to the EPA. Modifications to the emissions budget are subject to a 30 day public notice and comment period.

(4) Applicability

(a) 310 CMR 7.27 applies to anyone who owns, leases, operates or controls a budget unit.

(b) 310 CMR 7.27(10), the requirements for an Authorized Account Representative, applies to Authorized Account Representative(s) and Alternative Authorized Account Representative(s) (AAAR) for both general and compliance accounts.

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(c) After July 1, 1997, any person who owns, leases, operates or controls a unit which does not initially meet the definition of a budget unit, may choose to opt in to the NOx Allowance Program, become a budget unit and comply with 310 CMR 7.27 subject to the following:

1. The unit will be considered a budget unit when the Department approves the opt in application. It is then subject to 310 CMR 7.27.

2. Any person who owns, leases, operates or controls a unit who wishes to opt in to 310 CMR 7.27 must submit an application in an emission control plan under 310 CMR 7.27(7) to the Department for approval in order to do so. The application must document the unit's representative emissions. Representative emissions are an average of the actual emissions in a control period over two representative, consecutive control periods within the five years preceding the opt in application. In no event may representative emissions be greater than the allowable emissions for that unit established by any permit or regulation. The representative emissions from the opt in unit, as may be adjusted pursuant to 310 CMR 7.27(4)(c)3., will be added to the Massachusetts NOx emissions budget prior to the allocation of allowances to the opt in unit.

3. For an opt in unit that, by size, would otherwise be an affected unit, the Department will apply to the representative emissions the less stringent of a 65% reduction in representative emissions or an emission rate of 0.2 lbs/MMBtu. The allowances allocated to the unit will be the lesser of the above calculation, or the permitted allowable NOx emissions from the unit.

4. For an opt in unit that, by size, is not considered an affected unit, the Department will allocate a number of allowances equal to the representative control period emissions, or the permitted allowable NOx emissions from the unit, whichever is less. In no case will allocation of allowances to a unit which chooses to opt in to 310 CMR 7.27 require adjustments to the allocation of allowances to budget units already in 310 CMR 7.27.

5. Any person who chooses to opt in to 310 CMR 7.27 must modify their federally enforceable operating permit to include the applicability of 310 CMR 7.27, the authority to trade allowances, and the authority to emit in accordance with the allowances allocated or obtained by the allowance transfer deadline. Any modifications to the unit's operating permit must be done in accordance with 310 CMR 7.00: Appendix C(8).

6. Any person who chooses to opt in to 310 CMR 7.27, and who subsequently ceases or curtails operations, will be subject to an allowance adjustment which represents emissions equivalent to those reduced through the cessation or curtailment of emitting operations.

7. Any person who opts in to 310 CMR 7.27, can not opt out unless the NOx emitting operations at the opt in unit have ceased.

8. Units which are opted in to 310 CMR 7.27 are considered "special units" in 310 CMR 7.27(6), and will receive their total, fixed allocation by May 1 of each year.

(d) If the Department determines that a unit may cause or contribute to a condition of air pollution, the Department may require the person who owns, leases, operates or controls that unit to comply with 310 CMR 7.27 using allowances as assigned by the Department. The Department will notify the person in writing.

(e) Any person who owns, leases, operates or controls a budget unit which is listed in 310 CMR 7.27(6) as a "full allocation unit", may apply to the Department in an emission control plan under 310 CMR 7.27(7) to reclassify that unit to a "special unit", subject to the following:

1. Any person who owns, leases, operates or controls a "full allocation" unit who wishes to reclassify it to a special unit in 310 CMR 7.27(6) must submit an application to the Department in order to do so. The application must document the unit's representative emissions and heat input. Representative emissions and heat input are an average of the actual emissions and heat input in a control period over two representative, consecutive control periods within the five years preceding the application. In no event may representative emissions and heat input be greater than the allowable emissions and heat input for that unit established by any permit issued by the Department or other regulation.

2. The application must also demonstrate that the unit will satisfy the monitoring and reporting requirements of 40 CFR Part 75 or the EPA Monitoring Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program.

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3. The unit will be considered a "special unit" when the Department approves the application. Once it is reclassified as a "special unit", it will be allocated a fixed number of allowances for each subsequent control period, and the person may request no further allowances from the Department for that unit.

4. The Department will allocate allowances to the person for each subsequent control period equivalent to the heat input used to determine representative emissions times the unit's permitted emission rate.

5. Any person who chooses to reclassify a "full allocation unit" to a "special unit", and who subsequently ceases or curtails operations at that unit before operating for one full control period after reclassification, will be subject to an allowance reduction which represents the emissions eliminated through the cessation or curtailment of emitting operations.

(5) General Provisions.

(a) Beginning May 1, 1999, any person who owns, leases, operates or controls a budget unit must, by December 31 of each calendar year, have a number of NOx allowances in the budget unit's compliance account equal to or greater than the total tons of NOx emitted by that budget unit from May 1 through September 30 of that year. Allowances for which legitimate transfer requests have been submitted by December 31 are considered to be in the compliance account.

(b) Any new budget unit which begins operation after the allocation has been made must notify the Department when it begins operation, and obtain allowances in accordance with 310 CMR 7.27(6) to account for all NOx emissions during any control period. A unit is considered to begin operation when it first emits NOx, including periods of start-up and shakedown activities.

(c) Any person subject to 310 CMR 7.27 must still comply with all other applicable regulations, including, but not limited to: 310 CMR 7.02: *U Plan Approval and Emission Limitations*; 310 CMR 7.19: *Reasonably Available Control Technology (RACT) for Sources of Oxides of Nitrogen (NOx)*; 310 CMR 7.00: *Appendix A: Emissions Offsets and Nonattainment Review*; and 310 CMR 7.00: *Appendix C: Operating Permit and Compliance Program*. If provisions or requirements from any other regulation conflict with a provision of 310 CMR 7.27, the more stringent of the provisions will apply unless otherwise determined by the Department in the unit's approved emission control plan. Regardless of the Department's determination in the emission control plan, a person must comply with all applicable federal requirements.

(d) Except as otherwise provided for in 310 CMR 7.27, NOx allowances cannot be used to meet or exceed the limitations of any other permit or regulation.

(e) Offsets required for new or modified units subject to 310 CMR 7.00 Appendix A, Emissions Offsets and Nonattainment Review, must be obtained in accordance with 310 CMR 7.00 Appendix A and Appendix B, as applicable. NOx Allowances under 310 CMR 7.27 may not be used for offsets although emissions represented by allowances may satisfy part of the requirements of 310 CMR 7.00: *Appendix A* or *B*.

(6) Allowance Allocation.

(a) In order to simplify the allocation process, the Department will set up four accounts:

1. a "primary" account,
2. a "set-aside" account,
3. a "new unit" account, and
4. a "holding" account.

(b) The Department has divided budget units into four categories:

1. "Full-allocation Units": A full-allocation unit is any unit listed in 310 CMR 7.27(6) Table 1, which has not opted to become a special unit in accordance with 310 CMR 7.27(4)(e), and any new unit after its first season of operation. Full allocation units receive allowances from the set-aside account in an amount equal to the emissions reported to DEP and EPA on October 30 of each year of the allocation period. The maximum possible allocation for each full-allocation unit is its permitted allowable emissions or the number listed next to it in Table 1.

2. "New Units":

a. In 1999, a new unit is any budget unit which begins operating after July 31, 1996 and before October 1, 1999.

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b. In 2000 - 2002, a new unit is any budget unit which begins operating after September 30 of the previous year and before October 1 of the current year.

3. "Special Units": A special unit is any unit listed in Table 2, any unit which opts in to 310 CMR 7.27, and any full-allocation unit which has opted to become a special unit under 310 CMR 7.27(4)(e). Special units receive a fixed amount of allowances each year at the amount listed in Table 2. Some special units may receive additional allowances from the set-aside account (if they are available) according to 310 CMR 7.27(6).

4. "Utility Units": Utility units are the units listed in 310 CMR 7.27 Table 3. Utility unit allocations are determined on the percentage basis listed in Table 3 and by the procedures listed in 310 CMR 7.27(6).

310 CMR 7.27(6) Table 1
Full Allocation Units

| COMPANY | ORISPL Number | Maximum Possible Allocation |
|---|---|---|
| Waters River 2 | 01678 | 32 |
| Pittsfield Generating Company | 50002 | 101 |
| Dartmouth | 52026 | 49 |
| Milford | 54805 | 85 |
| Indeck/Pepperell | 10522 | 107 |
| L'Energia | 54586 | 42 |
| Lowell Cogen | 10802 | 99 |
| MASSPOWER | 10726 | 171 |
| NEA Bellingham | 10307 | 458 |
| MIT Cogen | 54907 | 49 |
| GE - Lynn Station | 10029 | 180 |
| MWRA | 10823 | 62 |
| MBTA | 10176 | 10 |
| New Units | | Permitted allowable |

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310 CMR 7.27(6) Table 2
Special Units

| COMPANY | ORISPL Number | Amount of Fixed Allocation |
|---|---|---|
| Fitchburg | 54620 | 16 |
| Trigen | 00507 | 181 |
| Indeck/TF | 50460 | 90 |
| MATEP | 10883 | 776 |
| BECO Edgar Station | 01585 | 1 |
| BECO Station 240 (Framingham) | 01586 | 1 |
| BECO Station 246 (Medway Jets) | 01592 | 7 |
| CES Blackstone Station | 01594 | 21 |
| CES Cannon Street Station | 01616 | 46 |
| CES Kendall Station | 01595 | 106 |
| WMECO Doreen Street | 01631 | 1 |
| WMECO Woodland Road | 01643 | 1 |
| WMECO Silver Lake | 01639 | 2 |
| WMECO West Springfield | 01642 | 88 |
| BELD Potter CC | 01660 | 126 |
| TRMLP Cleary Station | 01682 | 153 |
| Any full-allocation unit which opts to change status under 310 CMR 7.27(4)(e) | | see 310 CMR 7.27(4)(e) |
| Any unit which opts in to 310 CMR 7.27 under 310 CMR 7.27(4)(c) | | see 310 CMR 7.27(4)(c) |

310 CMR 7.27 Table 3

| 310 CMR 7.27 Table 3. Percentage Share for Utility Unit Allowance Allocation | | | |
|---|---|---|---|
| Company | Plant | ORISPL Number | Percentage |
| BECO | Mystic Station | 01588 | 12.70 |
| BECO | New Boston Station | 01589 | 11.57 |
| CES | Canal Electric | 01599 | 14.91 |
| EUA | Somerset Station | 01613 | 4.00 |
| NEP | Brayton Pt | 01619 | 32.83 |
| NEP | Salem Harbor | 01626 | 15.49 |
| HWP | Mt. Tom | 01606 | 5.04 |
| MMWEC | Stonybrook Station | 06081 | 3.46 |

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(c) In each year from 1999-2002 the Department will transfer allowances equal to the total Massachusetts NOx emissions budget from its primary, set-aside and new unit accounts to the budget units' compliance accounts and the Department's holding account according to 310 CMR 7.27(6)(d) through (g). The AAR for a compliance or general account may direct DEP to allocate the allowances to other accounts in accordance with 310 CMR 7.27(8)(h).

(d) The 1999 Control Period.

1. Prior to May 1, 1999, the Department will transfer allowances dated for the 1999 control period from its primary account according to the following sequential steps:

a. The Department will transfer a number of allowances to the "set-aside account" equal to the sum of the of allowances needed for the full-allocation units listed in 310 CMR 7.27(6) Table 1.

b. The Department will transfer 500 allowances into the "new unit account".

c. The Department will transfer allowances equal to the amount of the fixed allocation for special units listed in Table 2 to the compliance accounts of the special units.

d. The Department will transfer 152 allowances to its holding account for possible later use by MATEP.

e. The Department will transfer the remainder of the allowances to the compliance accounts of the utility units according to the percentages listed in 310 CMR 7.27(6) Table 3.

2. As required by 310 CMR 7.27(13), by October 30, 1999, all budget units must report their control period emissions to EPA. No later than October 30 of each year, any new unit may submit a request to the Department to transfer allowances from the Department's new unit account to its compliance account, and any full-allocation unit, and any applicable special unit, may submit a request to the Department to transfer allowances from the Department's set-aside account to their compliance accounts. By November 30 the Department will transfer the requested allowances in the order the requests were received by the Department, subject to the availability of allowances in the appropriate accounts and the following conditions:

a. Each new unit may request that the Department transfer allowances up to the lesser of the total emissions reported under 310 CMR 7.27(13), or the unit's permitted allowable emissions. The allowances will be transferred from the new unit account to the unit's compliance account. None of the allowances transferred under this request may be transferred out of the new unit's compliance account except to comply with 310 CMR 7.27(14) and 310 CMR 7.27(6).

b. Each full-allocation unit may request that the Department transfer allowances up to the lesser of the total emissions reported under 310 CMR 7.27(13), or the maximum for that unit in 310 CMR 7.27(6) Table 1. The allowances will be transferred from the set-aside account to the unit's compliance account. None of the allowances transferred under this request may be transferred out of the full allocation unit's compliance account, except to comply with 310 CMR 7.27(14) and 310 CMR 7.27(6).

c. Each applicable special unit may request that the Department transfer allowances from the set-aside account to the unit's compliance account subject to the following additional conditions:

i. Trigen may request as many allowances as needed over its original 181 allowances up to the total emissions reported under 310 CMR 7.27(13) only if its average actual emission rate over the current control period did not exceed 0.2#/MMBtu. The average emission rate is calculated by dividing the total pounds of NOx emitted over the current control period by the total heat input over the same period. Trigen must use any banked allowances it owns before the Department will transfer allowances from the set-aside account to its compliance account.

ii. Indeck/TF may request as many allowances as needed over its original 90 allowances up to the total emissions reported under 310 CMR 7.27(13). The Department will calculate the number of allowances which can be transferred by multiplying an emission rate of either 0.2#/MMBtu or Indeck/TF's actual emission rate, whichever is lower times the heat input for any emissions over 90 tons for the control period.

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iii. MATEP may request additional allowances from the Department's holding account up to their reported emissions with a maximum request of 152 allowances. Any additional allowances needed by MATEP over 928 (776 +152) are the responsibility of MATEP. MATEP must use any banked allowances it owns before the Department will transfer any of the 152 allowances to MATEP. Any of the 152 allowances not requested by MATEP will be held by the Department for use or retirement by the Department.

iv. The Department will transfer allowances subject to the above conditions from the set-aside and holding accounts to the compliance accounts of Trigen, Indeck/TF and MATEP.

3. By November 30, after accounting for the requests in 310 CMR 7.27(6)(d)2.a., b., c., the Department will:

a. Transfer half of any remaining allowances from the new unit and set-aside accounts to the Department's holding account.

b. Transfer the remaining half of the allowances in the new unit and set-aside accounts to the utility units' compliance accounts according to the percentages listed in 310 CMR 7.27(6) Table 3.

4. For the 1999 control period only, full-allocation units may request additional allowances after October 30, 1999. All requests must be received by the Department by December 20, 1999. The allowances will be transferred in the order the requests were received, subject to the availability of allowances in the Department's holding account. The Department will deduct half of the total number of allowances transferred this way from the total utility allocation in 2000. None of the allowances transferred under this request may be transferred out of the unit's compliance account except to comply with 310 CMR 7.27(14) and 310 CMR 7.27(6).

5. After the allowance transfer deadline of December 31 of each year, no budget unit may transfer allowances to or from its compliance account until all compliance issues have been resolved with the Department and the Department releases the compliance account.

6. Within 15 days of a final compliance determination, all full-allocation units and new units will return any unused allowances remaining in their compliance accounts to the Department which were transferred to them in accordance with 310 CMR 7.27(6)(d)2.a., b. and 310 CMR 7.27(6)(d)4. This does not apply to allowances in the unit's account which were transferred there by other means (e.g. purchase or trade).

7. Within 15 days of the transfer in 310 CMR 7.27(6)(d)6. the Department will:

a. Transfer half of the allowances returned under 310 CMR 7.27(6)(d)6. to the Department's holding account.

b. Transfer the other half of the returned allowances to the utility units' compliance accounts at the percentages listed in 310 CMR 7.27(6) Table 2.

(e) The 2000 Control period.

1. The Department will allocate allowances by April 30, 2000 using the procedures of 310 CMR 7.27(6)(d) with the following changes: All new units from 1999 will now be full-allocation units. The Department will increase the allocation to the set-aside account to cover all full-allocation units. The Department will calculate the maximum amount of allowances which could be needed by any new full-allocation unit based on the unit's potential to emit during the control period as contained in a permit approved by the Department under 310 CMR 7.02 or 310 CMR 7.00 Appendix A.

2. The Department will follow the procedures of 310 CMR 7.27(6)(d) at the end of the control period, adjusting only the dates in 310 CMR 7.27(6)(d) for the change of year, and excluding transfers under 310 CMR 7.27(6)(d)4.

(f) The 2001 and 2002 Control periods.

1. The Department will allocate allowances prior to the 2001 and 2002 seasons using the same sequential steps as it did for the 2000 season, as specified in 310 CMR 7.27(6)(e)1. and 2.

2. The Department will transfer allowances from its set-aside and new-unit accounts at the end of the 2001 and 2002 seasons using the same sequence as it did at the end of the 2000 season, except for 310 CMR 7.27(6)(d)3. Instead the Department will do the following:

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a. After accounting for the transfer requests in 310 CMR 7.27(6)(d)2.a., b., c., the Department will transfer half of any remaining allowances from the set-aside account to the Department's holding account.

b. The Department will then offer the remaining half of the allowances in the set-aside account through an open auction. If the Department has not established authority and an official procedure for the auction, the Department will distribute the remaining half of the allowances to the utility units according to the percentages listed in 310 CMR 7.27(6) Table 3.

(g) The list of budget units allocated allowances in 310 CMR 7.27(6) Tables 1, 2 and 3 may be modified by the Department to include units which opt in to 310 CMR 7.27 pursuant to 310 CMR 7.27(4)(c), reclassify under 310 CMR 7.27(4)(e), or which the Department opts in under 310 CMR 7.27(4)(d). Units which are opted in or reclassified will be treated as special units and receive a fixed allocation each year. Any modification of 310 CMR 7.27(6) Tables 1, 2 and 3 after January 1, 1997 shall be recorded and maintained by the Department, and submitted by January 1 of each year to the EPA. The Department will provide notice in the Massachusetts Environmental Monitor with an opportunity for public comment before modifying the list of units in 310 CMR 7.27(6).

(h) If a person who owns, leases, operates or controls a budget unit reduces the unit's emissions, and transfers those emission reductions under 310 CMR 7.00: Appendix A or B to a person not subject to 310 CMR 7.27, that person (the originator) will be subject to a deduction of allowances equal to the emission reductions transferred off-budget. This deduction will not be made if the unit receiving the emission reductions from a budget unit voluntarily opts in to 310 CMR 7.27 under 310 CMR 7.27(4)(c). The opt in must occur prior to the transfer of emission reductions.

(i) Special and utility units which cease to operate after January 1, 1997 will continue to receive allowances for each control period in the allocation period unless a request to reallocate allowances has been filed by the Authorized Account Representative pursuant to 310 CMR 7.27(8)(h). Full-allocation units which cease to operate will not continue to receive allowances since they will be reporting emissions of 0 tons on October 30 of each year.

(j) 1. Any person who owns, leases, operates or controls a new budget unit which repowered an existing budget unit, as determined by the Department, must choose one of the following options before the new budget unit begins emitting NOx:

a. receive allowances under 310 CMR 7.27(6) as a new unit, and remit all future allocations for the existing unit to the Department; or,

b: continue to receive the allocation for the existing unit, and receive no allowances from the Department's new unit account for the new budget unit.

2. If the person who owns, leases, operates or controls the new budget unit does not indicate to the Department which option in 310 CMR 7.27(6)(j)1. is chosen, before the unit begins emitting NOx, the Department will choose an option.

(k) An allowance is not a security or other form of property. An allowance allocation may be separated from the budget unit to which it is initially allocated according to the procedures of 310 CMR 7.27(8)(h).

(l) After providing an opportunity for public comment, the Department may condition, limit, suspend or terminate any allowance or the authorization to emit which an allowance represents.

(m) For each year after 2002, NOx allowances will be allocated and utilized in accordance with the requirements in 310 CMR 7.28(6).

(7) Emission Control Plans and Operating Permits.

(a) Emission Control Plan Application Deadlines.

1. Any person who owns, leases, operates or controls a budget unit must submit an emission control plan for approval by the Department for each facility which contains one or more budget unit(s). Emission control plans must be submitted according to the following schedule:

a. By July 31, 1997, for any person who is making physical or operational changes at a budget unit, not including changes to monitoring systems;

b. By August 15, 1997, for any person who is using any alternative heat input monitoring or unit specific maximum heat inputs in the monitoring section of the Emission Control Pan;

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c. By September 30, 1997 for any person who owns, leases, operates or controls a budget unit, and who has not already submitted an application;

d. Within six months of becoming subject to 310 CMR 7.27 if the unit becomes subject to 310 CMR 7.27 after July 1, 1997, and does not have an emission control plan contained in an approval issued by the Department under 310 CMR 7.02(1) or 310 CMR 7.00: *Appendix A*.

2. All emission control plan applications are subject to the fee regulations and approval timelines contained in 310 CMR 4.00.

3. If the emission control plan for a new budget unit is contained in an approval issued by the Department under 310 CMR 7.02(1), or 310 CMR 7.00: *Appendix A*, there is no separate requirement for approval of an emission control plan under 310 CMR 7.27.

4. For budget units operating prior to July 1, 1997, separate approval under 310 CMR 7.02(1) or 310 CMR 7.00: Appendix A is not required for equipment or procedures approved by the Department in an emission control plan under 310 CMR 7.27.

(b) Emission Control Plan Contents. The emission control plan submitted under 310 CMR 7.27(7) must include at least the following:

1. The name of the company.
2. A list of budget units.
3. A compliance account identification number for each budget unit.
4. The Authorized Account Representative, and Alternative. Authorized Account Representative, if applicable, for each budget unit.
5. If applicable, the operating practices, control efficiency, design, specifications, and standard operating and maintenance procedures for equipment used to meet the requirements of 310 CMR 7.27.
6. Any other information requested by the Department.
7. A monitoring plan which meets the requirements of 310 CMR 7.27(11).
8. Signature of the Authorized Account Representative.

(c) Approval of Emission Control Plans.

1. For any person who owns, leases, operates or controls a facility which includes a budget unit that is also subject to the operating permit and compliance program under 310 CMR 7.00: *Appendix C*, the facility's operating permit will be modified upon approval of the emission control plan, in accordance with the procedures in 310 CMR 7.00: *Appendix C*(8) in order for the emission control plan to be federally enforceable. No additional application or fee is necessary to modify the operating permit at the same time the emission control plan is approved.

2. For any person who owns, leases, operates or controls a facility which includes a budget unit that is not subject to the operating permit and compliance program under 310 CMR 7.00: *Appendix C*, and who is proposing to use one of the alternative monitoring procedures in 310 CMR 7.27(11), the Department will use the following public review process in order to make the emission control plan federally enforceable.

a. If the Department proposes to approve the emission control plan or approve the plan with conditions, it shall:

i. Notify the public of the Department's proposed action and availability of all related materials, by advertisement in a newspaper having wide circulation in the area of the facility applying for a permit restriction and allow not less than 30 days for public comment.

ii. Send a copy of the notice of public comment to the applicant and the EPA.

iii. Consider all public comments in making a final decision on the proposed emission control plan. The Department shall make all comments received available for public inspection.

iv. Make a final determination whether the emission control plan should be approved or approved with conditions.

v. Notify the applicant and EPA in writing of the final determination and provide a copy of the final emission control plan approval or approval with conditions.

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3. For any person who owns, leases, operates or controls a facility which includes a budget unit that is not subject to the operating permit and compliance program in 310 CMR 7.00: *Appendix C*, and who is not proposing to use one of the alternative monitoring procedures in 310 CMR 7.27(11), the Department will approve or disapprove the emission control plan without public comment.

(d) The Department will approve emission control plans in three phases. Deadlines for submissions after the first phase will be contained in the approval for the first phase. Submissions required for later phases may be subject to fees, but are not considered a separate emission control plan submittal. The following outline the Department's expected three-phase approval process:

1. Approval of the emission control plan concept including the proposed methods of emission rate and heat input monitoring;

2. Approval of the detailed monitoring plan required under 310 CMR 7.27(11) and the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program;

3. Approval of the certification of the monitoring equipment required under 310 CMR 7.27(11) and the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program.

(8) Allowance Use and Transfer.

(a) An allowance is a limited authorization to emit one ton of NOx during a specified control period or any control period thereafter. An allowance is usable only for complying with the provisions of 310 CMR 7.27 and may be bought, sold or traded at any time in accordance with 310 CMR 7.27.

(b) Allowances may only be used by a budget unit for compliance with 310 CMR 7.27 in a designated compliance year by being in the budget unit's compliance account as of the allowance transfer deadline, or by being transferred into the compliance account by an allowance transfer request submitted by the allowance transfer deadline.

(c) An allowance transfer will occur as follows:

1. The transfer request must be on a form, or electronic media, in a format determined by the NOx Allowance Tracking System (NATS) Administrator. The request must be submitted to the Administrator, and include, at a minimum:

a. The account numbers identifying both the originating account and the acquiring account;

b. The names and addresses associated with the owners of the originating account and the acquiring account; and,

c. The serial number for each allowance being transferred.

2. The transfer request must be authorized and certified by the Authorized Account Representative for the originating account. To be considered correctly submitted, the request for transfer must include the following statement of certification (verbatim):

"I am authorized to make this submission on behalf of the owners and operators of the budget unit, and I hereby certify under penalty of law, that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

The Authorized Account Representative for the originating account must provide a copy of the transfer request to each owner or operator of the budget unit.

(d) Transfer requests will be processed by the NATS Administrator in order of receipt.

(e) The transfer is complete when the NATS Administrator verifies the following:

1. Each allowance listed in the transfer request is held by the originating account at the time the transfer will be recorded;

2. The acquiring party has an account in the NATS; and,

3. The transfer request has been filed by the person named as Authorized Account Representative for the originating account.

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(f) Valid allowance transfers, after verification by the NATS Administrator, will be recorded in the NATS by deducting the specified allowances from the originating account and adding them to the acquiring account.

(g) The NATS Administrator will notify the Authorized Account Representatives for the originating account, and designated state officials where the acquiring account and originating accounts are located, of an allowance transfer. Notification may be made on paper or electronically and will include:

1. the effective date of the transfer;
2. the identity of the originating account and the acquiring account by name as well as account number; and,
3. the number of allowances transferred and their serial numbers.

(h) Should the Authorized Account Representative for a budget unit determine that some or all allocated allowances should be transferred to another budget unit's compliance account or other general account for the remainder of the current allocation period, the Authorized Account Representative of the originating account must submit a request for transfer that states this intent to the NATS Administrator. A request for transfer of allowances for the remainder of the allocation period must comply with 310 CMR 7.27(8)(c). In addition, the request must be submitted to the Department with a letter requesting that future allowance allocations be made directly to the acquiring account.

(i) Any budget unit will make available to the Department, upon request, information regarding transaction cost and allowance price on request.

(9) Allowance Banking.

(a) Allowances may be banked for future use in a compliance account or general account.

(b) All banked allowances retained in a budget unit's compliance or general account will be permanently retired on April 30, 2003, except to the extent the unit receives compliance supplement pool allowances under 310 CMR 7.28(6)(j).

(c) Banked allowances may be used for compliance with 310 CMR 7.27 in accordance with the following requirements:

1. By March 1 of each year, the total number of banked allowances in the OTR will be determined by the NATS Administrator and used to determine how banked allowances may be used in the current year as follows:
   a. If the total number of banked allowances in the OTR is less than or equal to 10% of the OTR's NOx emissions budget for the current year's control period, all banked allowances may be used for compliance with 310 CMR 7.27 on a one-for-one basis.
   b. If the total number of banked allowances in the OTR exceeds 10% of the OTR's NOx emissions budget for the current year's control period, banked allowances in each NATS compliance and general account will be subject to the following:
      i. A ratio will be established according to the following formula:

$$\frac{0.10 \times \text{the regional NOx Budget}}{\text{the total number of banked allowances in the region.}}$$

      ii. The ratio calculated in 310 CMR 7.27(9)(c)1.b.i. will be applied to the banked allowances in each account. The resulting number is the number of banked allowances in the account which can be used in the current year's control period on a one-for-one basis. Allowances in excess of that number, if used, must be used on a two-for-one basis.
2. The Department will notify the AAR for each account of the ratio which must be applied to banked allowances to determine the number of banked allowances available for use in the current year's control period on a one-for-one basis, and the number of banked allowances available for use in the current year's control period on a two-for-one basis.

(d) Early Reduction Allowances. Any person who owns, leases, operates or controls a budget unit may create NOx emission reductions from May 1st through September 30th in 1997 or 1998. The reductions may be created through physical or operational changes which occurred prior to 1997 or 1998. The Department will certify the reductions as early reduction credits under 310 CMR 7.00: *Appendix B*, and convert them to NOx allowances usable in 1999, subject to the following:

1. Approval by the Department that the reductions are real, quantifiable, and surplus to any other Department regulations, or policies which may be applicable;

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2. In order for NOx emission reductions to be approved as surplus, the reductions must result from control of a budget unit's NOx emission rate below the more stringent of:

a. for indirect heat exchangers greater than 250 MMBtu/hr, a 65% reduction from baseline emissions, or 0.2 lbs NOx/MMBtu, whichever is less stringent;

b. for electric generators rated greater than 15 MW which are not indirect heat exchangers greater than 250 MMBtu/hr, application of Reasonably Available Control Technology.

c. the permitted allowable emissions for the unit, unless the unit is a replacement unit for repowering for a unit which operated in 1990, whereupon a 65% reduction from baseline emissions or an emission rate of 0.2 lbs NOx/MMBtu, whichever is less stringent for the 1990 unit, supersedes the permitted allowable emissions for purposes of establishing early reduction credit;

d. the actual emission rate for the 1990 control period; or,

e. the actual emission rate for the average of two representative year control periods within the first five years of operation if the budget unit did not commence operation until after 1990.

3. The amount of early reduction credit presumes a capacity utilization (in MMBtu) equal to the average capacity utilization of the budget unit for the two consecutive calendar years immediately preceding the period for which early reduction credit is being applied for, adjusted for any reduced capacity utilization resulting from shut down or curtailment of the budget unit.

4. The Department will allow the use of a different two consecutive year period within the five years immediately preceding the early reduction credit application should the budget unit demonstrate, to the satisfaction of the Department, that an alternate two consecutive year period is more representative.

5. Repowering of a budget unit is eligible for early reduction credit provided that the replacement unit is approved by the Department after January 1, 1997, and the budget unit being replaced ceases operation in 1997 or 1998.

6. Before May 1, 1999 early reduction credit will be converted by the Department into allowances dated for use in 1999 and thereafter. Emission reductions converted to allowances under 310 CMR 7.27 cannot be used under 310 CMR 7.00: *Appendix A* or *B*.

7. On or before May 1, 1999, the Department will report the number of early reduction credits converted to allowances for use in 1999 and thereafter.

(10) NOx Allowance Tracking System (NATS).

(a) The NOx Allowance Tracking System (NATS) is the EPA's electronic recordkeeping and reporting system which is the official database for all allowance use and transfer related to 310 CMR 7.27. The NATS will track:

1. the allowances allocated by the Department to each budget unit;
2. the allowances held in each account;
3. the allowances used by each budget unit to comply with 310 CMR 7.27 for each control period;
4. the compliance accounts established for each budget unit to determine compliance with 310 CMR 7.27 for the unit;
5. any general accounts opened by individuals or entities, which are not used to determine compliance;
6. allowance transfers, as submitted voluntarily by the Authorized Account Representative; and,
7. deductions of allowances for compliance purposes.

(b) The NATS will establish a compliance account for each budget unit. The NATS will give each account an account number and provide the following information, at minimum, associated with each account:

1. the name of the account owner,
2. the name of the Authorized Account Representative,
3. the mailing address of the Authorized Account Representative,
4. the phone number of the Authorized Account Representative,
5. the address of budget unit associated with each compliance account, and

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6. the state in which the budget unit is located.

(c) The NATS will also establish general accounts upon request. Any person or group may open a general account. An Authorized Account Representative must be designated for each general account. That representative has the same obligations as an Authorized Account Representative designated by a budget unit.

(d) Only an Authorized Account Representative can request transfers of allowances from an account. For each account, one Authorized Account Representative and one alternate must be identified to represent the budget unit, or the owner of a general account. The Authorized Account Representative is responsible for all transactions and reports submitted to the NATS. The Alternate Authorized Account Representative has the same authority as the "primary" representative, however, all correspondence from the NATS Administrator will be directed to the primary Authorized Account Representative.

(e) The Authorized Account Representative will be officially designated when the NATS Administrator receives a form entitled "Account Certificate of Representation". The form constitutes an agreement of representation and contains, at a minimum, the following information:

1. identification of the budget unit by plant name, state and unit number for which the certification of representation is submitted;
2. the name, address, telephone and facsimile number of the Authorized Account Representative and any alternate;
3. a list of owners and operators of the budget unit;

(f) The "Account Certificate of Representation" must be signed by the Authorized Account Representative for the budget unit and must contain the following statement (verbatim):

"I certify that I, ____( name)_____, was selected as the Authorized Account Representative as applicable by an agreement binding on the owners and operators of the budget unit legally designated as _____(name of unit)_____".

Designation of an Authorized Account Representative for each budget unit must be completed by December 31, 1997. After December 31, 1997, a new Authorized Account Representative can be designated by submitting a new "Account Certificate of Representation". The NATS Administrator will confirm the change of Authorized Account Representative in writing once the change is recorded in the NATS.

(g) Each unit account will have a unique identification number, and each allowance will be assigned a unique serial number. Each allowance serial number will also indicate the first year it may be used for compliance with 310 CMR 7.27.

(11) Emission Monitoring.

(a) General Requirements. Any person who owns, leases, operates or controls a budget unit must comply with the following, as applicable:

1. NOx emissions from each budget unit must be monitored as specified in 310 CMR 7.27(11) and in the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program, dated January 28, 1997.
2. The owner or operator of each budget unit must submit to the Department a monitoring plan as part of the emission control plan required in 310 CMR 7.27(7). At minimum, the monitoring plan must detail the monitoring method(s) which will be used at the budget unit and meet the requirements established in the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program. In addition, budget facilities not subject to 40 CFR Part 75 must include the information required in 310 CMR 7.27(11)(f).
3. Emission monitoring systems required by 310 CMR 7.27(11), must be installed, operational and meet all certification testing requirements by April 30, 1999.
4. Budget facilities which commence operation after January 1, 1998 must submit a monitoring plan, and install, operate and certify the emission monitoring systems required by 310 CMR 7.27(11) within 90 days after the date the unit commences operations.
5. All monitoring systems are subject to initial performance testing and periodic calibration, accuracy testing and quality assurance/quality control testing as specified in the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program.

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6. During a period when valid data is not being recorded by a monitoring system approved under 310 CMR 7.27, the missing or invalid data must be replaced with default data in accordance with the provisions of 40 CFR Part 75 or the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program.

7. NOx emissions data must be reported to the NOx Emissions Tracking System (NETS) in accordance with 310 CMR 7.27(13).

8. Each budget unit which operates, or commences operation, prior to January 1, 1998 must begin reporting data to the NETS in accordance with 310 CMR 7.27(13) beginning on July 1, 1998.

9. Budget facilities which commence operation after January 1, 1998 must begin reporting data on July 1, 1998, or in the first hour that the budget unit is operating during a control period, whichever is later.

(b) Part 75 Units with Flow Monitors. Any person who owns, leases, operates or controls a budget unit subject to 40 CFR Part 75, must demonstrate compliance with 310 CMR 7.27 using a certified Part 75 monitoring system. If the budget unit has a flow monitor certified under 40 CFR Part 75, the NOx emissions in pounds per hour must be determined using a NOx CEMS and the flow monitor. NOx in pounds per million Btu must be determined by using the procedure in Section 3 of Appendix F of 40 CFR Part 75. The hourly heat input must be determined by using the procedures in Section 5 of Appendix F of 40 CFR Part 75. NOx in pounds per hour is determined by multiplying the above values together.

(c) Part 75 Units without Flow Monitors and with NOx CEMS. Any person who owns, leases, operates or controls a budget unit subject to 40 CFR Part 75 which does not have a certified flow monitor, but which does have a NOx CEMS, must determine NOx emissions in pounds per MMBtu using the NOx CEMS. Heat input in MMBtu per hour must be determined using the procedures contained in Appendix D of 40 CFR Part 75. NOx in pounds per hour is determined by multiplying the above values together.

(d) Part 75 Units using Appendix E of 40 CFR Part 75. Any person who owns, leases, operates or controls a budget unit subject to 40 CFR Part 75 who is using the procedures in Appendix E of 40 CFR Part 75, must determine the NOx emission rate in pounds per hour by multiplying the predicted NOx emission rate derived from the Appendix E correlation procedures times the heat input determined using Appendix D of 40 CFR Part 75.

(e) Part 75 Units using Subpart E of 40 CFR Part 75. Any person who owns, leases, operates or controls a budget unit subject to 40 CFR Part 75 who is using the procedures in Subpart E of 40 CFR Part 75, must determine the NOx emission rate in pounds per hour by using the alternative monitoring method approved under 40 CFR Part 75, Subpart E and the procedures contained in the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program.

(f) Non-Part 75 Units, General Provisions.

1. Any person who owns, leases, operates or controls a budget unit which is not subject to 40 CFR Part 75 must:

a. Prepare and obtain approval of a monitoring plan according to 310 CMR 7.27(11)(f) and the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program;

b. Determine the NOx emission rate and heat input using an appropriate methodology from 310 CMR 7.27(11)(g) through (k), or determine the NOx concentration and flow rate using an appropriate methodology from 310 CMR 7.27(11)(g) through (k), and,

c. Calculate the NOx emission rate in pounds per hour using the procedure in 310 CMR 7.27(11)(l).

2. The monitoring plan submitted under 310 CMR 7.27(11)(f)1. must contain:

a. A description of the monitoring approach which will be used.

b. A description of the major components of the monitoring system including the manufacturer, serial numbers of the component, the measurement spans of the components and documentation demonstrating that the measurement span of each component is appropriate to measure all of the expected values. This requirement applies to all monitoring systems, including NOx CEMS which have not been certified pursuant to 40 CFR Part 75.

c. An estimate of the accuracy of the monitoring system and documentation to demonstrate how the estimate of accuracy was determined.

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d. A description of the tests which will be used for initial certification, initial quality assurance, periodic quality assurance, and relative accuracy.

e. Other documentation as follows:

i. if the monitoring method for determining heat input involves boiler efficiency testing, a description of the boiler efficiency test.

ii. if the method for determining heat input uses fuel sampling, a description of the fuel sampling test.

iii. if the monitoring method utilizes fuel flow meters to determine the heat input, and the meters have not been certified pursuant to 40 CFR Part 75, the monitoring plan must include a description of all components of the fuel flow meter, the estimated accuracy of the fuel flow meter, the most recent calibration of each of the components and the original accuracy specifications from the manufacturer of the fuel flow meter.

f. If the method utilizes a unit-specific default emission rate or a unit specific emission factor:

i. all information necessary to support the default emission rate, including historical monitoring data and historical fuel usage data. If the unit plans to conduct emission testing to determine emission rate, the plan must include a test protocol explaining the testing to be conducted.

ii. procedures which will be utilized to demonstrate that any control equipment in operation during the testing to develop unit specific emission factors or during development of load-based emissions curves, is in use when those factors or emission curves are used to estimate NOx emissions.

iii. uncontrolled emission rates to be used to estimate NOx emissions when the control equipment is not being used or is inoperable.

(g) Any Non-Part 75 Unit.

1. Any person who owns, leases, operates or controls a budget unit which is not subject to 40 CFR Part 75, may monitor the unit's NOx emissions using one of the following methods:

a. Monitor the NOx emission rate in lbs/MMBtu using a NOx emission rate CEMS, or Part 75 Alternative Monitoring system, in accordance with 40 CFR Part 75; and determine the heat input using stack flow monitors, F factors, and a diluent monitor, or;

b. Monitor the NOx concentration in ppm using a NOx CEMS, and the stack flow using a stack flow CEMS.

2. Any person who owns, leases, operates or controls a budget unit which is not subject to 40 CFR Part 75, may, upon approval of the Department, monitor the unit's NOx emissions by monitoring the NOx emission rate in pounds per MMBtu using a NOx emission rate CEMS, or Part 75 Alternative Monitoring system, in accordance with 40 CFR Part 75; and determine the heat input using one of the following methods:

a. An hourly alternative heat input monitoring method (e.g., boiler efficiency, hourly fuel usage, etc.), or;

b. A unit specific maximum heat input.

(h) Non-Part 75 Units which are Required to Use NOx CEMS. Any person who owns, leases, operates or controls a budget unit which is not subject to 40 CFR Part 75, and which satisfies any one of the following:

1. The budget unit has a NOx CEMS installed to meet the requirements of 40 CFR Part 60, or any other Department requirement; or,

2. the budget unit is permitted to combust solid fuel; or,

3. the budget unit has a heat input capacity greater than 250 MMBtu per hour, and is not a peaking unit as defined in 40 CFR Part 72.2;

must determine the NOx emission rate using a NOx CEMS. If the person monitors stack flow, then the NOx CEMS may monitor the NOx emission rate in parts per million, otherwise the NOx emission rate must be measured in pounds per MMBtu. NOx CEMS must meet quality assurance criteria described in the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program. Any time a NOx CEMS cannot be used to report data for 310 CMR 7.27 because it does not meet the requirements in the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program, the missing data must be filled in using the procedures in that guidance.

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The NOx CEMS must meet the initial certification requirements contained in the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program. Any person may choose to use a NOx CEMS to monitor the NOx emission rate even if they are not specifically required to do so.

(i) Non-Part 75 Units which Combust Only Oil or Natural Gas. Any person who owns, leases, operates or controls a budget unit which is not subject to 40 CFR Part 75, and which combusts only oil or natural gas, may monitor the unit's NOx emissions by monitoring the NOx emission rate in pounds per MMBtu using a NOx emission rate CEMS, or Part 75 Alternative Monitoring system, in accordance with 40 CFR Part 75; and determine the heat input by using hourly fuel flow monitoring in accordance with the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program.

(j) Non-Part 75 Units Not Combusting Solid Fuels.

1. Any person who owns, leases, operates or controls a budget unit which is not subject to 40 CFR Part 75, and which does not combust solid fuels, may, upon approval of the Department, monitor the unit's NOx emissions by determining the NOx emission rate in pounds per MMBtu using NOx/heat input correlation in accordance with 40 CFR Part 75, Appendix E, and determining the heat input by using hourly alternative heat input monitoring (e.g., boiler efficiency, hourly fuel usage, etc.).

2. a. Any person who owns, leases, operates or controls a budget unit which is not subject to 40 CFR Part 75, and which does not combust solid fuels, may, upon approval of the Department, monitor the unit's NOx emissions by determining the NOx emission rate in pounds per MMBtu using a default emission factor, and determining the heat input by using one of the following:

i. hourly alternative heat input monitoring (e.g., boiler efficiency, hourly fuel usage, etc.).

ii. unit-specific maximum heat input

b. The default emission factors which may be used in 310 CMR 7.27(11)(i)2.a. are:

i. for gas-fired turbines: 0.7 pounds NOx per MMBtu;

ii. for oil-fired turbines: 1.2 pounds NOx per MMBtu;

iii. for gas-fired boilers: 1.5 pounds NOx per MMBtu;

iv. for oil-fired boilers: 2.0 pounds NOx per MMBtu;

v. a unit specific maximum potential emission rate provided that testing is performed using a protocol approved by the Department and consistent with the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program.

(k) Other Non-part 75 Units.

1. Any person who owns, leases, operates or controls a budget unit which is not subject to 40 CFR Part 75, and satisfies one of the following:

a. It is a budget unit which has a heat input capacity less than or equal to 250 MMBtu/hr, and which combusts only oil or natural gas; or

b. It is a budget unit which has a heat input capacity greater than 250 MMBtu per hour, which combusts only oil or natural gas and is a peaking unit as defined in 40 CFR Part 72.2:

may monitor the unit's NOx emissions by determining the NOx emission rate in pounds per MMBtu using a NOx/heat input correlation in accordance with 40 CFR Part 75, Appendix E, and determining the heat input by using hourly fuel flow monitoring.

2. Any person who owns, leases, operates or controls a budget unit which is not subject to 40 CFR Part 75, and satisfies one of the following:

a. It is a budget unit which has a heat input capacity less than or equal to 250 MMBtu/hr, and which combusts only oil or natural gas; or

b. It is a budget unit which has a heat input capacity greater than 250 MMBtu per hour, which combusts only oil or natural gas and which is a peaking unit as defined in 40 CFR Part 72.2:

may monitor the unit's NOx emissions by determining the NOx emission rate in pounds per MMBtu using a default emission factor from 310 CMR 7.27(11)(j)2.b., and determining the heat input by using either:

i. hourly fuel flow monitoring; or,

ii. long term fuel flow monitoring or fuel measurements.

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(l) If the NOx emission rate has been determined in pounds per MMBtu and the heat input rate has been determined in MMBtu per hour, multiply the two values together to determine NOx emissions in pounds per hour. If the NOx emission rate has been determined in parts per million, and the flow has been determined in standard cubic feet per hour, use the procedures the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program to determine NOx emissions in pounds per hour. All data must be reported to the NETS in accordance with 310 CMR 7.27(13).

(m) Where unusual stack configurations complicate the monitoring protocol, the relevant procedures contained in the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program apply.

(n) Any person who owns, leases, operates or controls a budget unit which is not subject to 40 CFR Part 75, may apply to the Department to use an alternative monitoring methodology which is not listed in 310 CMR 7.27(11) or in the Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program. The Department will approve such a petition if the person can demonstrate to the Department that:

1. It is not technologically and economically feasible to use one of the listed methodologies; and,
2. The proposed methodology is and will remain equivalent in accuracy to a method approvable under 40 CFR Part 75.

In approving an alternative monitoring methodology the Department may require bias, accuracy or compliance assurance adjustment factors be applied to the emissions reported using the alternative monitoring methodology.

(o) Part 75 units using the Low Mass Emissions Methodology of 40 CFR 75. Any person who owns, leases, operates or controls a budget unit subject to 40 CFR 75 who is using the procedures in 40 CFR 75.19 must calculate control period NOx mass emissions by summing all of the hourly NOx mass emissions in the control period, as determined under 40 CFR 75.19(c)(4)(ii)(A), divided by 2000 lb/ton.

(p) Any person subject to 310 CMR 7.27(11) may satisfy the $NO_x$ emission monitoring requirements of 310 CMR 7.27(11) by meeting the monitoring requirements of 40 CFR Part 75 Subpart H.

(12) Record Keeping. Any person who owns, leases, operates or controls a budget unit must keep all measurements, data, reports and other information required by 310 CMR 7.27 for five years, or any other period consistent with the budget unit's operating permit.

(13) Reporting.

(a) 1. The Authorized Account Representative for each budget unit which uses a CEMS to measure NOx emissions or heat input, must submit to the Administrator all emissions and operating information for each calendar quarter of each year in accordance with the standards specified in 40 CFR Part 75 Subpart G. The submission must be in an electronic format which meets the requirements of EPA's Electronic Data Reporting (EDR) convention, or in any other suitable format as approved by the Department and the NETS Administrator.

2. The Authorized Account Representative for each budget unit which uses fuel flow, default emission rates, or non-CEMS heat input methodologies to determine NOx emissions, must submit to the Administrator all emissions and operating information for the second and third calendar quarters of each year in accordance with the standards specified in 40 CFR Part 75 Subpart G. The second quarter information will only contain data for May and June of each calendar year. The submission must be in an electronic format which meets the requirements of EPA's Electronic Data Reporting (EDR) convention, or in any other suitable format as approved by the Department and the NETS Administrator.

(b) The quarterly reports must contain the NOx emission in pounds per hour for every hour, and cumulative quarterly and seasonal NOx emission data in pounds, in a format consistent with the EDR specified by the NETS Administrator.

(c) Any person who owns, leases, operates or controls a budget unit subject to 40 CFR Part 75 must submit this data to EPA as part of the quarterly reports submitted to EPA to comply with 40 CFR Part 75.

(d) Any person who owns, leases, operates or controls a budget unit not subject to 40 CFR Part 75 must submit the quarterly reports within 30 days after the end of each calendar quarter for which they must report under 310 CMR 7.27(13)(a). For units which only report for the second and third quarters, the second quarter information will only contain data for the months of May and June.

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(e) Should a budget unit be permanently or temporarily shutdown, the Department will grant an exemption from the requirements of 310 CMR 7.27(11), (12) and (13) upon request from the budget unit's Authorized Account Representative, and provided the shutdown is part of an approved emission control plan or approved under 310 CMR 7.00: Appendix B. The request must include an identification of the budget unit being shutdown, and the date of shutdown. Department approval of the request for shutdown exemption will be sent to the Authorized Account Representative, and the NETS Administrator, and may contain conditions as deemed necessary by the Department.

(14) Compliance Determination at the End of a Season.

(a) The data reported to the NETS Administrator by the Authorized Account Representative for a budget unit in accordance with 310 CMR 7.27(13), and the allowance allocations and transfers recorded in the NATS compliance account for that budget unit, are the basis for determining compliance with 310 CMR 7.27.

(b) Each year during the period November 1 through December 31, inclusive, the Authorized Account Representative for each budget unit must request the NATS Administrator to deduct current year allowances from the compliance account equivalent to the NOx emissions from the budget unit in the current control period. The request must be submitted by the Authorized Account Representative to the NATS Administrator no later than the allowance transfer deadline (December 31). The request must identify the compliance account from which the deductions should be made, and if desired, the serial numbers of the allowances to be deducted. If no serial numbers are identified, allowances useable for that compliance period will be deducted first followed by the deduction of transferred allowances. Banked allowances may be used in place of current year allowances subject to the conditions in 310 CMR 7.27(9).

(c) The Administrator will determine whether there are sufficient allowances in the compliance account to cover the control period NOx emissions. Regardless of the Authorized Account Representative's request for deductions submitted pursuant to 310 CMR 7.27(14)(b), the Administrator will deduct a number of allowances equal to the current control period's NOx emissions from the budget unit's compliance account.

(d) Should the emissions of the budget unit in the current control period exceed the allowances in the budget unit's compliance account for the control period, the budget unit is responsible for obtaining additional allowances by the allowance transfer deadline. The total number of allowances in the compliance account, including allowance transfers properly submitted to the NATS Administrator by the allowance transfer deadline, must equal or exceed the control period emissions of NOx rounded to the nearest whole ton.

(e) If the total number of allowances in the budget unit's compliance account, including allowance transfers submitted to the NATS Administrator by the allowance transfer deadline, does not equal or exceed the control period emissions of NOx from that budget unit, the Department will apply deduction penalties according to 310 CMR 7.27(16), and may take any additional enforcement action it deems appropriate.

(15) Compliance Certification.

(a) For each control period, the Authorized Account Representative for the budget unit must submit an annual compliance certification to the Department.

(b) The compliance certification must be submitted no later than the allowance transfer deadline (December 31) of each year.

(c) The compliance certification must contain, at a minimum:

1. Identification of the budget unit, including name, unit address, name of Authorized Account Representative and NATS account number.

2. A statement that emissions data has been submitted to the NETS in accordance with the procedures established in 310 CMR 7.27(13) and in conformance with the requirements of the NETS Administrator.

3. A statement that the budget unit operated in compliance with the allowances allocated for the control period, including those obtained through transfer by the allowance transfer deadline, and holds sufficient allowances in its compliance account for the control period, as of the allowance transfer deadline, to equal or exceed the recorded emissions for the control period.

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4. A statement certifying that the monitoring data reflected actual operations at the budget unit.

5. A statement that all emissions from the budget unit were accounted for, either through the applicable monitoring or through application of the appropriate missing data procedures.

6. A statement to indicate whether there were any changes in the method of operation of the budget unit or the method of monitoring the budget unit during the current year.

(d) The Department may verify compliance by whatever means necessary, including but not limited to:

1. Inspection of a unit's operating records;
2. Obtaining information on allowance deduction and transfers from the NATS;
3. Obtaining information on emissions from the NETS;
4. Testing emission monitoring devices; and,
5. Requiring the person who owns, leases, operates or controls a budget unit to conduct emissions testing under the supervision of the Department .

(e) In control period 2002, if a budget unit has failed to demonstrate compliance with 310 CMR 7.27(15) (relating to failure to meet compliance requirements), then $NO_x$ allowances to be allocated in calendar year 2003 under 310 CMR 7.28 and beyond may be withheld in accordance with 310 CMR 7.27(16).

(16) Penalties.

(a) If the total tons of $NO_x$ emitted from a budget unit exceed the number of current year or banked allowances held in the budget unit's compliance account for the control period as of the allowance transfer deadline, the Department will automatically deduct allowances from the budget unit's allocation for the next control period at a rate of three allowances for every one ton of excess emissions.

(b) In addition to the allowance deduction penalty provisions in 310 CMR 7.27(16)(a), the Department will enforce the provisions of 310 CMR 7.27 pursuant to applicable law and regulations. The following conditions apply:

1. For determining the number of days of violation, any excess emissions for the control period presume that each day in the control period constitutes a day in violation (153 days) unless the budget unit can demonstrate, to the satisfaction of the Department, that a lesser number of days should be considered.
2. Each ton of excess emissions is a separate violation.

(17) Account Maintenance Fees - Reserved

(18) Audit.

(a) The Department will conduct, or have conducted, an audit of 310 CMR 7.27 beginning in 2002 and every three years thereafter to ensure that the program is providing expected performance with regards to emissions monitoring and allowance use. The audits will include, as appropriate, confirmation of the accuracy of emissions reporting through validation of CEMS and data acquisition systems at budget units, and review of allowance transfer and use by budget units. Each audit will examine the extent to which banked allowances have, or have not, contributed to emissions in excess of the emissions budget for a given control period. The periodic audit will also provide an assessment of whether the program is consistent with the requirements for reasonable further progress and the Massachusetts attainment demonstration.

(b) In addition to the Department audit, the Department may request a third party audit of the program.

(c) Should an audit result in recommendations for revisions at a state level, the Department will consider the audit recommendations, in consultation with the OTC states, and if necessary, propose the appropriate revisions as changes to current procedures or modifications to 310 CMR 7.27.

7.28: $NO_x$ Allowance Trading Program

(1) Purpose and Scope.

(a) The purpose of 310 CMR 7.28 is to control emissions of nitrogen oxides ($NO_x$) during the summertime control period (May 1 through September 30 of each year). 310 CMR 7.28 accomplishes this by establishing a state trading program budget for $NO_x$ during each control period from 2003 through 2008, implemented through a $NO_x$ allowance trading program

7.28: continued

beginning May 1, 2003. The Massachusetts Clean Air Interstate Rule (310 CMR 7.32) will supersede this program beginning with the control period in 2009.

(b) The Department will allocate $NO_x$ allowances for each control period as described in 310 CMR 7.28(6) equal to the total Massachusetts $NO_x$ state trading program budget in tons.

(c) $NO_x$ allowances from other states may be used by budget units to comply with 310CMR 7.28, provided the other state has a $NO_x$ allowance trading program approved by EPA.

(d) $NO_x$ allowances allocated by the Department may be used by budget units to comply with $NO_x$ allowance trading programs of other states, provided the other state has a $NO_x$ allowance trading program approved by EPA.

(e) The Department authorizes the Administrator to assist the Department in implementing the $NO_x$ allowance program by carrying out the functions set forth for the Administrator in 310 CMR 7.28.

(2) Definitions. The definitions in 310 CMR 7.00 apply to 310 CMR 7.28. However, the following terms have the following meanings when they appear in 310 CMR 7.28. If a term is defined both in 310 CMR 7.00 and in 310 CMR 7.28(2), the definition in 310 CMR 7.28(2) applies.

Account means a record in the $NO_x$ Allowance Tracking System where allowances are recorded, and includes compliance, overdraft and general accounts.

Account Number means the identification number given by the Administrator to an account in the $NO_x$ Allowance Tracking System (NATS).

Acid Rain Emission Limitation means a limitation on emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program pursuant to the federal Clean Air Act, Title IV.

Actual Energy Efficiency means the percentage of gross energy input that is recovered as useful net energy output in the form of electrical or thermal energy and that is used for heating, cooling, industrial processes, or other beneficial uses.

Addition means an increase in the area, aggregate floor area, height or number of stories of a building.

Allocate or Allocation means the assignment of allowances by the Department to a $NO_x$ Allowance Tracking System account, as recorded by the Administrator.

Allowance means a limited authorization to emit one ton of $NO_x$ during a specified control period or any control period thereafter. An allowance is usable only for complying with the provisions of 310 CMR 7.28. The use of an allowance after the initial control period is subject to the terms and conditions for use of banked allowances in 310 CMR 7.28(9). All allowances are allocated, transferred, or used as whole allowances. To determine the number of whole allowances, the number of allowances or tons is rounded down for decimals less than 0.5 and rounded up for decimals of 0.5 or greater.

Allowance Deduction means the permanent withdrawal of allowances by the Administrator from a $NO_x$ Allowance Tracking System account pursuant to 310 CMR 7.28(14) or 7.28(4)(c)4.

Allowance Transfer means the transfer to another account of one or more allowances by whatever means, including but not limited to purchase, trade, auction, or gift, in accordance with the procedures established in 310 CMR 7.28(10).

Allowance Transfer Deadline means midnight of November 30 or, if November 30 is not a business day, midnight of the first business day thereafter. It is the deadline by which allowances must be transferred, or requested to be transferred, to a compliance or overdraft account to comply with the requirements of 310 CMR 7.28 for the control period of that year.

Authorized Account Representative (AAR) means the individual who is authorized, in writing, to transfer or otherwise manage allowances for an account, as well as to certify any other reports to the $NO_x$ Allowance Tracking System (NATS) and the $NO_x$ Emissions Tracking System (NETS).

7.28: continued

Alternative Authorized Account Representative (AAAR) means the alternate individual who is authorized, in writing, to transfer or otherwise manage allowance for an account, as well as to certify any other reports to the NATS and NETS. The AAAR has the same authority as the "primary" AAR, however, all correspondence from the Administrator will be directed to the primary AAR.

Banked Allowance means an allowance which is not used to reconcile emissions in the designated year of allocation but which is carried forward in a compliance, overdraft, or general account.

Banking means the retention of allowances from one control period for use in a future control period.

Budget Unit means a fossil fuel fired boiler, combustion turbine or indirect heat exchanger which emits $NO_x$ to a stack and has a maximum heat input capacity of 250 MMBtu/Hour, or more; an electric generating unit with a nameplate capacity of 15 MW, or more; any unit which has opted in to 310 CMR 7.28 when the Department approves an opt in application under 310 CMR 7.28(4)(c); or any unit the Department includes in 310 CMR 7.28 pursuant to 310 CMR 7.28(4)(d).

Building means a structure enclosed within exterior walls or firewalls, built, erected and framed of a combination of any materials, whether portable or fixed having a roof, to form a structure for the shelter of person, animal or property, and that is subject to the provisions of 780 CMR 13.00 *et seq*. For the purpose of this definition, "roof" shall include an awning or similar covering, whether or not permanent in nature. Each portion of a building which is completely separated from other portions by firewalls shall be considered as a separate building.

Commence Commercial Operation means, with regard to a unit that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation.

Commence Operation means to have begun any mechanical, chemical, or electronic process, including start-up of an emissions control technology, emissions monitor or a unit's combustion chamber.

Compliance Account means the account for each budget unit in the $NO_x$ Allowance Tracking System, which holds allowances used to determine compliance with 310 CMR 7.28.

Continuous Emission Monitoring System (CEMS) means the equipment required by 310 CMR 7.28(11) used to sample, analyze, measure and provide, by readings taken at least once every 15 minutes of the measured parameters, a permanent record of $NO_x$ emissions, expressed in tons per hour of $NO_x$. The following systems are component parts included, consistent with 40 CFR Part 75, in a continuous emission monitoring system:

(a) Flow monitor;
(b) Nitrogen oxides pollutant concentration monitors;
(c) Diluent gas monitor (oxygen or carbon dioxide) when such monitoring is required by 40 CFR Part 75 Subpart H;
(d) A continuous moisture monitor when such monitoring is required by 40 CFR Part 75 Subpart H; and
(e) An automated data acquisition and handling system.

Compliance Supplement Allowance means an allowance from the Massachusetts compliance supplement pool of 473 allowances as approved by EPA. Any compliance supplement allowance can only be used during 2003 and 2004, and the Department will retire any remaining allowances.

Control Period means the period beginning May 1 of a calendar year and ending on September 30 of the same year, inclusive.

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Current Year means the calendar year in which an action takes place. For example, an allowance allocated for use in 2003 which goes unused and becomes a banked allowance on January 1, 2004 can be used in the "current year" 2004 or later, subject to the conditions for banked allowance use, as stated in 310 CMR 7.28(9).

Curtailment or Curtails means a reduction from the representative utilization or capacity factor at a budget unit.

Electric Generating Unit means any fossil fuel fired combustion unit that serves a generator of 15 MW nameplate capacity or greater, which provides electricity for sale or use.

Energy Efficiency Project or EEP means one or more of the following voluntary projects that directly result in energy savings at a facility located in Massachusetts:

(a) the construction of a new building or addition that exceeds the requirements of the Massachusetts State Building Code, 780 CMR 13.01 *et seq*., *Energy Conservation*; or

(b) the installation, replacement or modification of equipment, fixtures, or materials including without limitation:

1. windows and doors;
2. caulking and weather-stripping;
3. insulation;
4. automatic energy control systems;
5. refrigeration equipment;
6. hot water systems;
7. equipment required to operate steam, hydraulic, and ventilation systems;
8. plant and distribution systems including replacement of burners, furnaces or boilers;
9. electrical or mechanical furnace ignition systems;
10. lighting fixtures;
11. energy recovery systems excluding landfill gas combustion, or municipal waste combustion systems;
12. motors;
13. variable speed drive installations on industrial fans and pumps; and
14. combined heat and power systems that achieve an actual energy efficiency of 60%; or

(c) The commencement or modification of building or facility operation and maintenance procedures.

(d) Reductions in labor, load shifting, and any other measures that do not directly result in energy savings are not EEPs under 310 CMR 7.28(2).

(e) Projects resulting in energy savings for a budget unit are not EEPs under 310 CMR 7.28(2).

Excess Emissions means emissions of $NO_x$ reported by a budget unit during the control period, rounded to the nearest whole ton, which are greater than the number of current year and banked allowances in the budget unit's $NO_x$ Allowance Tracking System compliance or overdraft accounts available for compliance under 40 CFR 96.54 at the allowance transfer deadline for that year.

Existing Budget Unit means:

(a) For the year 2000, when the Department allocates allowances for the 2003 control period, any budget unit which has commenced operation, and has electrical or useful steam output for the years 1994 through 1998, including years with an output of zero.

(b) For the years 2001 onward, when the Department allocates allowances for the 2004 control periods onward, any budget unit which has operated during a control period prior to the current year.

Once a unit meets the criteria to be an existing budget unit, it will retain that classification.

Fossil Fuel means natural gas, petroleum, coal or any form of solid, liquid or gaseous fuel derived wholly, or in part, from such material.

7.28: continued

Fossil Fuel Fired means the combustion of fossil fuel or any derivative of fossil fuel alone, or, in combination with any other fuel, if fossil fuel comprises more than 50% of the annual heat input on a Btu basis. Once a unit is considered fossil fuel fired, then the unit is always considered fossil fuel fired even if the fossil fuel no longer comprises more than 50% of the annual heat input on a Btu basis.

General Account means an account in the $NO_x$ Allowance Tracking System (NATS) that is not a compliance or overdraft account.

Heat Input means heat derived from the combustion of fuel in a budget unit and does not include the heat derived from preheated combustion air, recirculated flue gas, or exhaust from other budget units.

Indirect Heat Exchanger means combustion equipment in which the flame or the products of combustion are separated from any contact with the principal material in the process by metallic or refractory walls. It includes, but is not limited to, steam boilers, vaporizers, melting pots, heat exchangers, column reboilers, fractioning column feed preheaters, reactor feed preheaters, fuel-fired reactors such as steam hydrocarbon reformer heaters and pyrolysis heaters.

Maximum Heat Input Capacity means a unit-specific maximum hourly heat input (MMBtu), which is the higher of the manufacturer's maximum rated hourly heat input or the highest observed hourly heat input.

Nameplate Capacity means the maximum electrical generating output (expressed in MW) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings as measured in accordance with the United States Department of Energy standards.

New Budget Unit means, for the purpose of the allocation under 310 CMR 7.28(6), a budget unit which has commenced operation after the 1998 control period, but which has not received an allocation under 310 CMR 7.28 from the Department for the current year's control period.

$NO_x$ Allowance Tracking System (NATS) means the computer system used by the EPA to track the number of allowances held and used by any account.

$NO_x$ Emissions Tracking System (NETS) means the computer system used by the EPA to track the $NO_x$ emissions from budget units.

Opt In means that a person who owns, leases, operates or controls a unit elects to become a $NO_x$ budget unit under 310 CMR 7.28 through a final, effective $NO_x$ budget unit opt-in approval issued under 310 CMR 7.28(4)(c).

Overdraft Account means the $NO_x$ Allowance Tracking System account established by the Administrator for each facility where there are two or more budget units.

Public Benefit Set Aside Baseline Period means any one of the three control periods as defined in 310 CMR 7.28 preceding the year in which the Energy Efficiency Project or Renewable Energy Project was first put in use or first became operational. Once allowances have been granted for a project, the same PBSA baseline period shall be used to calculate allowances for that project in any subsequent year.

Proponent means any person who owns, leases, operates or controls an Energy Efficiency Project or a Renewable Energy Project, or a Representative as defined in 310 CMR 7.28(2).

Quantifiable means a reliable and replicable method for calculating the amount of an emission reduction acceptable to the Department and to the EPA.

Real means a reduction in emissions, quantified retrospectively, net of any consequential increase in emissions due to shifting demand determined using the ISO New England's or successor organization's marginal $NO_x$ emission rate.

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Recorded with regard to an allowance transfer or allowance deduction, means an account in the NATS was updated by the Administrator with the details of an allowance transfer or allowance deduction.

Renewable Energy means energy generated by one or more of the following fuels, energy resources or technologies, and that does not emit $NO_x$: solar photovoltaic or solar thermal energy; wind energy; fuel cells that do not employ a fuel processor that emits $NO_x$; ocean thermal, wave or tidal energy; hydro and geothermal energy. Energy generated from nuclear fuel, biomass, landfill gas, fuel cells that employ a fuel processor that emits $NO_x$, and hydro using pumped storage are not renewable energy under 310 CMR 7.28.

Renewable Energy Project or REP means one or more generation units producing renewable energy that is either located in Massachusetts or adjacent to Massachusetts and directly and solely connected to transmission facilities located in Massachusetts. An REP may not receive PBSA allowances under 310 CMR 7.28 for energy generation that has been awarded $NO_x$ allowances under another program administered by the government of the United States, or any other political subdivision thereof.

Representative means a party who aggregates one or more Renewable Energy Projects or Energy Efficiency Projects, to equal at least one whole allowance. Representative may include, without limitation, a common owner of projects, an energy service company, an emission trading broker or a state or municipal entity.

Repowering means:

(a) Qualifying Repowering Technology as defined by 40 CFR Part 72 or,

(b) The replacement of a budget unit by either a new combustion unit or the purchase of heat or power from the owner of a new combustion unit, provided the replacement unit:

1. (regardless of owner) is on the same, or contiguous property as the replaced budget unit;
2. has a maximum heat output rate or power output rate equal to or greater than the maximum heat output rate or power output rate of the replaced budget unit;
3. incorporates technology capable of controlling multiple combustion pollutants simultaneously with improved fuel efficiency and significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

Representative Emissions for units which opt in to 310 CMR 7.28 are an average of the unit's actual emissions in a control period over two representative, consecutive control periods within the five years preceding the opt in or reclassification. In no event may representative emissions be greater than the allowable emissions for that unit established by any permit or regulation.

State Trading Program Budget means the total number of $NO_x$ tons apportioned to all $NO_x$ Budget units in a given State, in accordance with the $NO_x$ Budget Trading Program under 40 CFR 51.121, for use in a given control period.

Steam Generating Unit means a combustion unit that utilizes greater than 50% of its energy output measured in MMBtu for heat or process applications.

Submitted means sent to the appropriate authority under the signature of the Authorized Account Representative. For purposes of determining when something is submitted, an official U.S. Postal Service postmark or electronic time stamp establishes the date of submittal.

Surplus means an emission reduction which is not required by the Massachusetts SIP at the time the reduction was made, is not relied upon in an applicable attainment demonstration, and is not required by a state or federal permit or order.

Voluntary means an action that is not otherwise required by federal or Massachusetts law or the ordinance of any Massachusetts municipality.

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(3) The Massachusetts $NO_x$ State Trading Program Budget.

(a) From 2003 through 2008 the Massachusetts $NO_x$ state trading program budget is 12,861 tons of $NO_x$ for each control period.

(b) The Massachusetts $NO_x$ state trading program budget established in 310 CMR 7.28(3)(a) may be modified by the Department to include emissions from units which opt in to 310 CMR 7.28 pursuant to 310 CMR 7.28(4)(c), or which the Department opts in under 310 CMR 7.28(4)(d). The Department will record any modification to the state trading program budget, and submit it by January 1 of each year to the EPA. Modifications to the state trading program budget are subject to a 30-day public notice and comment period, as part of the opt-in process.

(4) Applicability.

(a) 310 CMR 7.28 applies to any person who owns, leases, operates or controls a budget unit.

(b) 310 CMR 7.28 applies to Authorized Account Representatives (AARs) and Alternative Authorized Account Representatives (AAARs) for general, compliance and overdraft accounts, where appropriate. Any provision of the $NO_x$ allowance program that applies to a budget unit (including a provision applicable to the $NO_x$ AAR of a $NO_x$ budget unit) shall also apply to the owners, lessee, operators or controllers of the budget units.

(c) Any person who owns, leases, operates or controls a unit which does not initially meet the definition of a budget unit, and which emits $NO_x$ through a stack may choose to opt in to the $NO_x$ allowance program to become a budget unit, subject to the following:

1. The person must submit an opt in application and an emission control plan under 310 CMR 7.28(7) to the Department for approval. The application must document the unit's representative emissions. Representative emissions are an average of the actual emissions in a control period over two representative, consecutive control periods within the five years preceding the opt in application. In no event may representative emissions exceed the allowable emissions for that unit established by any permit or regulation.

2. The unit will be considered a budget unit when the Department approves the opt in application and the emissions control plan. It is then subject to all of the requirements contained in 310 CMR 7.28.

3. Any person who chooses to opt in to 310 CMR 7.28 must modify the facility's operating permit, issued pursuant to 310 CMR 7.00: *Appendix C*, to include the applicability of 310 CMR 7.28, the authority to trade allowances, and the authority to emit in accordance with the allowances allocated or obtained by the allowance transfer deadline.

4. Any person who chooses to opt in to 310 CMR 7.28, and who subsequently ceases or curtails operations, will be subject to an allowance adjustment which represents emissions equivalent to those reduced through the cessation or curtailment of emitting operations.

5. Any person who opts in to 310 CMR 7.28, can not opt out unless the $NO_x$ emitting operations at the opt in unit have permanently ceased.

(d) If the Department determines that a unit that emits $NO_x$ through a stack may cause or contribute to a condition of air pollution, the Department may require the person who owns, leases, operates or controls that unit to comply with 310 CMR 7.28 using allowances, as assigned by the Department. The Department will notify the person in writing and allocate allowances to the unit as determined by the Department.

(5) General Provisions.

(a) From 2003 through 2008, any person who owns, leases, operates or controls a budget unit must, by November 30 of each calendar year, possess a number of current year or banked $NO_x$ allowances in the budget unit's compliance or overdraft accounts that are available for compliance under 40 CFR 96.54, equal to or greater than the total tons of $NO_x$ emitted by that budget unit from May 1st through September 30th of that year. Allowances for which transfer requests have been submitted in accordance with 310 CMR 7.28(10) by November 30th are considered to be in the compliance or overdraft account.

(b) Any person who owns, leases, operates or controls a new budget unit must notify the Department when it commences operation. Any person who owns, leases, operates or controls a new budget unit may request allowances from the Department in accordance with 310 CMR 7.28(6).

7.28: continued

(c) Any person subject to 310 CMR 7.28 must comply with all other applicable regulations, including, but not limited to, 310 CMR 7.02: *Plan Approval and Emission Limitations*, 310 CMR 7.19: *U Reasonably Available Control Technology (RACT) for Sources of Oxides of Nitrogen ($NO_x$);*, 310 CMR 7.00: *Appendix A Emissions Offsets and Nonattainment Review*; and 310 CMR 7.00: *Appendix C Operating Permit and Compliance Program*. If provisions or requirements from any other regulation conflict with a provision of 310 CMR 7.28, the more stringent of the provisions will apply unless otherwise determined by the Department in the unit's approved emission control plan. Regardless of the Department's determination in the emission control plan, a person must comply with all applicable federal requirements.

(d) Except as otherwise provided in 310 CMR 7.28, $NO_x$ allowances cannot be used to meet or exceed the limitations of any other permit or regulation issued under 310 CMR 7.00.

(e) Offsets required for new or modified units subject to 310 CMR 7.00: *Appendix A, Emissions Offsets and Nonattainment Review*, must be obtained in accordance with 310 CMR 7.00: *Appendix A* and *Appendix B*, as applicable. $NO_x$ allowances under 310 CMR 7.28 may not be used for offsets.

(f) The reductions of $NO_x$ emissions at a budget unit may be used to meet the requirements of 310 CMR 7.00: *Appendix A* or *B*. The use of the $NO_x$ emission reductions under 310 CMR 7.00: *Appendix A* or *B* may not result in a reduction of the budget unit's allowance allocation except as provided under 310 CMR 7.28(6)(h).

(6) Allowance Allocation.

(a) New Unit Set-aside.

1. For each year from 2003 through 2008, the Department will allocate 5% of the Massachusetts $NO_x$ state trading program budget to a new unit set-aside account. New budget units may request allowances from this new unit set-aside account according to the procedures in 310 CMR 7.28(6)(c), and the Department will allocate allowances from the new unit set-aside account to the new budget unit. If, in total, new budget units request more allowances than are available in the new unit set-aside account that calendar year, including those available under 310 CMR 7.28(6)(a)2., then allowances will be allocated to the new budget units by the Department pro rata based on net control period electrical and useful steam output.

2. In any calendar year, if new budget units request more allowances than are available in the new unit set-aside account, then a maximum of 2% of the Massachusetts $NO_x$ state trading program budget from the public benefit set-aside account may be transferred to the new unit set-aside account to satisfy new budget unit requests. Allowances requested under 310 CMR 7.28(6)(b)1. will be allocated before any transfers to the new unit set-aside can be made.

3. Unused allowances allocated to the new unit set-aside will be banked in the new unit set-aside account. If the number of banked allowances in the new unit set-aside account is 10% or more of the total Massachusetts $NO_x$ state trading program budget after EPA completes the annual compliance determination under 310 CMR 7.28(14), then any banked allowances in excess of 5% of the Massachusetts $NO_x$ state trading program budget will be allocated to existing units *pro rata* based on net control period electrical and useful thermal energy output for the previous calendar year.

4. After a new budget unit has operated in one control period it becomes an existing budget unit and the Department will allocate allowances for the control period commencing three years in the future according to 310 CMR 7.28(6)(d). The unit will continue to receive allowances from the new unit set-aside according to 310 CMR 7.28(6)(c) until it is eligible to use allowances allocated under 310 CMR 7.28(6)(d).

(b) Public Benefit Set-aside.

1. For each year from 2003 through 2008, the Department will allocate 5% of the Massachusetts $NO_x$ state trading program budget to a public benefit set-aside (PBSA) account to provide for allocation of allowances for Energy Efficiency Projects (EEPs) and Renewable Energy Projects (REPs).

7.28: continued

2. In any calendar year, if the Department approves the allocation of more allowances for EEPs and REPs than are available in the public benefit set-aside account, then a maximum of 2% of the Massachusetts $NO_x$ state trading program budget from the new unit set-aside account may be transferred to the PBSA account, if available. The Department will allocate allowances to the new budget units as requested under 310 CMR 7.28(6)(a)1. before it transfers any surplus new budget unit allowances to the PBSA account.

3. In any calendar year, if the Department approves the allocation of more allowances than are available in the PBSA account for that calendar year, including those surplus new unit set-aside allowances transferred pursuant to 310 CMR 7.28(6)(b)2. then allowances will be allocated to all PBSA projects for that year on a *pro rata* basis.

4. Limited Allocation from Public Benefit Set-aside to Existing Budget Units.

a. For each of the three control periods of 2003 through 2005 only, the budget units in Table A will receive the allocations listed in the table from the public benefit set-aside.

310 CMR 7.28(6)(b)4.a.: *Table A*
Partial $NO_x$ Allowance Allocation from the Public Benefit Set-aside for 2003-2005

| NAME | ORIS Code | Allowance Allocation |
|---|---|---|
| Braintree | 1660 | 3 |
| Peabody | 1658 | 1 |
| Taunton | 1682 | 3 |

b. On November 4, 2004, the facilities in Table B will receive the allocation listed in the table from the public benefit set-aside account.

310 CMR 7.28(6)(b)4.b. TABLE B
$NO_x$ Allowance Allocation from the Public Benefit Set-Aside for 2003 – 2005

| NAME | ORIS Code | 2003 Allowance Allocation | 2004 Allowance Allocation | 2005 Allowance Allocation |
|---|---|---|---|---|
| ANP Blackstone | 55212 | 181 | 222 | 93 |
| Brayton Point | 1619 | 75 | 91 | 38 |
| New Boston | 1589 | 42 | 51 | 21 |
| Mystic | 1588 | 14 | 16 | 7 |
| Bellingham Cogen | 10307 | 12 | 15 | 6 |
| Stony Brook | 6081 | 7 | 8 | 4 |
| Salem Harbor | 1626 | 7 | 8 | 3 |
| Waters River | 1678 | 2 | 3 | 1 |
| Masspower | 10726 | 2 | 2 | 1 |
| Kneeland | 880023 | 1 | 2 | 1 |
| Pittsfield | 50002 | 1 | 2 | 1 |
| Lowell Power | 54586 | 1 | 1 | 1 |
| Mount Tom | 1606 | 1 | 1 | 1 |
| Somerset | 1613 | 1 | 1 | 1 |
| Dartmouth | 52026 | 1 | 1 | 0 |
| Fore River | 55317 | 1 | 1 | 0 |
| Blackstone Street | 1594 | 0 | 1 | 0 |
| Dighton | 55026 | 0 | 1 | 0 |

There will be no further changes to the existing budget units' NOx allowance allocations for the 2004-2007 control periods.

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5. Allowances allocated to the PBSA account that are unused will be banked in the PBSA account. If the number of banked allowances in the PBSA account is 10% or more of the total Massachusetts $NO_x$ state trading program budget after EPA completes the annual compliance determination pursuant to 310 CMR 7.28(14), then any banked allowances in excess of 5% of the Massachusetts $NO_x$ state trading program budget will be allocated to existing budget units *pro rata* based on their net control period electrical and useful thermal energy output for the previous calendar year.

6 By November 1st of each year, the Department will allocate current year allowances from the PBSA account to the account established under 310 CMR 7.28(8).

7. PBSA Allowance Calculations. To calculate the number of allowances that may be allocated under 310 CMR 7.28(6)(b), a proponent shall use one of the following formulae, except that other reliable and replicable methods of quantification acceptable to the Department may also be used for projects that in the aggregate do not exceed five PBSA allowances:

a. REPs Generating Electrical Energy.
Allowances = (MWh * 1.5 lbs/MWh) / (2000 lbs/ton);
Where MWh is the net electrical energy generated by a renewable energy project.

b. REPs Generating Useful Net Thermal Energy.
Allowances = (MMBtu output * 0.44 lb/MMBtu output) / (2000 lbs/ton);
Where MMBtu output is the useful net thermal energy generated by the REP.

c. EEPs Saving Electrical Energy.
i. Allowances = (MWh * 1.5 lbs/MWh) / (2000 lbs/ton);
Where MWh is the amount of electrical energy saved by the EEP.
ii. Except as provided in 310 CMR 7.28 (6)(b)7.c.iii. and iv., the amount of electrical energy saved shall be calculated by comparing, (a) the amount of electrical energy consumed during the control period in the calendar year preceding the year in which the application is submitted, to (b) the amount of electrical energy consumed during the PBSA baseline period. If monthly data for energy consumed is not available, then energy savings shall be calculated by comparing the energy consumed during the calendar years corresponding to the periods described in 310 CMR 7.28(6)(b)7.c.ii. multiplied by five-twelfths.
iii. For the construction of a new building or addition that exceeds the requirements of 780 CMR 13.01 *et seq*., *Energy Conservation*, the amount of electrical energy saved shall be calculated by comparing, (a) the amount of electrical energy consumed during the first full control period immediately preceding the year the application is submitted, to (b) the amount of electrical energy that would have been consumed at the same occupancy level during the control period if the building or addition had been constructed according to780 CMR 13.01 *et seq*., *Energy Conservation*. If monthly data for energy consumed is not available then energy savings shall be calculated by comparing the energy consumed during the calendar years corresponding to the periods described in 310 CMR 7.28(6)(b)7.c.iii.. multiplied by five-twelfths.
iv. 2003 Allowances. For 2003 allowances for the construction of a new building or addition that exceeds the requirements of 780 CMR 13.01 *et seq*., *Energy Conservation*, the amount of electrical energy saved shall be calculated by comparing (a) the amount of electrical energy consumed during the 2002 control period to (b) the amount of electrical energy that would have been consumed during the 2002 control period if the building or addition had been constructed according to 780 CMR 13.01 *et seq*., *Energy Conservation*.

For all 2003 allowances for EEPs, other than a new building or addition, the amount of electrical energy saved shall be calculated by comparing (a) the amount of electrical energy consumed during the 2002 control period to (b) the amount of electrical energy consumed during the PBSA baseline period.

For projects described in 310 CMR 7.28(6)(b)7.c.iv., if monthly data for energy consumed is not available, then energy savings shall be calculated by comparing the energy consumed during the calendar years corresponding to the periods described in 780 CMR 7.28(6)(b)7.c.iv. multiplied by five-twelfths.

d. EEPs Saving Thermal Energy.
i. Allowances = (MMBtu output * 0.44 lb/MMBtu output) / (2000 lbs/ton);
Where MMBtu output is the amount of thermal energy saved by the EEP.

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ii. Except as provided in 310 CMR 7.28 (6)(b)7.d.iii. and iv., the amount of thermal energy saved shall be calculated by comparing, (a) the amount of thermal energy consumed during the control period in the calendar year preceding the year in which the application is submitted, to (b) the amount of thermal energy consumed during the PBSA baseline period. If monthly data for energy consumed is not available, then energy savings shall be calculated by comparing the energy consumed during the calendar years corresponding to the periods described in 310 CMR 7.28(6)(b)7.d.ii. multiplied by five-twelfths.

iii. For the construction of a new building or addition that exceeds the requirements of 780 CMR 13.01 *et seq*., *Energy Conservation*, the amount of thermal energy saved shall be calculated by comparing, (a) the amount of thermal energy consumed during the first full control period immediately preceding the year the application is submitted, to (b) the amount of thermal energy that would have been consumed at the same occupancy level during the control period if the building or addition had been constructed according to780 CMR 13.01 *et seq*., *Energy Conservation*). If monthly data for energy consumed is not available then energy savings shall be calculated by comparing the energy consumed during the calendar years corresponding to the periods described in 310 CMR 7.28(6)(b)7.d.iii. multiplied by five-twelfths.

iv. 2003 Allowances. For 2003 allowances for the construction of a new building or addition that exceeds the requirements of 780 CMR 13.01 *et seq*., *Energy Conservation*, the amount of thermal energy saved shall be calculated by comparing (a) the amount of thermal energy consumed during the 2002 control period to (b) the amount of thermal energy that would have been consumed during the 2002 control period if the building or addition had been constructed according to 780 CMR 13.01 *et seq*., *Energy Conservation*.

For all 2003 allowances for EEPs, other than a new building or addition, the amount of thermal energy saved shall be calculated by comparing (a) the amount of thermal energy consumed during the 2002 control period to (b) the amount of thermal energy consumed during the PBSA baseline period.

For projects described in 310 CMR 7.28(6)(b)7.d.iv., if monthly data for energy consumed is not available, then energy savings shall be calculated by comparing the energy consumed during the calendar years corresponding to the periods described in 310 CMR 7.28(6)7.d.iv. multiplied by five-twelfths.

e. EEPs Saving Thermal or Mechanical Energy in a Manufacturing Process Where Energy Consumption is Measured on a Unit of Production Basis.

A unit of production as used in this formula may include manufactured items, raw, intermediate, or final materials including steam, or other products measured in discrete units and produced as a result of the consumption of energy in a specific process or piece of equipment (e.g., a natural gas compressor).

$$\text{Allowances} = \frac{(((Et1/Pt1) - (Et2/Pt2)) * Pt2 * NPt2 * (NPt1/NPt2))}{(2000 \text{ lbs/ton})};$$

Where Et1 = Energy consumed during the PBSA baseline period in MMBtu. If monthly data is not available for the control period, then Et1 = the amount of energy consumed during any one of the three calendar years before the year in which the EEP was first put in use or first became operational multiplied by five-twelfths;

Pt1 = Units of product produced per PBSA baseline period. If monthly data is not available for the control period, then Pt1 = the units of product produced during any one of the three calendar years before the year in which the EEP was first put in use or first became operational, multiplied by five-twelfths;

NPt1 = $NO_x$ emitted during the consumption of energy, measured in pounds per MMBtu heat input during the PBSA baseline period. If monthly data is not available for the control period, then NPt1 = $NO_x$ emitted during any one of the three calendar years before the year in which the EEP was first put in use or first became operational, multiplied by five-twelfths.

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Et2 = Energy consumed during the control period in the year before the calendar year in which the application is submitted (or during the 2002 control period in the case of 2003 allowances). If monthly data is not available for the control period, then Et2 = energy consumed during the calendar year before the year in which the application is submitted (or 2002 in the case of 2003 allowances), multiplied by five-twelfths.

Pt2 = Units of product produced during the control period in the year before the calendar year in which the application is submitted (or during the 2002 control period in the case of 2003 allowances). If monthly data is not available for the control period then Pt2 = units of product produced during the calendar year before the year in which the application is submitted (or 2002 in the case of 2003 allowances), multiplied by five-twelfths.

NPt2 = $NO_x$ emitted during the consumption of energy, measured in pounds per MMBtu heat input during the control period in the year before the calendar year in which the application is submitted (or during 2002 in the case of 2003 allowances). If monthly data is not available for the control period then NPt2 = $NO_x$ emitted during the calendar year before the year in which the application is submitted (or during 2002 in the case of 2003 allowances), multiplied by five-twelfths.

f. EEPs That are Combined Heat and Power Systems With Actual Energy Efficiency Equal to or Greater Than 60%.

i. The requirement of 60% Actual Energy Efficiency applies to the combined heat and power system, not the end user. For purposes of determining when a combined heat and power system meets 60% Actual Energy Efficiency, Actual Energy Efficiency shall be calculated using the following formula:

$$\text{Eff\%} = \frac{(\text{NEO} + \text{UTO})}{\text{GEI}};$$

Where:

Eff% = Actual energy efficiency;

NEO = Net useful electrical energy output of the system converted to British thermal units, (Btus) per unit of time;

UTO = Net useful thermal energy output, or the energy output in Btus of thermal energy used for heating, cooling, industrial processes, or other beneficial uses, per unit of time; and

GEI = Gross energy input, based upon the higher heating value of fuel, in Btus per unit of time.

ii. Allowances = ([$NO_x$ conventional] – [$NO_x$ CHP system]) / (2,000 lbs/ton)

Where:

[$NO_x$ conventional] = (kWh * (3,412 Btu/kWh) / 0.34 + HeatOut / 0.8) / 1,000,000 * (0.15 lbs $NO_x$/MMBtu);

[$NO_x$ CHP system] = BtuIn / 1,000,000 * $NO_x$Rate;

kWh = The number of kilowatt-hours of net electrical energy generated by the system during the PBSA baseline period. If monthly data is not available for the PBSA baseline period, then the number of kilowatt-hours of net electrical energy generated by the system during any one of the three calendar years before the year in which the system first generated energy, multiplied by five-twelfths;

HeatOut = The number of British thermal units (Btu) of net useful thermal energy used by the system for space, water, or industrial process heat during a control period. If monthly data is not available for the control period, then HeatOut = the number of British thermal units (Btu) of net useful thermal energy used by the system for space, water, or industrial process heat during a calendar year, multiplied by five-twelfths;

BtuIn = The heat input of fuel used by the system to produce electrical or thermal energy during the PBSA baseline period. If monthly data is not available for the PBSA baseline period, then BtuIn = the heat input of fuel used by the system to produce electrical or thermal energy during any one of the three calendar years before the year during which the system first generated energy, multiplied by five-twelfths; and

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$NO_x$Rate = $NO_x$ emitted in normal system operation by the project (lbs $NO_x$/MMBtu).

8. Measurement and Verification. Measurements of the amount of energy saved or generated by each project:

a. shall adhere to the International Performance Measurement and Verification Protocol, March 2002, DOE/GO-102002-1554, (IPMVP), or U.S. EPA's Conservation Verification Protocol; and

b. shall adhere to the measurement and verification provisions of NEPOOL's Operating Procedure 18 "Metering and Telemetering" or other provisions acceptable to the Department; and

c. shall make normalization adjustments for energy savings in accordance with the IPMVP, (e.g., to correct for increases in lighting capacity in a defined office space, or for weather conditions causing increased or decreased load demands); and,

d. may include without limitation, thermodynamic steam table energy extrapolations; the American Society of Mechanical Engineers' Standard for Measurement of Fluid Flow in Pipes Using Orifice, Nozzle, and Venturi, (ASME MFC-3M-1989); manufacturers' efficiency specifications for useful energy determinations, or other measurement and verification protocols acceptable to the Department.

9. PBSA Procedures.

a. Any proponent who has not already done so shall establish a NATS account with the EPA in accordance with 310 CMR 7.28(8).

b. All applications for allowances shall:

i. be submitted on the Department's Public Benefit Set Aside $NO_x$ Allowance Application form;

ii. describe the project, and explain how the amount of energy saved or generated has been measured, verified and calculated;

iii. provide any additional information requested by the Department, including without limitation, site information, plans, specifications, drawings, calculations and operation and maintenance procedures; and,

iv. include the following certification signed by a responsible official:

As the project proponent, or the person fully authorized to make this certification on behalf of the project proponent, I certify that I personally examined the foregoing information, am familiar with the information contained in this application and any attachments thereto and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information contained in this application, including without limitation the quantification of the total amount of energy generated or saved by the project, is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment.

10. Timing of Allowances.

a. Project Start Date. Only REPs that were built and began generating energy and EEPs that were built and in use, or installed and operational, after December 31, 1999 are eligible for allowances from the PBSA account.

b. Applications in Calendar Year 2004. In 2004, applications for PBSA allowances shall be submitted to the Department by September 1, 2004. In 2004, a proponent may apply for PBSA allowances designated for year 2003 and year 2004. The allocation of 2003 allowances will be based on energy saved or generated in calendar year 2002. The allocation of 2004 allowances will be based on energy saved or generated in calendar year 2003.

c. Applications in Calendar Year 2005 and Thereafter. In 2005, and each year thereafter, proponents shall submit applications for PBSA allowances to the Department by April 1st of each year. The designated year of the PBSA allowances allocated will correspond to the calendar year in which the application is submitted. The allocation will be based on the energy saved or generated in the calendar year preceding the year in which the application is submitted.

d. Annual Applications. In 2005 and thereafter, a proponent may request allowances for only one year at a time. A separate application shall be submitted annually for each year during which an REP generates energy or an EEP saves energy.

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e. Useful Life of EEPs. An EEP is only eligible for allowances for energy saved during the seven years immediately following the year during which the EEP was first put in use (in the case of new buildings and additions), was first installed (in the case of materials) or first became operational (in the case of equipment or procedures).

11. General Provisions.

a. Limitation. If more than one proponent submits an application for allowances for the same project for the same calendar year, the Department, at its discretion, may refuse to accept such applications.

b. Aggregation. Proponents may submit an application that aggregates two or more REPs or EEPs that individually result in less than one allowance, but that equal at a minimum one whole allowance when aggregated. The Department will not allocate allowances for REPs or EEPs totaling less than one whole allowance.

c. Banking and Transferring. Allowances from the PBSA account may be banked in accordance with 310 CMR 7.28(9), or transferred in accordance with 310 CMR 7.28(10).

d. Whole Allowances. All allowances shall be allocated, transferred, or used as whole allowances. To determine the number of whole allowances, the number of allowances shall be rounded down for decimals less than 0.5 and rounded up for decimals of 0.5 or greater. Requests for less than one allowance may not be rounded up to 1.0.

e. Relationship to Air Pollution Control Regulations. Proponents applying for allowances from the PBSA account are not required to apply for Emission Control Plans or Operating Permits solely on account of said application.

f. Relationship to Other Laws. Proponents shall comply with all applicable state and federal laws and regulations, including without limitation, M.G.L. c. 93A (regarding the Regulation of Business Practices for Consumer Protection); M.G.L. c. 164 (regarding the Manufacture and Sale of Gas and Electricity); 940 CMR 19.00 *et seq*. the regulations of the Office of the Attorney General regarding the Retail Marketing and Sale of Electricity, and 220 CMR 11.00 *et seq*., *The Rules Governing the Restructuring of the Electric Industry*. Subject to 310 CMR 7.28(6)(b)11.f., nothing in 310 CMR 7.28(6)(b) shall be construed to limit any rights under M.G.L. c. 164.

(c) Allocation Process for New Budget Units. Any person who owns, leases, operates or controls a new budget unit may request that the Department allocate allowances to the unit from the new unit set-aside account. Allowances will be allocated to the overdraft account for each facility, or for facilities with only one budget unit, to the unit's compliance account. No later than October 15 of each year, each budget unit may request that the Department allocate allowances to that unit pursuant to 310 CMR 7.28(5)(b). By November 15 of each year the Department will allocate allowances from the new unit set-aside account to new budget units using the following formulae:

1. For electric generation:

$$\frac{(\text{MWh}) * (0.2 \text{ lbs/MWh})}{2000 \text{ lbs/ton}}$$

Where MWh = Actual net electric output for the current year's control period in megawatt hours.

2. For steam generation:

$$\frac{(\text{SO}) * (0.44 \text{ lbs/MMBtu output})}{2{,}000 \text{ lbs/ton}}$$

Where: SO = Actual net steam output for the current year's control period in MMBtu.

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3. For units with both electrical and useful steam output, the Department will add the number of allowances allocated for each type of output together to determine the total.

(d) Allocation Process for Existing Budget Units.

1. Except as stated in 310 CMR 7.28(6)(d)3., for each control period from 2003 through 2008, the Department will allocate allowances to existing budget units using the formulae in 310 CMR 7.28(6)(d)1. Through 2005, allocations will be made by April 1 of each year, three years before the control period the allowances are first usable. Allowances will be allocated to the overdraft account for each facility, or for facilities with only one budget unit, to the unit's compliance account. If a name or Office of Regulatory Information Systems (ORIS) code change occurs for a facility after 310 CMR 7.28 is promulgated, the Department will incorporate that change in its allocation process.

a. For electric generation:

UUA(y) = AEO(y-6, y-5, y-4) * 1.5 lbs/MWh / 2000 lbs/ton

UAA(y) = UUA(y) * (Allowance available for allocation)/sum of all UUA(y)

b. For useful steam generation:

UUA(y)= ASO(y-6, y-5, y-4) * 0.44 lbs/MMBtu output / 2000 lbs/ton

UAA(y)=UUA(y) * (Allowances available for allocation)/sum of all UUA(y)

Where: UUA(y) = a unit's unadjusted allocation for year y

AEO(y-6, y-5, y-4) = a unit's net electric output in MWh for the average of the two highest control periods 6, 5 or 4 years prior to year y

ASO(y-6, y-5,y-4) = a unit’s net steam output in MMBtu for the average of the two highest control periods 6, 5 or 4 years prior to year y

UAA(y) = a unit's allocation, adjusted so the total control period allocation does not exceed the Massachusetts state trading program budget.

For the control period of 2003 only, the Department will determine allocations using the average net electrical or useful steam output for the highest two years from 1994 through 1998 to determine an existing budget unit's average output for the equations in 310 CMR 7.28(6)(d)1. The Department may use heat input providing useful steam output as a surrogate for steam output in the above equation as necessary.

For units with both electrical and useful steam output, the Department will add the number of allowances allocated for each type of output together to determine the total.

If a budget unit has no operating history during 1994 through 1998, but has commenced operation during 1999, then the budget unit will be allocated from the new source set-aside for the 2003 control period.

2. For budget units with less than three full control periods of historical output the Department will determine the Units Unadjusted Allocation (UUA(y)) for the equations in 310 CMR 7.28(6)(d)1. according to the following:

a. For budget units with less than one full control period of operation:

AEO(y) = (greater of actual capacity utilization in percent or 0.9) * 3672 h * (nameplate capacity of the budget unit in MWh)

ASO(y) = (greater of actual capacity utilization in percent or 0.9) * 3672 h * (nameplate capacity of the budget unit in MMBtu/h)

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For purposes of 310 CMR 7.28(6)(d)2.a., the nameplate capacity to be used in the calculation of AEO or ASO shall represent the portion of the budget unit configuration contributing to generation of electrical output or useful steam output by the end of the control period. Such nameplate capacity shall have been established in a 310 CMR 7.02 plan approval or otherwise determined by the Department. A budget unit or portion thereof that does not generate electricity or useful steam output by the end of the control period shall not be included in the calculation of AEO or ASO.

b. For budget units with only one full control period of operation:

AEO(y) = (electrical output from the one full control period in MWh)

ASO(y) = (useful steam output from the one full control period in MMBtu)

c. For budget units with two full control periods of operation:

AEO(y) = (average electrical output from the two full control periods in MWh)

ASO(y) = (average useful steam output from the two full control periods in MMBtu)

After a unit has commenced operation, every control period is included in determining whether a unit has three full control periods of historical operation, including control periods with an electrical or useful steam output of zero.

3. For control periods 2003 through 2005, the existing budget units in Table 1 will receive the allocation listed in the table. Beginning with the allocation for control period 2006, the existing budget units in Table 1 will be allocated allowances according to the formulae in 310 CMR 7.28(6)(d)1.

310 CMR 7.28(6)(d): TABLE 1
$NO_x$ Allowance Allocation, 2003 – 2005

| NAME | ORIS Code | Control period Allowance Allocation |
|---|---|---|
| Braintree | 1660 | 76 |
| General Electric Lynn | 10029 | 60 |
| MA Bay Transit Authority | 10176 | 6 |
| MA Water Resources Authority | 10823 | 37 |
| Peabody | 01658 | 19 |
| Taunton | 01682 | 92 |

4. For the allocation for the 2008 control period, which occurs in the Spring of 2005, the Department will forward a template to be used by the budget units for submitting control period output data. After receiving output data from the budget units, the Department will calculate the allocation for the 2008 control period and forward a draft spreadsheet containing all of the budget units' allocations, including output data and calculations, to the budget units. There will be a 30-day comment period during which budget units may notify the Department of any errors in the output data and the calculation of the allocations contained in the spreadsheet. If the Department receives any comments and makes revisions to the spreadsheet, then it will provide a ten-day comment period on the revised spreadsheet. The Department will post the final allocation on the Department website and send it to EPA and budget units by April 1, 2005.

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(e) After the allowance transfer deadline of November 30 of each year, no person who owns, leases operates or controls a budget unit may transfer banked or current year allowances to or from that unit's compliance account until all compliance issues are resolved with the Department and the Department releases the compliance account.

(f) If a person who owns, leases, operates or controls a budget unit reduces the unit's emissions, and transfers those emission reductions under 310 CMR 7.00: *Appendix A* or *B* to a person not subject to 310 CMR 7.28 or another $NO_x$ allowance trading program approved by EPA, that person (the originator) must surrender or retire allowances equal to the emission reductions transferred off-budget. This surrender or retirement will not be made if the unit receiving the emission reductions from a budget unit voluntarily opts in to the Massachusetts trading program or other state's approved trading program. The opt in must occur prior to the use of emission reductions.

(g) 1. Any person who owns, leases, operates or controls a new budget unit which repowered an existing budget unit, as determined by the Department, must choose one of the following options before the new budget unit commences operation:

a. receive allowances under 310 CMR 7.28(6) as a new unit, and remit allowances equal to the allocation for the existing unit to the Department, if already allocated; or,

b. retain the allocation for the existing unit, and receive no allowances from the Department's new unit set-aside account for the new budget unit.

2. If the person who owns, leases, operates or controls the new budget unit does not indicate to the Department before the unit commences operation which option in 310 CMR 7.28(6)(g)1. is chosen, the Department will choose an option.

(h) An allowance is not a security or other form of property. An allowance allocation may be separated from the budget unit to which it is initially allocated according to the procedures of 310 CMR 7.28(10)(h).

(i) After providing an opportunity for public comment, the Department may condition, limit, suspend or terminate any allowance or the authorization to emit that an allowance represents.

(j) The Department will allocate 473 allowances from EPA's compliance supplement pool on a *pro rata* basis to those compliance and overdraft accounts that contain banked allowances from 2000, 2001 or 2002 on March 1, 2003. The Department will determine the budget units' pro rata shares by the number of allowances banked pursuant to 310 CMR 7.27. Allowances from EPA's compliance supplement pool may only be used for compliance in the 2003 and 2004 control periods.

(7) Emission Control Plans and Operating Permits.

(a) Emission Control Plan Application Deadlines.

1. Any person who owns, leases, operates or controls an existing budget unit(s) must submit an emission control plan for Department approval under 310 CMR 7.28 by November 1, 2001.

2. Any person who owns, leases, operates or controls a new budget unit must submit an emission control plan at least 18 months before the later of May 1, 2003 or the date on which the unit commences operation, if the unit does not have an emission control plan contained in an approval issued by the Department under 310 CMR 7.02(1) or 310 CMR 7.00: *Appendix A*.

3. A plan approval under 310 CMR 7.02(1) is not required for construction, substantial reconstruction or alteration of the budget unit(s) to comply with 310 CMR 7.28 unless such construction, substantial reconstruction or alteration to the facility that includes the budget unit(s) causes an increase in emissions of any criteria air pollutant or triggers any other applicable section under 310 CMR 7.02(4)(a) or 310 CMR 7.02(5)(a).

4. All emission control plan applications are subject to the fee regulations and approval timelines contained in 310 CMR 4.00.

(b) Emission Control Plan Contents. The emission control plan submitted pursuant to 310 CMR 7.28(7)(a) must include at least the following, in a format specified by the Department:

1. The name of the company.
2. A list of budget units.
3. A compliance account identification number for each budget unit.

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4. The AAR, and AAAR, if applicable, for each budget unit.

5. If applicable, the operating practices, control efficiency, design, specifications, and standard operating and maintenance procedures for equipment used to meet the requirements of 310 CMR 7.28.

6. A monitoring plan which meets the requirements of 310 CMR 7.28(11) and 40 CFR 96.74(b).

7. Signature of the AAR or AAAR.

8. Identification of the $NO_x$ Budget unit, including plant name and the ORIS or facility code assigned to the facility by the U.S. Energy Information Administration, if applicable.

9. Any other information requested by the Department.

(c) The Department will approve emission control plans in two phases. The submittal deadline for the second phase will be contained in the approval for the first phase. The Department's two-phase approval process follows:

1. Approval of the detailed monitoring plan required pursuant to 310 CMR 7.28(11);

2. Approval of the certification of the monitoring system required under 310 CMR 7.28(11).

(d) Revisions to Emission Control Plans.

1. If any person who owns, leases, operates or controls a budget unit proposes a change in the monitoring methodology pursuant to 40 CFR Part 75 Subpart H, then that person must submit a revised monitoring plan to the Department prior to making the modification. The Department will modify the emission control plan upon approval of the revised monitoring plan.

2. If any person who owns, leases, operates or controls a budget unit makes any change to the unit's approved detailed monitoring plan (represented electronically by the record type 500s), then that person must either:

a. notify the Department of the change and provide an explanation of the change in the next quarterly electronic report; or

b. notify the Department of the change, provide an explanation of the change, and submit an electronic copy of the revised detailed monitoring plan within two weeks after the next quarterly submittal deadline.

3. For any person who owns, leases, operates or controls a budget unit that is also subject to the operating permit program under 310 CMR 7.00: *Appendix C*, the operating permit will be modified upon approval of the revision to the emission control plan, in accordance with the procedures in 310 CMR 7.00: *Appendix (C)(8)*.

4. Allowance transfers under 310 CMR 7.28(10) are not considered revisions to the emission control plan.

(8) $NO_x$ Allowance Tracking System (NATS).

(a) The $NO_x$ Allowance Tracking System (NATS) is EPA's electronic record keeping and reporting system, which is the official database for all allowance use, and transfer related to 310 CMR 7.28. The NATS will track:

1. the allowances allocated by the Department to each budget unit;

2. the allowances held in each account;

3. the allowances used by each budget unit to comply with 310 CMR 7.28 for each control period;

4. the compliance and overdraft accounts established for each budget unit to determine compliance with 310 CMR 7.28 for the unit;

5. any general accounts opened by individuals or entities, which are not used to determine compliance with 310 CMR 7.28;

6. allowance transfers; and,

7. deductions of allowances for compliance purposes or to meet any other requirements of 310 CMR 7.28.

(b) The Administrator will establish a compliance account for each budget unit and an overdraft account, if applicable. The Administrator will give each account an account number and provide the following information, at a minimum, associated with each account:

1. the name of the account owner,

2. the name of the AAR,

3. the mailing address of the AAR, and

4. the phone number of the AAR.

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(c) The Administrator will also establish general accounts upon request. Any person or group may open a general account. An AAR must be designated for each general account. The AAR will be officially designated when the Administrator receives a complete application. That representative has the same obligations as an AAR designated by a budget unit, as applicable. The application for a general account shall be submitted in a format prescribed by the Administrator, must be signed and dated by the AAR for the general account and must contain the following statement (verbatim): "I certify that I was selected as the $NO_x$ authorized account representative or the $NO_x$ alternate authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the $NO_x$ Allowance Trading Program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any order or decision issued to me by the Administrator or a court regarding the general account."

(d) Only an AAR can request transfers of allowances from an account. For each account, one AAR must be, and one alternate may be, identified to represent the budget unit, or the owner of a general account. The AAR is responsible for all transactions and reports submitted to the NATS.

(e) The AAR will be officially designated when the Administrator receives a complete account certificate of representation, submitted in a format prescribed by the Administrator, containing, at a minimum, the following information:

1. identification of the budget unit by plant name, state and unit number for which the certification of representation is submitted;
2. the name, address, telephone and facsimile number of the AAR and any alternate; and
3. a list of owners, lessees, operators and controllers of the budget unit.

The AAR must submit a revised application when any of the above information changes.

(f) The account certificate of representation must be signed and dated by the AAR for the budget unit and must contain the following statement (verbatim): "I certify that I was selected as the $NO_x$ authorized account representative or alternate $NO_x$ authorized account representative, as applicable, by an agreement binding on the owners, lessees, operators and controllers of the $NO_x$ budget unit. I certify that I have all the necessary authority to carry out my duties and responsibilities under the $NO_x$ Allowance Trading Program on behalf of the owners, lessees, operators and controllers of the $NO_x$ budget unit(s) and that each such owner, lessee, operator and controller shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the permitting authority, the Administrator, or a court regarding the unit." Designation of an AAR for each budget unit must be completed by the first submission requirement under 310 CMR 7.28. Submitting a revised account certificate of representation pursuant to 40 CFR 96.12 can designate a new AAR. The Administrator will confirm the change of AAR in writing once the change is recorded in the NATS.

(g) Each unit account will have a unique identification number, and the Administrator will assign each allowance a unique serial number. Each allowance serial number will also indicate the first year it may be used for compliance with 310 CMR 7.28.

(h) Any objections concerning the AAR and AAAR are subject to the provisions of 40 CFR 96.14 and 96.51.

(i) The AAR or AAAR must include the certification statement in 310 CMR 7.28(10)(c)2. in all submissions.

(j) The Administrator may, at his or her sole discretion and on his or her own motion, correct any error in any $NO_x$ Allowance Tracking System account. Within ten business days of making such correction, the Administrator will notify the AAR for the account.

(9) Allowance Banking.

(a) Allowances may be banked for future use in a compliance, overdraft or general account.

(b) Any allowance not retired or used for compliance with 310 CMR 7.28 in a given year, will be retained in a compliance, overdraft or general account and designated as a "banked" allowance.

(c) Banked allowances may be used for compliance with 310 CMR 7.28 in accordance with the following requirements:

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1. By May 1 of each year, the total number of banked allowances in all of the states' trading programs will be determined by the Administrator and used to determine how banked allowances may be used in the current year as follows:

a. If the total number of banked allowances is less than or equal to 10% of the total of states' trading program budgets for the current year's control period, all banked allowances may be used for compliance with 310 CMR 7.28 on a one-for-one basis.

b. If the total number of banked allowances exceeds 10% of the total of states' trading program budgets for the current year's control period, banked allowances in each NATS compliance, overdraft and general account will be subject to the following:

i. A ratio will be established according to the following formula:

$$\frac{0.10 \times \text{the total of states' trading program budgets}}{\text{the total number of banked allowances in NATS}}$$

ii. The ratio calculated in 310 CMR 7.28(9)(c)1.b.i. will be applied to the banked allowances in each account. The resulting number is the number of banked allowances in the account that can be used in the current year's control period on a one-for-one basis. Allowances in excess of that number, if used, must be used on a two-for-one basis.

2. The Administrator will notify the AAR for each account of the ratio which must be applied to banked allowances to determine the number of banked allowances available for use in the current year's control period on a one-for-one basis, and the number of banked allowances available for use in the current year's control period on a two-for-one basis.

(10) Allowance Use and Transfer.

(a) An allowance is a limited authorization to emit one ton of $NO_x$ during a specified control period or any control period thereafter. An allowance is usable only for complying with the provisions of 310 CMR 7.28 and may be bought, sold or traded at any time in accordance with 310 CMR 7.28.

(b) A budget unit may only use allowances designated for that control period year or banked allowances for compliance with 310 CMR 7.28. Allowances must be in the budget unit's compliance or overdraft account as of the allowance transfer deadline, or transferred into the compliance or overdraft account by an allowance transfer request submitted by the allowance transfer deadline in accordance with 310 CMR 7.28(10)(c) through (e).

(c) An allowance transfer will occur as follows:

1. The transfer request must be on a form, or electronic media, in a format determined by the Administrator. The request must be submitted to the Administrator and include, at a minimum:

a. The account numbers identifying both the originating account and the destination account;

b. The names and addresses associated with the AARs of the originating account and the destination account; and,

c. The serial number for each allowance or range of allowances being transferred.

2. The transfer request must be signed and dated by the AAR for the originating account. The AAR for the originating account must provide a copy of the transfer request to each person who owns, leases, operates or controls the budget unit. To be considered correctly submitted, the request for transfer must include the following statement of certification (verbatim):

a. For General Accounts: "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the $NO_x$ allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

7.28: continued

b. For Compliance and Overdraft Accounts: "I am authorized to make this submission on behalf of the owners, lessee, operators or controllers of the $NO_x$ budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(d) Transfer requests will be processed by the Administrator in order of receipt.

(e) The Administrator will verify the following:

1. Each allowance listed in the transfer request is held by the originating account at the time the transfer will be recorded;
2. The acquiring party has an account in the NATS; and,
3. The transfer request was filed by the person named as AAR for the originating account.

(f) Valid allowance transfers, after verification by the Administrator, will be recorded in the NATS by deducting the specified allowances from the originating account and adding them to the acquiring account.

(g) The Administrator will notify the AAR for the originating account of an allowance transfer. Notification may be made on paper or electronically and will include:

1. The effective date of the transfer;
2. The identity of the originating account and the acquiring account by name as well as account number; and,
3. The number of allowances transferred and their serial numbers, or
4. The reason for failure if the transfer is not recorded.

(h) If the AAR for a budget unit determines that some or all allocated allowances should be transferred to another budget unit's compliance account, overdraft account or general account for the remainder of the current control period, then the AAR of the originating account must submit to the Administrator a request for transfer that states this intent. A request for transfer of allowances for the remainder of the control period must comply with 310 CMR 7.28(10)(c). In addition, the request must be submitted to the Department with a letter requesting that future allowance allocations be made directly to the acquiring account.

(i) Any AAR shall make available to the Department, upon request, information regarding transaction cost and allowance price.

(11) Emission Monitoring.

(a) General Requirements. Any person who owns, leases, operates or controls a budget unit must comply with the following, as applicable:

1. Any person who owns, leases, operates or controls a budget unit that commences operation before January 1, 2002 shall install, operate and successfully complete all applicable certification testing requirements for monitoring heat input, $NO_x$ emission rate and $NO_x$ mass emissions pursuant to the requirements of 40 CFR Part 75 Subpart H by May 1, 2002.

2. Any person who owns, leases, operates or controls a new budget unit which commences operation on or after January 1, 2002, shall install, operate and successfully complete all applicable certification testing requirements for monitoring heat input, $NO_x$ emission rate and $NO_x$ mass emissions pursuant to the requirements of 40 CFR Part 75 Subpart H, as in effect on July 2, 2004, the later of the following dates: May 1, 2002; or, the earlier of 90 unit operating days, or 180 calendar days after the date the unit commences commercial operation

3. Any person who owns leases, operates or controls a budget unit may petition the Department and EPA pursuant to 40 CFR 75.70(h) to use an alternative monitoring methodology.

4. All monitoring systems are subject to initial performance testing and periodic calibration, accuracy testing and quality assurance/quality control testing as specified in 40 CFR Part 75 Subpart H.

7.28: continued

5. During a period when valid data is not being recorded by a monitoring system approved under 310 CMR 7.28, the missing or invalid data must be replaced with default data in accordance with the provisions of 40 CFR 75.70(f).

6. $NO_x$ emissions data must be reported to the $NO_x$ Emissions Tracking System (NETS) in accordance with 310 CMR 7.28(13).

7. Budget units must report data pursuant to the requirements of 310 CMR 7.28(11) for every hour.

8. Any person who owns, leases, operates or controls a new budget unit must determine, record and report $NO_x$ mass, heat input (if required for purposes of allocation) and any other values required to determine $NO_x$ mass (*e.g.*, $NO_x$ emission rate and heat input or $NO_x$ concentration and stack flow) using the provisions in 40 CFR 75.70(g) from the date and hour the unit commences operation until all required certification tests are successfully completed.

(b) Notification. Any person who owns, leases, operates or controls a budget unit subject to 310 CMR 7.28 must comply with the notification requirements in 40 CFR 75.61, where applicable.

(c) The Department and the Administrator will follow the procedures of 40 CFR 75.70(h) on petitions for using alternative monitoring procedures from 40 CFR 75.

(12) Record Keeping. Any person who owns, leases, operates or controls a budget unit must keep all measurements, data, reports and other information required by 310 CMR 7.28 for five years, or any other period consistent with the budget unit's operating permit.

(13) Reporting.

(a) The AAR must submit quarterly reports for each calendar quarter beginning with:

1. For units commencing operation prior to May 1, 2002, the earlier of the calendar quarter that includes the date of initial certification or, if the certification tests are not completed by May 1, 2002, the partial calendar quarter from May 1, 2002 through June 30, 2002. Data shall be recorded and reported from the earlier of the date and hour corresponding to the date and hour of certification or the first hour on May 1, 2002; or

2. For a unit that commences operation on after May 1, 2002, the calendar quarter in which the unit commences operation. Data shall be reported from the date and hour the unit commenced operation.

(b) The Authorized Account Representative (AAR) for each budget unit using CEMS shall submit to the EPA all emissions and operating information for each calendar quarter of each year in accordance with the standards specified in 40 CFR Part 75 Subpart H and 40 CFR 75.64, both as in effect on July 2, 2004. For budget units not using CEMS, reports shall be submitted only for the control period portion of the second and third quarters of each calendar year.

(c) The quarterly reports must contain the following information as applicable:

1. For units subject to an Acid Rain Emissions limitation, quarterly reports shall include all of the data and information required in 40 CFR Part 75 Subpart H for each $NO_x$ Budget unit (or group of units using a common stack) as well as information required in 40 CFR Part 75 Subpart G.

2. For units not subject to an Acid Rain Emissions limitation, quarterly reports are only required to include all of the data and information required in 40 CFR Part 75 Subpart H for each $NO_x$ Budget unit (or group of units using a common stack).

(d) Should a budget unit be permanently shut down, the Department will grant an exemption from the requirements of 310 CMR 7.28 upon request from the budget unit's AAR, and provided the shutdown is part of an approved emission control plan or approved under 310 CMR 7.00: *Appendix B*. The request must include an identification of the budget unit being shut down, and the date of shutdown. Department approval of the request for shutdown exemption will be sent to the AAR, and the Administrator, and may contain conditions as deemed necessary by the Department.

(e) By October 31 of each year, any person who owns, leases, operates or controls a new or existing budget unit shall report to the Department each facility's metered net electric and useful steam output for that year's control period. Net electric output must be reported in megawatt-hours, and steam output in MMBtu. If data for steam output is not available, the person may report heat input providing useful steam output as a surrogate for steam output.

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(14) Compliance Determination at the End of a Season.

(a) The data reported to the Administrator by the AAR for a budget unit in accordance with 310 CMR 7.28(13), and the allowance allocations and transfers recorded in the NATS compliance or overdraft account for that budget unit, are the basis for determining compliance with 310 CMR 7.28.

(b) Each year by November 30, the AAR for each budget unit may request that the Administrator deduct current year allowances from the compliance or overdraft account equivalent to the $NO_x$ emissions from the budget unit in the current control period. The request must be submitted by the AAR to the Administrator no later than the allowance transfer deadline (November 30). The request must identify the compliance or overdraft account from which the deductions should be made, and if desired, the serial numbers of the allowances to be deducted. If no serial numbers are identified, the Administrator will deduct allowances in the following order: current year allowances allocated to the account; current year allowances transferred to the account; banked allowances allocated to the account; and, banked allowances transferred to the account. Banked allowances may be used in place of current year allowances subject to the conditions in 310 CMR 7.28(9).

(c) The Administrator will determine whether there are sufficient allowances in the compliance or overdraft account to cover the control period $NO_x$ emissions. Regardless of the AAR's request to the Administrator to deduct allowances pursuant to 310 CMR 7.28(14)(b), the Administrator will deduct a number of allowances equal to the current control period's $NO_x$ emissions, rounded to the nearest whole ton, from the budget unit's compliance or overdraft account.

(d) Should the emissions of the budget unit in the current control period exceed the allowances in the budget unit's compliance or overdraft account available for compliance for the control period, the AAR is responsible for obtaining additional allowances by the allowance transfer deadline. The total number of allowances in the compliance or overdraft account, including allowance transfers submitted to the Administrator in accordance with 310 CMR 7.28(10) by the allowance transfer deadline, must equal or exceed the control period emissions of $NO_x$ rounded to the nearest whole ton.

(e) If the total number of allowances in the budget unit's compliance or overdraft account available for compliance, including allowance transfers submitted to the Administrator by the allowance transfer deadline in accordance with 310 CMR 7.28(10), does not equal or exceed the control period emissions of $NO_x$ from that budget unit, the Department will apply deduction penalties according to 310 CMR 7.28(16), and may take any additional enforcement action it deems appropriate.

(f) The Department or the Administrator may review and conduct independent audits concerning any compliance certification or any other submission under the 310 CMR 7.28 $NO_x$ Allowance Trading Program and make appropriate adjustments of the information in the compliance certifications or other submissions. The Administrator may deduct $NO_x$ allowances from, or transfer $NO_x$ allowances to, a unit’s compliance account or overdraft account based on the information in the compliance certifications or other submissions as audited.

(15) Compliance Certification.

(a) For each control period, the AAR for the budget unit shall submit an annual compliance certification report to the Department and the Administrator.

(b) The compliance certification report shall be submitted no later than the allowance transfer deadline (November 30) of each year.

(c) The compliance certification shall contain the following elements, in a format prescribed by the Administrator:

1. Identification of the budget unit, including name, unit address, name of AAR and NATS account number.

2. At the AAR's option, the serial numbers of the $NO_x$ allowances that are to be deducted from each unit's compliance account for the control period, and the percent of allowances to be deducted for each unit on a common stack.

3. A statement that emissions data have been submitted to the Administrator in accordance with the procedures established in 310 CMR 7.28(13) and in conformance with the requirements of the Administrator.

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4. A statement that the budget unit holds sufficient current year or banked allowances available under 40 CFR 96.54 in its compliance or overdraft account for the control period, as of the allowance transfer deadline, to equal or exceed the recorded emissions for the control period.

5. A statement certifying that the monitoring data reflected operations at the budget unit.

6. A statement that all emissions from the budget unit were accounted for, either through the applicable monitoring or through application of the appropriate missing data procedures and reported in the quarterly reports. If provisionally certified data were reported, the $NO_x$ AAR must indicate whether the status of all provisionally certified data was resolved and all necessary quarterly reports were submitted.

7. A statement indicating whether there was any changes in the method of operation of the budget unit or the method of monitoring the budget unit during the current year. If a change must be reported, then specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor re-certification.

8. A certification statement stating (verbatim): "I am authorized to make this submission on behalf of the owners, lessees, operators and controllers of the $NO_x$ Budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(d) The Department may verify compliance by whatever means necessary, including but not limited to:

1. Inspection of a unit's operating records;
2. Obtaining information on allowance deduction and transfers from the NATS;
3. Obtaining information on emissions from the NETS;
4. Testing emission monitoring devices; and,
5. Requiring the person who owns, leases, operates or controls a budget unit to conduct emissions testing under the supervision of the Department.

(16) Penalties.

(a) If the total tons of $NO_x$ emitted from a budget unit exceed the number of current year or banked allowances available under 40 CFR 96.54 for the control period as of the allowance transfer deadline, the Administrator will automatically deduct allowances from the budget unit's allocation for the next control period at a rate of three allowances for every one ton of excess emissions.

(b) The penalty provisions in 310 CMR 7.28(16)(a) are in addition to any applicable enforcement provisions.

(17) Account Maintenance Fees (Reserved)

(18) Audit.

(a) The Department will conduct, or have conducted, an audit of the implementation of the $NO_x$ Allowance Trading Program beginning in 2006 and every three years thereafter to ensure that the program is providing expected performance with regards to emissions monitoring and allowance use. The audits will include, as appropriate, confirmation of the accuracy of emissions reporting through validation of CEMS and data acquisition systems at budget units, and review of allowance transfer and use by budget units. Each audit will examine the extent to which banked allowances have, or have not, contributed to emissions in excess of the state trading program budget for a given control period.

(b) In addition to the Department audit, the Department may request a third party audit of the program.

(c) Should an audit result in recommendations for revisions at a state level, the Department will consider the audit recommendations, in consultation with the other states in the $NO_x$ allowance program, and if necessary, propose the appropriate revisions as changes to current procedures or modifications to 310 CMR 7.00.

## 7.29: Emissions Standards for Power Plants

(1) Purpose and Scope. The purpose of 310 CMR 7.29 is to control emissions of nitrogen oxides ($NO_x$), sulfur dioxide ($SO_2$), mercury (Hg), carbon monoxide (CO), carbon dioxide ($CO_2$) and fine particulate matter (PM 2.5) (together "pollutants") from affected facilities in Massachusetts. 310 CMR 7.29 accomplishes this by establishing output-based emission rates for $NO_x$, $SO_2$ and $CO_2$ and establishing a cap on $CO_2$ and Hg emissions from affected facilities. $CO_2$ emissions standards set forth in 310 CMR 7.29(5)(a)5.a. and b. shall not apply to emissions that occur after December 31, 2008.

(2) Definitions. The definitions in 310 CMR 7.00 apply to 310 CMR 7.29. However, the terms below have the following meanings when they appear in 310 CMR 7.29. If a term is defined both in 310 CMR 7.00 and in 310 CMR 7.29(2), the definition in 310 CMR 7.29(2) applies for the purpose of 310 CMR 7.29.

Actual Emissions for a facility means that facility's total annual emissions expressed in tons for each pollutant, as measured and reported in accordance with 310 CMR 7.29(7).

Affected Facility means a facility which emitted greater than 500 tons of $SO_2$ and 500 tons of $NO_x$ during any of the calendar years 1997, 1998 or 1999 and which includes a unit which is a fossil fuel fired boiler or indirect heat exchanger that:

(a) is regulated by 40 CFR Part 72 (the Federal Acid Rain Program);
(b) serves a generator with a nameplate capacity of 100 MW or more;
(c) was permitted prior to August 7, 1977; and
(d) had not subsequently received a Plan Approval pursuant to 310 CMR 7.00: *Appendix A* or a Permit pursuant to the regulations for Prevention of Significant Deterioration, 40 CFR Part 52, prior to October 31, 1998.

Alternate Hg Designated Representative means, for a coal-fired affected facility and each coal-fired unit at the facility, the natural person who is authorized by the owners and operators of the facility and all such units at the facility in accordance with 40 CFR 60.4110 through 60.4114, to act on behalf of the Hg designated representative in matters pertaining to mercury monitoring, recordkeeping, reporting and compliance.

Alternative Monitoring System means a system or a component of a system designed to provide direct or indirect data of mass emissions per time period, pollutant concentrations, or volumetric flow, that is demonstrated to the Administrator as having the same precision, reliability, accessibility, and timeliness as the data provided by a certified CEMS or certified CEMS component in accordance with 40 CFR Part 75.

Ash means bottom ash, fly ash or ash generated by an ash reduction process derived from combustion of fossil fuels, carbon or other substances.

Automated Data Acquisition and Handling System or DAHS means that component of the mercury continuous emission monitoring system (CEMS), or other emissions monitoring system approved for use under 40 CFR 60.4170 though 60.4176, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by 40 CFR 60.4170 through 60.4176.

Block Hourly Average means the average of all valid emission concentrations when the affected unit is operating, measured over a one-hour period of time from the beginning of an hour to the beginning of the next hour.

Calendar Quarter means any consecutive three-month period (nonoverlapping) beginning January 1$^{st}$, April 1$^{st}$, July 1$^{st}$ or October 1$^{st}$.

Calendar Year means any period beginning January 1$^{st}$ and ending December 31$^{st}$.

Continuous Emission Monitoring System or CEMS means the equipment required by 40 CFR Part 75 used to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated data acquisition and handling system (DAHS)), a permanent record of $SO_2$, $NO_X$ or $CO_2$ emissions or stack gas volumetric flow rate.

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Historical Actual Emissions or Historical Actual Emission Rate means the average annual emissions or output-based emission rate averaged over 1997, 1998 and 1999. A different three-year period within the past five years may be used if requested by the owner of an affected facility, and if the Department determines that period is more representative of historical actual emissions.

Mercury (Hg) Designated Representative means, for a coal-fired affected facility and each coal-fired unit at the facility, the natural person who is authorized by the owners and operators of the facility and all such units at the facility, in accordance with 40 CFR 60.4110 through 60.4114, to represent and legally bind each owner and operator in matters pertaining to mercury monitoring, recordkeeping, reporting and compliance.

Mercury Continuous Emission Monitoring System or Mercury CEMS means the equipment required under 40 CFR 60.4170 through 60.4176 to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated data acquisition and handling system (DAHS)), a permanent record of Hg emissions, stack gas volumetric flow rate, stack gas moisture content, and oxygen or carbon dioxide concentration (as applicable), in a manner consistent with 40 CFR Part 75. The following systems are the principal types of CEMS required under 40 CFR 60.4170 through 60.4176:

(a) A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack gas volumetric flow rate, in units of standard cubic feet per hour (SCFH);

(b) A Hg concentration monitoring system, consisting of a Hg pollutant concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of Hg emissions in units of micrograms per dry standard cubic meter (µg/dscm);

(c) A moisture monitoring system, as defined in 40 CFR 75.11(b)(2) and providing a permanent, continuous record of the stack gas moisture content, in percent $H_2O$.

(d) A carbon dioxide monitoring system, consisting of a $CO_2$ concentration monitor (or an oxygen monitor plus suitable mathematical equations from which the $CO_2$ concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of $CO_2$ emissions, in percent $CO_2$; and

(e) An oxygen monitoring system, consisting of an $O_2$ concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of $O_2$, in percent $O_2$.

Mercury Monitoring System means a mercury continuous emission monitoring system, an alternative monitoring system, or a sorbent trap monitoring system under 40 CFR Part 60 or 75 but does not mean the low mass emissions excepted monitoring methodology in 40 CFR 75.81(d).

MWh means megawatt-hours of net electrical output.

Net Electrical Output of a Facility means the total actual net electrical output of the facility used by the New England Independent System Operator to determine settlement resources of energy market participants.

Output-based Emission Rate means an emission rate for any pollutant, expressed in terms of actual emissions in pounds over a specified time period per megawatt-hour of net electrical output produced over the same time period.

Output-based Emission Standard means the emission standards for each applicable pollutant, expressed in terms of pounds of pollutant emitted per megawatt-hour of net electrical output produced, as set forth in 310 CMR 7.29(5).

Repowering means:

(a) Qualifying Repowering Technology as defined by 40 CFR Part 72 or,

(b) The replacement of the heat or power from a unit subject to 40 CFR Part 72 at an affected facility with either a new combustion unit, regardless of the fuel used, or the purchase of heat or power from the owner of a new combustion unit, regardless of the fuel used, provided the replacement unit:

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1. (Regardless of owner) is on the same, or contiguous property as the replaced unit;
2. Has a maximum heat output rate or power output rate equal to or greater than the maximum heat output rate or power output rate of the replaced unit; and, the replaced unit is physically removed from the affected facility, or the heat or power available from the replaced unit is limited by limiting hours of operation, maximum heat input or some other method approved by the Department; and,
3. Incorporates technology capable of controlling multiple combustion pollutants simultaneously with improved fuel, boiler or generation efficiency and significantly greater waste reduction relative to the performance of technology in widespread commercial use as determined by the Department.

Rolling with respect to an average means the calculation of an average by dropping the earliest month or calendar quarter value and incorporating the latest month or calendar quarter value for the period over which an average is calculated.

Sorbent Trap Monitoring System means the equipment required by 40 CFR Part 75 for the continuous monitoring of mercury emissions, using paired sorbent traps containing iodinized charcoal (IC) or other suitable reagent(s). This excepted monitoring system consists of a probe, the paired sorbent traps, a heated umbilical line, moisture removal components, an airtight sample pump, a dry gas meter, and an automated data acquisition and handling system. The monitoring system samples the stack gas at a rate proportional to the stack gas volumetric flow rate. The sampling is a batch process. Using the sample volume measured by the dry gas meter and the results of the analyses of the sorbent traps, the average mercury concentration in the stack gas for the sampling period is determined, in units of micrograms per dry standard cubic meter (µg/dscm). Mercury mass emissions for each hour in the sampling period are calculated using the average mercury concentration for that period, in conjunction with contemporaneous hourly measurements of the stack gas flow rate, corrected for the stack gas moisture content.

Total Mercury means the sum of particulate-bound and vapor-phase (elemental and oxidized) mercury in combustion gases or emitted to the atmosphere.

(3) Applicability. The provisions of 310 CMR 7.29 apply to any person who owns, leases, operates or controls an affected facility.

(4) General Provisions.

(a) Each affected facility shall comply with the applicable emission standards established in 310 CMR 7.29(5).

(b) Any person subject to 310 CMR 7.29 shall comply with all other applicable regulations, including, but not limited to: 310 CMR 7.02: *U Plan Approval and Emission Limitations*; 310 CMR 7.19: *Reasonably Available Control Technology (RACT) for sources of Oxides of Nitrogen ($NO_x$)*; 310 CMR 7.28: *$NO_x$ Allowance Trading Program*; 310 CMR 7.70 *$CO_2$ Budget Trading Program*; 310 CMR 7.00: *Appendix A: Emissions Offsets and Nonattainment Review*; and 310 CMR 7.00: *Appendix C: Operating Permit and Compliance Program*. If provisions or requirements from any other regulation or permit conflict with a provision of 310 CMR 7.29, the more stringent of the provisions will apply unless otherwise determined by the Department in the affected facility's operating permit. Regardless of the Department's determination in the operating permit, any person subject to 310 CMR 7.29 shall comply with all applicable federal requirements.

(c) In the case of imminent threat to the reliability of New England's electricity system, the Department may promulgate an emergency regulation, as per M.G.L. c. 30A, §§ 2 and 3, to mitigate the emergency situation.

(5) Emission Requirements.

(a) Emission Standards for Affected Facilities.

1. Nitrogen Oxides Emission Standards.

a. Effective on the applicable date in 310 CMR 7.29(6)(c), emissions of nitrogen oxides shall not exceed an emission rate of 1.5 lbs./MWh calculated over any consecutive 12 month period, recalculated monthly; and,

b. Effective on the applicable date in 310 CMR 7.29(6)(c), emissions of nitrogen oxides shall not exceed an emission rate of 3.0 lbs./MWh calculated over any individual calendar month.

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2. Sulfur Dioxide Emission Standards.

a. Effective on the applicable date in 310 CMR 7.29(6)(c), emissions of sulfur dioxide shall not exceed an emission rate of 6.0 lbs./MWh calculated over any consecutive 12 month period, recalculated monthly.

b. Effective on the applicable date in 310 CMR 7.29(6)(c),

i. Emissions of sulfur dioxide shall not exceed an emission rate of 3.0 lbs./MWh calculated over any consecutive 12 month period, recalculated monthly; and,

ii. Emissions of sulfur dioxide shall not exceed an emission rate of 6.0 lbs./MWh calculated over any individual calendar month.

3. Mercury Emissions.

a. By December 1, 2002, the Department will complete an evaluation of the technological and economic feasibility of controlling and eliminating emissions of mercury from the combustion of solid fossil fuel in Massachusetts in accordance with the Mercury Action Plan of the Conference of New England Governors and Eastern Canadian Premiers.

b. Deleted.

c. The Emission Control Plan submitted to the Department under 310 CMR 7.29(6) shall demonstrate, and any person who owns, leases, operates or controls an affected facility shall ensure, that beginning at the time of the affected facility's earliest applicable compliance date in 310 CMR 7.29(6)(c), or at the time of the facility's earliest applicable Phase 1 NOx and $SO_2$ compliance date under an administrative order existing prior to June 4, 2004, whichever is later, total annual mercury emissions from combustion of solid fuels in units subject to 40 CFR Part 72 located at an affected facility or from re-burn of ash in Massachusetts will not exceed the average annual emissions calculated using the results of the stack tests required in 310 CMR 7.29(5)(a)3.d.ii.. The average annual emissions calculated using the results of the stack tests required in 310 CMR 7.29(5)(a)3.d.ii. equal the average measured pounds of mercury emitted per million Btu consumed multiplied by the heat input in million Btu averaged over 1997, 1998 and 1999. A different three-calendar-year period within the five years prior to May 11, 2001 may be used if requested by the owner of an affected facility, and if the Department determines that the different period is more representative of historical actual heat input. Total annual mercury emissions equal the total emissions from:

i. combustion of solid fossil fuel in units subject to 40 CFR Part 72 located at an affected facility, determined using emissions testing at least every other calendar quarter from October 1, 2006 until a certified mercury monitoring system is used to demonstrate compliance with the standards in 310 CMR 7.29(5)(a)3.e. or f., and using a certified mercury monitoring system thereafter, and

ii. re-burn of ash, where such ash was produced by the combustion of fossil fuel or ash at any affected facility. When ash is re-burned at an affected facility, the associated mercury emissions shall be attributed to the affected facility at which the ash is re-burned. When ash produced by an affected facility is used in Massachusetts as a cement kiln fuel, as an asphalt filler, or in other high temperature processes that volatilize mercury,

(i) the mercury content of the utilized ash shall be measured weekly using a method acceptable to the Department,

(ii) all of the mercury in the utilized ash shall be assumed to be emitted, unless it can be demonstrated with data acceptable to the Department that a lesser amount of mercury is emitted,

(iii) the associated mercury emissions shall be attributed to the affected facility from which the ash is shipped to the cement kiln, asphalt batching plant or other high temperature processing location, and

(iv) a proposal shall be submitted for Department approval at least 45 days prior to such use, or at least 45 days prior to October 1, 2006, whichever is later, detailing the proposed measurement methods to be used to comply with 7.29(5)(a)3.c.ii.(i) and (ii).

7.29: continued

d. Fuel Sampling and Stack Testing.

i. Beginning on May 11, 2001 until August 1, 2002, any person who owns, leases, operates or controls an affected facility which combusts solid fossil fuel in a Part 72 unit shall test each shipment of coal at the time received. The test shall be conducted by a method approved by the Department, and report the mercury and chlorine content of the coal. The results of each interim fuel testing shall be reported to the Department with the results of the next stack test as required in 310 CMR 7.29(5)(a)3.d.ii.

ii. Any person who owns, leases, operates or controls an affected facility which combusts solid fossil fuel shall perform stack tests for mercury. The stack tests shall:

- Be conducted using a DEP-approved test method detailed in a test protocol submitted to the Department at least 45 days before commencement of testing, and notify the Department of the specific date the test will be conducted at least 30 days prior to conducting the test;
- Test the mercury concentrations and species before all add-on air pollution control equipment (inlet) and after (outlet);
- Be conducted as follows: One test shall be performed before August 1, 2001,
  A second test shall be performed after December 1, 2001 but not later than February 1, 2002,
  A third test shall be performed after June 1, 2002 but not later than August 1, 2002
- The results of each stack test shall be reported to the Department within 30 days after conducting each stack test.

iii. Until a certified mercury monitoring system is installed, stack tests for mercury shall consist at a minimum of three runs at full load on each unit firing solid fossil fuel or ash according to a testing protocol acceptable to the Department. Unless a mercury monitoring system that measures particulate-bound mercury, either combined with or separate from the measurement of vapor-phase mercury, is installed at a unit for purposes of determining compliance with the standards in 310 CMR 7.29(5)(a)3.c., e. and f., stack tests for mercury, and certification tests and Relative Accuracy Test Audits for mercury monitoring systems, shall determine total and particulate-bound mercury. Relative accuracy shall be calculated as specified in 40 CFR Part 75. The results of each stack test shall be reported to the Department within 45 days after conducting each stack test.

e. Effective on January 1, 2008, or 15 months after the facility's earliest applicable Phase 1 $NO_x$ and $SO_2$ compliance date under an administrative order existing prior to June 4, 2004, whichever is later, any person who owns, leases, operates or controls an affected facility which combusts solid fossil fuel or ash shall comply with at least one of the following mercury emissions standards:

i. a facility average total mercury removal efficiency of 85% or greater for those units combusting solid fossil fuel or ash. The mercury removal efficiency based on a mercury monitoring system shall be calculated based on the average historic mercury inlet emissions determined under 310 CMR 7.29(5)(a)3.d.ii. using the methodology approved by the Department in the monitoring plan required under 310 CMR 7.29(5)(a)3.g. and shall be calculated on a rolling 12 month basis; or

ii. a facility average total mercury emissions rate of 0.0075 lbs./GWh or less for those units combusting solid fossil fuel or ash. The mercury emissions rate based on a mercury monitoring system shall be calculated using the mercury mass emissions methodology specified in 40 CFR Part 75 and approved by the Department in the monitoring plan required under 310 CMR 7.29(5)(a)3.g. and shall be calculated on a rolling 12 month basis.

7.29: continued

iii. Notwithstanding 310 CMR 7.29(5)(a)3.e.i. and ii., any person who owns, leases, operates or controls an affected unit which combusts solid fossil fuel or ash and has an enforceable commitment with the Department to terminate operations by January 1, 2010, may comply with 310 CMR 7.29 (5)(a)3.e.i. or ii. through January 1, 2010 by complying with an approved 310 CMR 7.29 emission control plan modification achieving early or off-site reductions. To comply with the foregoing, such person shall propose under 310 CMR 7.29(6)(h)1. to amend the approved emission control plan. Such early or off-site reductions shall be in an amount of at least the equivalent mass of mercury reductions required under 310 CMR 7.29 (5)(a)3.e.i. or ii. Any early reductions shall be accrued on-site at the stack prior to the compliance date effective under 310 CMR 7.29(5)(a)3.e. Any off-site mercury air emission reductions shall be accrued on at least a one pound reduced for one pound credited basis from facilities located in the same DEP Region as the affected unit. Any other off-site mercury reductions shall be accrued on at least a ten pounds reduced for one pound credited basis from facilities located in the same DEP Region as the affected unit.

f. Effective on October 1, 2012, any person who owns, leases, operates or controls an affected facility which combusts solid fossil fuel or ash shall comply with at least one of the following mercury emissions standards:

i. a facility average total mercury removal efficiency of 95% or greater for those units combusting solid fossil fuel or ash. The mercury removal efficiency shall be calculated based on a mercury monitoring system as provided in 310 CMR 7.29(5)(a)3.e.i.; or

ii. an average total mercury emission rate of 0.0025 lbs./GWh or less for those units combusting solid fossil fuel or ash. The mercury emission rate shall be calculated based on a mercury monitoring system as provided in 310 CMR 7.29(5)(a)3.e.ii.

g. Mercury Monitoring Systems.

i. By January 1, 2008, any person who owns, leases, operates or controls an affected facility which combusts solid fossil fuel or ash shall install, certify, and operate a mercury monitoring system in accordance with 40 CFR Part 75 and 40 CFR 60.4106(b)(1) to measure mercury stack emissions from each solid fossil fuel- or ash-fired unit at a facility subject to 310 CMR 7.29. Any person required to install a mercury monitoring system shall submit a monitoring plan for Department approval and shall propose to amend the approved emission control plan in accordance with 310 CMR 7.29(6)(n)1. to incorporate the mercury monitoring approach at least 45 days prior to the commencement of initial certification testing.

ii. Affected facilities must include in their monitoring plan a proposed methodology to demonstrate compliance with the emission standards in 310 CMR 7.29(5)(a)3.e. and f.

iii. If a mercury monitoring system capable of measuring only vapor-phase mercury is installed at a unit for purposes of determining compliance with the standards in 310 CMR 7.29(5)(a)3.c., e. and f., total mercury shall be determined by taking into account the average particulate-bound mercury measured during the most recent stack test on that unit in combination with the total vapor-phase mercury measured by the mercury monitoring system until such time as a mercury monitoring system to measure particulate-bound mercury is installed and operational at a unit.

iv. (i) Notwithstanding 310 CMR 7.29(5)(a)3.g.i., a unit with an enforceable commitment to terminate operations by January 1, 2010 and that qualifies to use the mercury low mass emissions excepted monitoring methodology under 40 CFR 75.81(b) may choose between quarterly stack testing and a mercury monitoring system to document mercury emissions in the period from January 1, 2008 until the time such unit terminates operation or January 1, 2009, whichever is earlier.

7.29: continued

(ii) Notwithstanding 310 CMR 7.29(5)(a)3.g.i., a unit with an enforceable commitment to terminate operations by January 1, 2010 and that qualifies to use the mercury low mass emissions excepted monitoring methodology under 40 CFR 75.81(b) may choose between the low mass emissions excepted monitoring methodology with retests conducted at least every calendar quarter and a mercury monitoring system to document mercury emissions in the period from January 1, 2009 until the time such unit terminates operation or January 1, 2010, whichever is earlier; however, if such a unit must install a mercury monitoring system to meet a federal requirement, then the mercury monitoring system shall document mercury emissions instead of stack testing.

4. Carbon Monoxide Emission Standards. (Reserved.)

5. Carbon Dioxide Emission Standards.

a. By September 1, 2009, any person who owns, leases, operates or controls an affected facility shall demonstrate that emissions of carbon dioxide from the affected facility in calendar years 2006, 2007, and 2008, expressed in tons, from Part 72 units located at the affected facility did not exceed historical actual emissions. If the Department has received a technically complete plan approval application under 310 CMR 7.02 for a new or repowered electric generating unit subject to 40 CFR Part 72 at an affected facility prior to May 11, 2001, then the emissions from the new or repowered unit may be included in the calculation of historical actual emissions. The calculation of historical actual emissions which includes emissions from a new or repowered unit shall not include emissions from any unit shutdown or removed from operation at the affected facility that is included in the technically complete plan approval application pursuant to 310 CMR 7.02. These emissions standards shall not apply to the emissions of $CO_2$ that occur after December 31, 2008.

b. By September 1, 2009, any person who owns, leases, operates or controls an affected facility shall demonstrate to the Department that the average emission rate of carbon dioxide from Part 72 units located at the affected facility did not exceed an emission rate of 1800 lbs./MWh in calendar year 2008. The average emission rate is calculated by dividing the total number of pounds of $CO_2$ emitted by the affected facility in the calendar year by the net electrical output for the affected facility for the same calendar year. These emissions standards shall not apply to the emissions of $CO_2$ that occur after December 31, 2008.

c. Compliance with 310 CMR 7.29(5)(a)5.a. may be demonstrated by using emission reductions, avoided emissions or sequestered emissions verified under 310 CMR 7.00: *Appendix B*(7) to offset emissions above the historical actual emissions, provided the Department determines such emission reductions, avoided emissions or sequestered emissions are real, additional, verifiable, permanent, and enforceable, as defined in 310 CMR 7.00: *Appendix B*(7) or by using the GHG Expendable Trust under the conditions specified in 310 CMR 7.00: *Appendix B*(7)(d)5.

d. Compliance with 310 CMR 7.29(5)(a)5.b. may be demonstrated by using emission reductions, avoided emissions or sequestered emissions verified under 310 CMR 7.00: *Appendix B*(7) to offset excess emissions, provided the Department determines such emission reductions, avoided emissions or sequestered emissions are real, additional, verifiable, permanent, and enforceable as defined in 310 CMR 7.00: *Appendix B*(7) or by using the GHG Expendable Trust under the conditions specified in 310 CMR 7.00: *Appendix B*(7)(d)5. Excess emissions are any emissions above the net electrical output of the facility times 1800 lbs./MWh.

6. Fine Particulate Matter Emissions Standards. (Reserved.)

(b) Compliance with the emission standards in 310 CMR 7.29(5)(a), may be demonstrated by any combination of the following:

1. Dividing the total emissions of each pollutant by the total net electrical output from all electric generating units subject to 40 CFR Part 72 located at the affected facility as of May 11, 2001 or repowered at the affected facility after May 11, 2001. For demonstrating compliance with the mercury emissions standards in 310 CMR 7.29(5)(a)3., the person who owns, leases, operates or controls an affected facility shall include in the calculation only units that fire solid fossil fuel or ash, or that repowered a unit that fired solid fossil fuel or ash.

7.29: continued

2. For the $SO_2$ emission standards in 310 CMR 7.29(5)(a)2., using $SO_2$ reductions at the affected facility below historical actual emissions which were made after May 11, 2001, and prior to the earliest applicable date set in 310 CMR 7.29(6). The total amount of tons produced through early reductions each year is calculated by multiplying the facility's net electrical output for that year times (the historical actual emission rate minus that year's actual emission rate in lbs./MWh) divided by 2000. The amount of early reductions, with supporting information, shall be provided to the Department prior to use for compliance with 310 CMR 7.29(5)(a)2.a.. Each ton of reduction may be used, once, to offset one ton of excess emissions from the facility. Excess emissions are any emissions above a level equal to the net electrical output of the facility times the applicable emission standard in 310 CMR 7.29(5)(a)2.

3. For the emission standards in 310 CMR 7.29(5)(a)2.b., using $SO_2$ allowances created pursuant to 40 CFR Part 72 (the Federal Acid Rain Program). Three allowances shall be used to offset each ton of excess emissions above the emission standard. Such $SO_2$ allowances shall be in addition to those allowances used by the facility to comply with the requirements of 40 CFR part 72, and shall be transferred to the Department and retired for the benefit of the environment.

(6) Emission Control Plans, Compliance Paths and Compliance Dates.

(a) Emission Control Plan Deadline and General Provisions.

1. Any person who owns, leases, operates or controls an affected facility shall submit an emission control plan for Department approval under 310 CMR 7.29 on or before January 1, 2002 regardless of the compliance path chosen.

2. Any person who owns, leases, operates or controls an affected facility who is required to submit an application for a plan approval under 310 CMR 7.02 shall submit an application for plan approval pursuant to 310 CMR 7.02 on or before January 1, 2003.

3. Any person who owns, leases, operates, or controls an affected facility which installs mercury control equipment that is not already contained in an emission control plan approval under 310 CMR 7.29 shall submit a mercury emissions control plan amendment application under 310 CMR 7.29(6)(h) at least 90 days before intended installation and may not install such equipment until receiving approval of the revision.

4. Any person who owns, leases, operates or controls an affected facility which combusts solid fossil fuel shall by December 4, 2004, propose under 310 CMR 7.29(6)(h)1. to amend the approved emission control plan to incorporate the mercury emission cap established in 310 CMR 7.29(5)(a)3.c. Notwithstanding 310 CMR 7.29(5)(a)3.c., any facility with average annual emissions of less than five pounds, calculated using the results of the stack tests required in 310 CMR 7.29(5)(a)3.d.ii., may propose and be approved to use early or off-site reductions to demonstrate compliance with 310 CMR 7.29(5)(a)3.c. through September 30, 2012. Any early reductions shall be accrued on-site at the stack prior to the compliance date effective under 310 CMR 7.29(5)(a)3.c. Any off-site mercury air emission reductions shall be accrued on at least a one pound reduced for one pound credited basis from facilities located in the same DEP Region as the affected unit. Any other off-site mercury reductions shall be accrued on at least a ten pounds reduced for one pound credited basis from facilities located in the same DEP Region as the affected unit.

(b) Emission Control Plan Contents. The emission control plan submitted pursuant to 310 CMR 7.29(6) shall include, but is not limited to, the following:

1. The name of the company and the affected facility.

2. A list of units at the affected facility that will be used to demonstrate compliance with 310 CMR 7.29(5), including which units will be included in calculating historical actual emissions.

3. The name of the company contact responsible for compliance with 310 CMR 7.29.

4. A statement that the affected facility has a monitoring plan in place which meets the requirements of 40 CFR Part 72. Any modifications to an affected facility's monitoring methodology approved pursuant to the requirements of 40 CFR 72 are hereby incorporated into the approved emission control plan under 310 CMR 7.29.

5. Signature of the company contact responsible for compliance with 310 CMR 7.29.

7.29: continued

6. Identification of the affected facility, including plant name and the ORIS or facility code assigned to the facility by the U.S. Energy Information Administration, if applicable.

7. A description of how the affected facility will comply with the emission standards contained in 310 CMR 7.29(5), by the applicable compliance dates contained in 310 CMR 7.29(6)(c), including, but not limited to, the control equipment the affected facility intends to use.

8. A proposed schedule with interim milestones for each activity leading to compliance with the requirements in 310 CMR 7.29(5). Such information shall include, but not be limited to, sufficient information to allow DEP to consult with the Division of Energy Resources and the Department of Telecommunications and Energy, to address any concerns with potential impacts to the reliability of the New England power system.

9. A description of how emission reduction measures implemented to achieve reductions in one pollutant will optimize reductions in other pollutants.

10. A description of the sampling and testing protocol(s) meeting the requirements of 310 CMR 7.29(5)(a)3.d.

11. Any other information requested by the Department.

(c) Compliance Paths and Compliance Dates.

1. Any person who owns, leases, operates or controls an affected facility who does not choose to comply with the emissions standards in 310 CMR 7.29(5) by repowering a unit subject to 40 CFR Part 72 at the affected facility, or is not required to receive a plan approval pursuant to 310 CMR 7.02 for construction, substantial reconstruction or alteration of a unit at the affected facility subject to 40 CFR Part 72 for the purpose of compliance with 310 CMR 7.29, shall begin to comply with the emission standards in 310 CMR 7.29(5) by the following dates:

a. For the emission standards in 310 CMR 7.29(5)(a)1.a. and (5)(a)2.a., October 1, 2004; and,

b. For the emission standards in 310 CMR 7.29(5)(a)1.b., and (5)(a)2.b., October 1, 2006.

2. Any person who owns, leases, operates or controls an affected facility who chooses to comply with the emissions standards in 310 CMR 7.29(5) by repowering at least one unit at the affected facility subject to 40 CFR Part 72, or is required to receive a plan approval pursuant to 310 CMR 7.02 for construction, substantial reconstruction or alteration of a unit at the affected facility subject to 40 CFR Part 72 for the purpose of compliance with 310 CMR 7.29, and submits, on or before January 1, 2003, an administratively complete application pursuant to 310 CMR 7.02, shall begin to comply with the emission standards in 310 CMR 7.29(5) by the following dates:

a. For the emissions standards contained in 310 CMR 7.29(5)(a)1.a. and (5)(a)2.a., October 1, 2006, and

b. For the emissions standards contained in 310 CMR 7.29(5)(a)1.b. and (5)(a)2.b, October 1, 2008.

3. If an affected facility has units with different applicable compliance dates for a particular standard, the later compliance date applies to all units at the affected facility.

(d) Interaction with 310 CMR 7.02. A plan approval under 310 CMR 7.02(1) may be required for construction, substantial reconstruction or alteration of a unit at an affected facility to comply with 310 CMR 7.29. If such construction, substantial reconstruction or alteration to the facility triggers any applicable section under 310 CMR 7.02(4)(a) and 310 CMR 7.02(5)(a), a plan approval under 310 CMR 7.02 is required**.** If a plan approval is required under 310 CMR 7.02, then upon the Department's issuance of the plan approval, the Department will modify the affected facility's emission control plan pursuant to 310 CMR 7.29(6)(g).

(e) Public Comment. If the Department proposes to approve an emission control plan or approve a plan with conditions, the Department shall issue a draft emission control plan approval. Upon issuance, the Department will publish a notice of public hearing and comment on the draft emission control plan approval, in accordance with M.G.L. c. 30A, at least 30 days before the public hearing.

7.29: continued

(f) Approval of the Emission Control Plan.

1. After the close of the public comment period, and consideration of any public comments, the Department shall issue a disapproval of the emission control plan, a final approval of the emission control plan, or a final approval of the emission control plan with conditions, based on whether the emission control plan as submitted meets the requirements of 310 CMR 7.29.

2. Upon final approval of an emission control plan, any person who owns, leases operates or controls an affected facility shall implement and comply with the approved emission control plan.

(g) Modification to an Affected Facility's Operating Permit. For any person who owns, leases, operates or controls an affected facility, the facility's operating permit will be modified upon approval of the emission control plan in accordance with the procedures in 310 CMR 7.00: *Appendix C(8)*. No additional application or fee is necessary to modify the operating permit at the same time the emission control plan is approved.

(h) Modifications to an Affected Facility's Emission Control Plan.

1. Any person subject to 310 CMR 7.29 may propose amendments to the approved emission control plan. If the Department proposes to approve such amendments, or approve such amendments with conditions, then the Department will publish a notice of public comment on the draft approval, in accordance with M.G.L. c. 30A. The Department will allow a 30 day public comment period following publication of the notice, and may hold a public hearing. Modifications to an affected facility's monitoring system approved pursuant to the requirements of 40 CFR Part 72 are not subject to such public comment prior to approval.

2. For the purposes of evaluating system performance, testing new technology or control technologies, diagnostic testing, or other related activities that are anticipated to reduce air pollution or advance the state-of-the-art technology for controlling facility mercury emissions, the Department may issue an ECP approval in the form of a limited amendment to the ECP for a limited period of time for the purpose of achieving compliance with the requirements of 310 CMR 7.29(5)(a)3.e. and f. The Department approval will detail the duration of the time period and how the facility shall report under 310 CMR 7.29(7)(b) for the duration of the time period. The Department will publish a notice of public comment on the draft approval. The Department will allow a ten day public comment period following publication of the notice, and may hold a public hearing.

(7) Reporting, Compliance Certification, and Recordkeeping.

(a) By January 30 of the year following the earliest applicable compliance date for the affected facility under 310 CMR 7.29(6)(c), and January 30 of each calendar year thereafter, the company representative responsible for compliance at each affected facility shall submit a report to the Department demonstrating compliance with the emission standards contained in 310 CMR 7.29(5)(a) and in an approved emission control plan. The report shall demonstrate compliance with any applicable monthly emission rate for each month of the previous calendar year, and with any applicable 12-month emission rate for each of the 12 previous consecutive 12-month periods. For the mercury standards at 310 CMR 7.29(5)(a)3.c., the compliance reports due January 30, 2007 and 2008 shall include the quarterly emissions for each quarter beginning October 1, 2006. For the mercury standards at 310 CMR 7.29(5)(a)3.c., e., and f., the compliance report due January 30, 2009 and each report thereafter shall demonstrate compliance with any applicable annual standard for the previous calendar year and with any applicable 12-month standard for each of the 12 previous consecutive 12-month periods.

(b) The compliance report shall contain the following:

1. Actual emissions for each pollutant, expressed in tons for $SO_2$, $CO_2$, and $NO_x$, for each of the preceding 12 months and expressed in thousandths of ounces for mercury, for each of the preceding four calendar quarters beginning October 1, 2006 and preceding 12 months beginning January 1, 2008. Actual emissions shall be provided for individual units and as a facility total for all units included in the calculation demonstrating compliance. Actual emissions provided under 310 CMR 7.29 shall be reported in accordance with:

a. 40 CFR Part 75 for $SO_2$, $CO_2$, and $NO_x$, and, no later than January 1, 2009, for mercury,

7.29: continued

b. for the standards at 310 CMR 7.29(5)(a)3.c.i. based on stack tests, by calculating the thousands of ounces of mercury from:

i. the average measured pounds of mercury emitted per million Btu consumed for the calendar year multiplied by

ii. the heat input determined under 40 CFR Part 75 for the calendar year. Affected facilities may choose to subtract the heat input attributable to combustion of fuels other than solid-fossil fuel and ash if such heat input is determined using the procedures of 40 CFR Part 75 Appendix D.

c. for the standards at 310 CMR 7.29(5)(a)3.c.ii., by assuming all of the mercury in the utilized ash is emitted, unless a lesser amount of mercury has been approved under 310 CMR 7.29(5)(a)3.c.ii.(iv).

d. Any particulate-bound mercury accounted for under the provisions of 310 CMR 7.29(5)(a)3.g.ii. shall be calculated from:

i. the most recent average measured pounds of particulate mercury emitted per million Btu consumed multiplied by

ii. the heat input determined under 40 CFR Part 75 for each calendar month. Affected facilities may choose to subtract the heat input attributable to combustion of fuels other than solid-fossil fuel and ash if such heat input is determined using the procedures of 40 CFR Part 75 Appendix D.

2. Actual net electrical output for each of the preceding 12 months, expressed in megawatt-hours. Actual net electrical output shall be provided for individual units and as a facility total for all units included in the calculation demonstrating compliance.

3. The resulting output-based emission rates for each of the preceding 12 months, and each of the 12 consecutive rolling month time periods, expressed in pounds per megawatt-hour for $SO_2$, $CO_2$, and $NO_x$ and pounds per gigawatt-hour for mercury. Output-based emission rates shall be provided for individual units and as a facility total for all units included in the calculation demonstrating compliance.

4. A compliance certification report, which shall contain the following elements:

a. A statement certifying that the monitoring data reflects operations at the affected facility.

b. A statement that all $SO_2$, $CO_2$, and $NO_x$ emissions, and, beginning January 1, 2009, all mercury emissions, from the affected facility were accounted for, either through the applicable monitoring or through application of the appropriate missing data procedures and reported in the quarterly reports. If provisionally certified data were reported, the company representative responsible for compliance with 310 CMR 7.29 shall indicate whether the status of all provisionally certified data was resolved and all necessary quarterly reports were submitted.

c. A statement certifying that the MWhs of net electrical output used in compliance calculations reflect the total actual electrical output of the facility used by the New England Independent System Operator to determine settlement resources of energy market participants.

d. A statement notifying the Department of any changes in the method of operation at the affected facility or the method of monitoring the units at the affected facility during the previous year. If a change is reported, then specify the nature of the change, the reason for the change, when the change occurred, and how the facility's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor re-certification.

e. A certification statement stating (verbatim): "I am authorized to make this submission on behalf of the owners, lessees, operators and controllers of the affected facilities for which the submission is made. I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines or imprisonment."

(c) The Department may verify compliance by whatever means necessary, including but not limited to:

1. Inspection of a unit's operating records;

7.29: continued

2. Requiring the person who owns, leases, operates or controls an affected facility to submit information on actual electrical output of company generating units provided to that person by the New England Independent System Operator;

3. Testing emission monitoring devices; and,

4. Requiring the person who owns, leases, operates or controls an affected facility to conduct emissions testing under the supervision of the Department.

(d) Any person who owns, leases, operates or controls an affected facility shall keep all measurements, data, reports and other information required by 310 CMR 7.29 for five years, or any other period consistent with the affected facility's operating permit.

(e) For units that apply carbon or other sorbent injection for mercury control, the following records shall be kept until such time as a mercury monitoring system is installed at that unit:

1. The average carbon or other sorbent mass feed rate (in lbs/hr) estimated during the initial mercury optimization test and all subsequent mercury emissions tests, with supporting calculations.

2. The average carbon or other sorbent mass feed rate (in lbs/hr) estimated for each hour of operation, with supporting calculations.

3. The total carbon or other sorbent usage for each calendar quarter, with supporting calculations.

4. The carbon or other sorbent injection system operating parameter data for the parameter(s) that are the primary indicator(s) of carbon or other sorbent feed rate.

5. Identification of the calendar dates when the average carbon or other sorbent mass feed rate recorded under 310 CMR 7.29(7)(e)2. was less than the hourly carbon feed rate estimated during and recorded under 310 CMR 7.29(7)(e)1., with reasons for such feed rates and a description of corrective actions taken.

6. Identification of the calendar dates when the carbon injection or other sorbent system operating parameter(s) that are the primary indicator(s) of carbon or other sorbent mass feed rate recorded under 310 CMR 7.29(7)(e)4. are below the level(s) estimated during the optimization tests for mercury with reasons for such occurrences and a description of corrective actions taken.

(f) For units that apply technology other than carbon or other sorbent for mercury control, the operating parameter records to be kept until such time as a mercury monitoring system is installed at that unit shall be proposed to the Department in the emission control plan application required under 310 CMR 7.29(6)(a)3.

(g) For mercury monitoring, recordkeeping and reporting, any person who owns, leases, operates or controls an EGU (as defined in 40 CFR 60.24(h)(8)) at an affected facility shall comply with all mercury monitoring, recordkeeping and reporting requirements in 40 CFR Part 75 and "Monitoring and Reporting" in 40 CFR Part 60 Subpart HHHH and any additional mercury monitoring, recordkeeping and reporting requirements the Department deems necessary and specifies in the facility's ECP or mercury monitoring plan approval. In implementing the provisions of 40 CFR Part 75 and 40 CFR Part 60 Subpart HHHH concerning monitoring of mercury mass emissions, the terms used therein shall have the meanings defined in 40 CFR Part 72 and Part 60 respectively; provided, however, that the term Permitting Authority shall mean the Department, the term Hg Budget Trading Program shall mean 310 CMR 7.02 and 7.29, and the term Hg Budget Unit shall mean an EGU (as defined in 40 CFR 60.24(h)(8)).

(h) For selection of a Hg Designative Representative, any person who owns, leases, operates or controls an EGU (as defined in 40 CFR 60.24(h)(8)) at an affected facility must select a Hg Designated Representative for each affected facility, and may select an Alternate Hg Designated Representative, pursuant to the requirements of "Hg Designated Representative For Hg Budget Sources" in 40 CFR Part 60 Subpart HHHH. In implementing the provisions of 40 CFR Part 60 Subpart HHHH, the terms used in that subpart shall have the meanings defined in 40 CFR Part 60; provided, however, that the term Permitting Authority shall mean the Department, the term Hg Budget Trading Program shall mean 310 CMR 7.02 and 7.29, and the term Hg Budget Unit shall mean an EGU (as defined in 40 CFR 60.24(h)(8)).

(i) Any person subject to 310 CMR 7.29(5)(a)3. shall submit the results of all mercury emissions, monitor, and optimization test reports, along with supporting calculations, to the Department within 45 days after completion of such testing.

## 7.30: MB Massport/Logan Airport Parking Freeze

(1) Applicability.

(a) 310 CMR 7.30 in its entirety is applicable to the Massachusetts Port Authority, the body politic and corporate, created by and existing pursuant to St. 1956, c. 465, hereafter referred to as Massport, which is the owner/operator of the Logan International Airport in Boston, Massachusetts, hereafter referred to as Logan Airport.

(b) 310 CMR 7.30 in its entirety applies to the parking of motor vehicles on property owned or leased by Massport at Logan Airport, as well as sections of Neptune Road and the Massachusetts Bay Transportation (MBTA) Wood Island Station, geographically described as follows and hereafter referred to as the Logan Airport Parking Freeze Area. This geographic area, as shown on a map approved and held by the Department, shall be bounded as follows:

Beginning at the intersection of the high water line of the Boston Inner Harbor and the Logan Airport boundary, in the vicinity of the intersection of Jeffries Street and Marginal Street;
then following along the westerly boundary of the Airport, which in this area generally northwesterly along Maverick Street, northeasterly along Geneva Street, and southeasterly, northeasterly, northwesterly around Memorial Stadium, as far as the Massachusetts Bay Transportation Authority (MBTA) Blue Line right-of-way, just north of the Airport Station;
then northeasterly along the Blue Line right-of-way to the southerly edge of property known as the Robie Industrial Park;
then easterly, northerly and westerly along the boundary of said Park and extending along an imaginary straight line to MBTA Blue Line right-of-way;
then northeasterly along the Blue Line right-of-way to the intersection of the Blue Line right-of-way and the Airport boundary, in the vicinity of the southerly end of Moore Street;
then northeasterly along the boundary of the Airport and then northeasterly, southeasterly, southwesterly and northeasterly along the Airport boundary to the point of beginning (the "Logan Airport Parking Freeze Area").

In the event that the property described herein as Robie Industrial Park shall be owned or leased by Massport at some point in the future, then at the time of such purchase or lease, the Robie Park parcel shall become part of the Logan Parking Freeze Area.

(c) In the event any property within the boundaries of the Logan Airport Parking Freeze Area is conveyed in fee by Massport, such property shall be removed from the Logan Parking Freeze Area and become part of the East Boston Parking Freeze area at the time of such conveyance.

(2) Terms of the Parking Freeze.

(a) Commercial and employee parking spaces within the Logan Airport Parking Freeze Area shall be limited to 19,315 parking spaces, except as otherwise provided by 310 CMR 7.30(5), of which there shall be:

1. No more than 5,225 employee parking spaces, as defined by 310 CMR 7.00; and
2. No fewer than 14,090 commercial parking spaces, as defined by 310 CMR 7.00; provided that:
   a. The total never exceeds 19,315 parking spaces, except as otherwise provided by 310 CMR 7.30(5); and
   b. Employee parking spaces are permanently converted into commercial parking spaces utilizing the process set forward by 310 CMR 7.30(4).
3. The parking spaces within the Logan Airport Parking Freeze area may increase above 19,315 spaces in accordance with 310 CMR 7.30(5), providing that the inventory of commercial and employee parking spaces subject to the Logan Airport Parking Freeze does not exceed 21,790 parking spaces.

(3) Parking Space Inventory.

(a) One month from the date 310 CMR 7.30 is first published in the *Massachusetts Register* (11/24/89), Massport shall submit to the Department a description of all commercial, employee, and rental motor vehicle parking spaces, available in the Logan Airport Parking Freeze Area and all restricted use parking spaces regardless of location, as of the effective date of 310 CMR 7.30. This document shall include a map of sufficient detail to identify the type and quantity of parking spaces available by location.

7.30: continued

(b) If the total inventory of on-airport commercial and employee parking spaces exceeds 19,315 and/or the number of on-airport employee parking spaces exceeds 7,100, then Massport shall identify the number of spaces by type and location that are immediately eliminated and the means by which this has been accomplished in order to ensure that the base number of on-airport parking spaces is equivalent to the numbers specified in 310 CMR 7.30(2).

(c) If the total inventory of on-airport commercial and employee parking spaces is less than 19,315, Massport shall be certified by the Department as having a total of 19,315 parking spaces, upon receipt of the inventory and provided that the inventory submittal includes an identification of the potential location and quantity of parking spaces that represent the difference between the existing parking spaces and the maximum 19,315 parking spaces specified in 310 CMR 7.30(2).

(d) The document described in 310 CMR 7.30(3)(a) shall be updated and submitted to the Department at six month intervals, beginning on March 1, 1990.

(4) Employee Parking Reduction.

(a) Massport shall develop and submit to the Department a plan to reduce permanently the number of on-airport employee parking spaces either through relocating said parking spaces to locations outside of the Logan Airport Parking Freeze Area which maximize regional and local air quality benefits, or through providing incentives to employees to use alternative means of transportation to access Logan Airport property. Said plan shall target the elimination of 2,000 employee parking spaces within three years of the effective date of 310 CMR 7.30 and the elimination of additional employee parking spaces in future years.

(b) No earlier than four months from the date 310 CMR 7.30 is first published in the *Massachusetts Register* (11/24/89), Massport shall begin implementation of the plan described by 310 CMR 7.30(4)(a). Massport may convert to commercial parking an equal number of parking spaces as have been permanently eliminated from the employee parking space inventory and shall annually submit documentation which supports this conversion, in accordance with the reporting requirements at 310 CMR 7.30(8).

(c) Employee parking relocated from the Logan Airport Parking Freeze Area shall not be located in another area subject to a parking freeze.

(5) Park and Fly Parking. Notwithstanding any provisions herein to the contrary or any subsequent disposition of the property by Massport, in the event that Massport, or its nominee, acquires in fee [or leases for a term in excess of five years,] property within the East Boston Parking Freeze on which Park and Fly Parking Spaces included in the East Boston Parking Freeze Area inventory, certified by the Department under 310 CMR 7.31(3), are located, such spaces, upon notification by Massport to the Department and the BAPCC will be automatically and permanently converted to Commercial Parking Spaces within the Logan Airport Parking Freeze Area. The Logan Airport Parking Freeze Area Commercial Parking Space inventory pursuant to 310 CMR 7.30(2)(a) will be permanently increased, and the East Boston Parking Freeze Park and Fly Parking Space inventory pursuant to 310 CMR 7.31(3) will be permanently decreased by the number of such converted spaces. All such converted spaces may be relocated and used as commercial parking spaces within the Logan Parking Freeze Area.

NON-TEXT PAGE

7.30: continued

(6) Rental Motor Vehicle Parking.

(a) Massport shall work with BAPCC to develop and implement a plan to relocate rental motor vehicle parking spaces identified in the East Boston Parking Freeze Area, described by 310 CMR 7.31(1), to the Logan Airport Freeze Area. Relocation of the rental motor vehicle parking spaces shall be in accordance with the plan described in 310 CMR 7.31(4).

(b) Once parking space relocations have been scheduled for implementation, Massport shall submit an application to BAPCC, in accordance with procedures referenced at 310 CMR 7.31(5) to reduce permanently the East Boston Parking Freeze Area inventory by the number of parking spaces scheduled to be relocated to the Logan Airport Parking Freeze Area.

(7) Restricted Use Parking.

(a) The category of restricted use parking spaces is created with the understanding that Massport experiences, at several times during the year, extreme peaks of air travel and corresponding demand for parking spaces. Restricted use parking spaces may be made available for use only at such times, on the conditions in 310 CMR 7.30.

(b) Massport shall limit the use of restricted use parking spaces, defined at 310 CMR 7.00 to ten days in any calendar year. If this limitation is projected to be exceeded and/or in fact is exceeded in any given calendar year, then the requirements and procedures described 310 CMR 7.30(7)(e) and (f) shall apply.

(c) Restricted use parking spaces may be located within the Logan Airport Parking Freeze Area, but shall not be located in the East Boston Parking Freeze Area or any other geographic area subject to a parking freeze.

(d) The category of restricted use parking spaces shall be subject to the following monitoring and reporting provisions:

1. On December 31 of each calendar year Massport shall submit to the Department a letter containing an estimate of the number of days and the dates on which Massport anticipates the need over the following calendar year to invoke the use of restricted use parking spaces, including the estimated number and location of said spaces.

2. Massport shall monitor and track the use of these spaces continuously throughout the year and on March 1 of the following year shall submit a report to the Department describing the actual dates, locations and numbers of restricted use parking spaces used in the preceding calendar year.

(e) Should the actual number of days when restricted use parking is invoked by Massport exceed six by July 1 of any year, Massport shall submit to the Department, on or before August 1, a report outlining strategies Massport commits to undertake during the remainder of the calendar year so as not to have to invoke the use of the restricted use parking spaces more than four additional days that calendar year.

(f) Should Massport invoke the use of restricted use parking spaces for more than ten days during the calendar year, Massport shall submit to the Department, on or before March 1 of the following year, a report containing:

1. An explanation of why the ten day limit on use of restricted use parking spaces was exceeded.

2. A determination of whether this exceedence was temporary or may be expected to continue into future years and technical support for this determination.

3. A projection of future need to use restricted use parking spaces in terms of number of days and number of spaces, and an analysis of the air quality impacts of the projected use of the restricted use parking spaces.

4. A plan and schedule for initiating actions which will eliminate the projected need identified in 310 CMR 7.30(3).

5. A commitment from Massport to implement the actions identified in 310 CMR 7.30(7)(f)4.

7.30: continued

(8) Transportation Management Studies and Programs.

(a) To discourage the use of private passenger motor vehicles to access Logan Airport:

1. The Boston MPO, in conjunction with other appropriate local and state agencies, shall conduct a study of private passenger motor vehicle travel patterns of, at a minimum, employees, travellers, and visitors to and from Logan Airport in the corridor north of the East Boston Parking Freeze Area, as defined in 310 CMR 7.31(1). Based on the results of this study, the Boston MPO shall develop a corridor traffic management plan, which shall include to the extent appropriate, a parking freeze component. The Boston MPO shall submit a copy of the study by November 24, 1990, along with a written determination and schedule of its intent to adopt the study recommendation(s) as part of the Boston Region Transportation Element of the State Implementation Plan.

2. Massport shall conduct a study of costs and pricing for different modes of transportation to and from Logan Airport to identify a pricing structure and the use of revenues so generated to promote the use of high occupancy modes of transportation by Airport air travellers and visitors. This study shall be completed by November 24, 1990. Upon completion, Massport shall submit the study to the Boston MPO, with a copy to the Department, along with a determination regarding the need to revise 310 CMR 7.30 in light of the results and, if such a revision is appropriate, a schedule to effectuate that change.

(b) Massport shall commit to making all reasonable efforts to identify, analyze, implement and communicate to the public transportation management programs including but not limited to:

1. Maintain and improve current transportation management programs of: remote parking/Express Bus service from the West and the South Shore; infrastructure and leasing arrangements for the water shuttle service to and from Logan Airport; the one way toll program; and the commercial vehicle lane at Logan Airport.

2. Identify additional suitable site(s) and implementation of additional remote parking/express bus service(s).

3. Identify and study the feasibility and impact on transportation and air quality parameters of additional transportation management programs and ground access improvement projects.

(c) Massport shall report annually the status of studies, findings and commitments to implement in accordance with 310 CMR 7.30(9).

(9) Recordkeeping and Reporting. On or before March 1 of each year Massport shall submit a report detailing the progress and status of each provision of 310 CMR 7.30, in its entirety, during the preceding calendar year. Copies of said report shall be submitted to the Department, EPA, the Chairman of the Boston MPO, and the BAPCC.

(10) Enforcement. The Commissioner will enforce 310 CMR 7.30 under applicable law.

## 7.31: MB City of Boston/East Boston Parking Freeze

(1) Applicability

(a) 310 CMR 7.31 in its entirety is applicable to the City of Boston through the authority of the Boston Air Pollution Control Commission; the entity within the City of Boston Department of the Environment which through regulations and procedures adopted under authority vested in said Commission by M.G.L., c. 111, § 31C, and hereafter referred to as BAPCC, is responsible for administering local air pollution control programs including parking freezes within the geographic and political boundaries of the City of Boston.

7.31: continued

(b) 310 CMR 7.31 in its entirety applies to the parking of motor vehicles in the area of East Boston, geographically described as follows and hereafter referred to as the East Boston Parking Freeze Area. This geographic area, as shown on a map approved and held by the Department, shall be bounded as follows:

Beginning at the point where Waldemar Avenue meets Walley Street and continuing in a westerly direction along Waldemar Avenue to the William McClellan Highway and continuing in a northwesterly direction in a straight line to the Chelsea River;
then southwesterly along the high water line of the River to the Boston Inner Harbor;
then continuing generally southeasterly along the high water line of the Harbor to the Logan Airport boundary;
then following along the westerly boundary of the Airport, (which in this area runs generally northwesterly along Maverick Street, northeasterly along Geneva Street, and southeasterly, northeasterly, northwesterly around Memorial Stadium) to the Massachusetts Bay Transportation Authority (MBTA) Blue Line right-of-way, just north of the Blue Line Airport Station;
then northeasterly along the Blue Line right-of-way to the southerly edge of property known as the Robie Industrial Park;
then easterly, northerly and westerly along the boundary of said Park and extending along an imaginary straight line to the MBTA Blue Line right-of-way;
then northeasterly along the Blue Line right-of-way to the intersection between the Blue Line right-of-way and the Airport boundary, in the vicinity of the southerly end of Moore Street;
then southeasterly along the airport boundary to the high water mark of the harbor;
then northeasterly along the high water mark of the Harbor to the Belle Isle Inlet;
then generally northerly along the Belle Isle Inlet to Bennington Street in East Boston;
then southwesterly along Bennington Street to the intersection with Leverett Avenue;
then northwesterly along an imaginary straight line to the point of beginning (the "East Boston Parking Freeze Area").

In the event that property described herein as Robie Industrial Park shall be owned or leased by Massport at some point in the future, then at the time of such purchase or lease, the Robie Park parcel shall become part of the Logan Parking Freeze Area.

(c) In the event that any property located within the boundaries of Logan Airport Parking Freeze Area is conveyed in fee by Massport, such property will become part of the East Boston Parking Freeze Area at the time of such conveyance.

(2) Definition of the Parking Freeze.

(a) There is hereby established a freeze on the availability of Park and Fly parking spaces within the East Boston Parking Freeze Area. No owner, operator or lessee of Park and Fly parking spaces within the East Boston Parking Freeze Area shall allow for the parking of motor vehicles in excess of the number of Park and Fly parking spaces available for use and/or permitted as of the effective date of 310 CMR 7.00.

(b) There is hereby established a freeze on the availability of Rental Motor Vehicle parking spaces. No owner, operator or lessee of Rental Motor Vehicle parking spaces within the East Boston Parking Freeze Area shall allow for the parking of Rental Motor Vehicles in excess of the number of Rental Motor Vehicle parking spaces actively in use as of the date 310 CMR 7.31 is first published in the *Massachusetts Register* (11/24/89).

(c) Parking spaces of types and categories not specifically cited in 310 CMR 7.31(2) are excluded from the provisions of the East Boston Parking Freeze.

7.31: continued

(3) Parking Space Inventory.

(a) On or before June 30, 1990, the BAPCC shall submit to the Department an inventory of all Park and Fly and Rental Motor Vehicle parking spaces. Said document shall include a map and supporting descriptive material of sufficient detail to identify the type, location, and quantity of Park and Fly and Rental Motor Vehicle parking spaces located in the East Boston Parking Freeze Area.

(b) Within 60 days of receipt of said inventory, the Department, after review and consultation with interested parties, including but not limited to the BAPCC, Chairman of the Boston MPO, Massport and EPA, shall issue a finding of adequacy or inadequacy depending upon the results of the review. If found adequate, the number of spaces by category shall be the Department-certified parking freeze for the East Boston Parking Freeze Area. If found inadequate, the BAPCC, in consultation with the Department and other interested parties, shall have an additional 60 days to resolve the inadequacies, so that the Department may certify a freeze number for the area. If no agreement is reached, the Department shall, at the end of these additional 60 days, issue a number, based on information submitted to-date; said number shall be the Department-certified parking freeze for the East Boston Parking Freeze Area.

(c) The number of Park and Fly parking spaces certified by the Department in 310 CMR 7.31(3)(b) shall be the maximum number under 310 CMR 7.30(5) by which the Logan Airport Parking Freeze Area inventory of commercial parking spaces established by 310 CMR 7.30(2)(b), may be increased.

(d) Upon the conversion of any park and fly parking spaces under 310 CMR 7.30(5) from the East Boston Freeze Area to commercial parking spaces within the Logan Airport Parking Freeze Area, the number of park and fly parking spaces certified by the Department in 310 CMR 7.31(3)(b) shall be permanently reduced by the number of parking spaces relocated to the Logan Airport Parking Freeze Area.

(e) Upon the relocation of any rental motor vehicle parking spaces under 310 CMR 7.30(6) from the East Boston Freeze Area to the Logan Airport Parking Freeze Area, the number of rental motor vehicle parking spaces certified by the Department in 310 CMR 7.31(3)(b) shall be permanently reduced by the number of parking spaces relocated to the Logan Airport Parking Freeze Area.

(4) Parking Freeze Plan.

(a) On or before June 30, 1990, BAPCC shall develop and submit to the Department, with copies to the Chairman of the Boston MPO, Massport and EPA, an East Boston Parking Freeze plan, developed in coordination and consultation with the Boston Zoning Commission, the Boston Department of Transportation, Corporation Counsel, the Department, Massport, and the Chairman of the Boston MPO and other city and state authorities as may be appropriate. Said plan shall contain the following:

1. Authority and responsibilities of City entities supporting the implementation of each of the components of the East Boston Parking Freeze.
2. The identification of new local ordinances, rules, regulations and policies, or modifications to existing local ordinances, rules, regulations and policies, where needed, to enable the City to implement each of the components of the East Boston Parking Freeze.
3. A schedule for adopting each of these additions and/or changes identified in 310 CMR 7.31(4)(a)2.
4. An implementation plan describing the actions to be taken by the City of Boston, Massport, and any other applicable party to enable the relocation of Park and Fly parking spaces from the East Boston Parking Freeze Area to the Logan Airport Parking Freeze Area, described in 310 CMR 7.30(1).

(5) City of Boston "Procedures and Criteria for Issuance of Parking Freeze Permits".

(a) On or before December 31, 1990, BAPCC shall amend the existing "Procedures and Criteria for Issuance of Parking Freeze Permits" required by 40 CFR 52.1135(f), and submit these amendments to the Department for review and approval. Amendments shall incorporate the following additions and modifications:

1. The East Boston Freeze Area and the Department-certified parking freeze number.

7.31: continued

2. Modify procedures, as necessary, so as to delineate the administration and management of the East Boston Parking Freeze. Said modifications shall include provisions requiring approval by the BAPCC for any change in the location of the available parking spaces within the East Boston Parking Freeze Area.

(6) Recordkeeping and Reporting.

(a) On or before March 1 of each year BAPCC shall submit a report detailing the progress and status of each provision of 310 CMR 7.31, in its entirety, during the preceding calendar year. Copies of said report shall be submitted to the Department, EPA, Chairman of the Boston MPO, and Massport.

(b) Copies of local ordinances adopted or modified in support of the East Boston Parking Freeze shall be submitted to the Department as they become effective.

(7) Enforcement. The Commissioner will enforce 310 CMR 7.31 under applicable law.

7.32: Massachusetts Clean Air Interstate Rule (Mass CAIR)

(1) CAIR NOx Ozone Season Trading Program General Provisions.

(a) Purpose and Scope.

1. The purpose of 310 CMR 7.32 is to control emissions of nitrogen oxides (NOx) during the summertime control period (May 1st through September 30th of each year) by implementing the CAIR NOx Ozone Season Trading Program beginning May 1, 2009.

2. The Department will allocate NOx Ozone Season allowances for each control period as described in 310 CMR 7.32(5).

3. CAIR NOx Ozone Season allowances from other states may be used by CAIR NOx Ozone Season sources to comply with 310 CMR 7.32.

4. CAIR NOx Ozone Season allowances allocated by the Department may be used by CAIR NOx Ozone Season sources to comply with CAIR NOx Ozone Season Trading Programs of other states, provided the other state has a CAIR NOx Ozone Season Trading Program approved by EPA.

5. The Department authorizes the Administrator to assist the Department in implementing the CAIR NOx Ozone Season Trading Program by carrying out the functions set forth for the Administrator in 310 CMR 7.32.

(b) Definitions. The definitions in 310 CMR 7.00 apply to 310 CMR 7.32. However, the following terms have the following meanings when they appear in 310 CMR 7.32. If a term is defined both in 310 CMR 7.00 and in 310 CMR 7.32(1)(b), the definition in 310 CMR 7.32(1)(b) applies for purposes of 310 CMR 7.32.

Account Number means the identification number given by the Administrator to each CAIR NOx Ozone Season Allowance Tracking System account.

Acid Rain Emissions Limitation means a limitation on emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program.

Acid Rain Program means a multi-state sulfur dioxide and nitrogen oxides air pollution control and emission reduction program established by the Administrator under title IV of the CAA and 40 CFR Parts 72 through 78.

Actual Energy Efficiency means the percentage of gross energy input that is recovered as useful net energy output in the form of electrical or thermal energy and that is used for heating, cooling, industrial processes, or other beneficial uses.

Addition means an increase in the area, aggregate floor area, height or number of stories of a building.

Administrator means the Administrator of the United States Environmental Protection Agency or the Administrator's duly authorized representative.

7.32: continued

Allocate or Allocation means, with regard to CAIR NOx Ozone Season allowances, the determination by a permitting authority or the Administrator of the amount of such CAIR NOx Ozone Season allowances to be initially credited to a CAIR NOx Ozone Season unit, a New Unit Set-aside, a Public Benefit Set-aside, or other entity.

Allowance Transfer Deadline means, for a control period, midnight of November 30$^{th}$ (if it is a business day), or midnight of the first business day thereafter (if November 30$^{th}$ is not a business day), immediately following the control period and is the deadline by which a CAIR NOx Ozone Season allowance transfer must be submitted for recordation in a CAIR NOx Ozone Season source's compliance account in order to be used to meet the source's CAIR NOx Ozone Season emissions limitation for such control period in accordance with 310 CMR 7.32(6)(e).

Alternate CAIR Designated Representative means, for a CAIR NOx Ozone Season source and each CAIR NOx Ozone Season unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with 310 CMR 7.32(2), to act on behalf of the CAIR designated representative in matters pertaining to the CAIR NOx Ozone Season Trading Program. If the CAIR NOx Ozone Season source is also a CAIR NOx source, then this natural person shall be the same person as the alternate CAIR designated representative under the CAIR NOx Annual Trading Program. If the CAIR NOx Ozone Season source is also a CAIR SO2 source, then this natural person shall be the same person as the alternate CAIR designated representative under the CAIR SO2 Trading Program. If the CAIR NOx Ozone Season source is also subject to the Acid Rain Program, then this natural person shall be the same person as the alternate designated representative under the Acid Rain Program. If the CAIR NOx Ozone Season source is also subject to the Hg Budget Trading Program, then this natural person shall be the same person as the alternate Hg designated representative under the Hg Budget Trading Program.

Automated Data Acquisition and Handling System or DAHS means that component of the continuous emission monitoring system, or other emissions monitoring system approved for use under 310 CMR 7.32(8), designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by 310 CMR 7.32(8).

Bank means to retain CAIR NOx Ozone Season allowances from one control period pursuant to 310 CMR 7.32(6)(f) for use in a future control period.

Boiler means an enclosed fossil- or other-fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

Bottoming-cycle Cogeneration Unit means a cogeneration unit in which the energy input to the unit is first used to produce useful thermal energy and at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

Building means a structure enclosed within exterior walls or firewalls, built, erected and framed of a combination of any materials, whether portable or fixed having a roof, to form a structure for the shelter of person, animal or property, and that is subject to the provisions of 780 CMR 1301.0 *et seq*. For the purpose of 310 CMR 7.32(1)(b): Building, "roof" shall include an awning or similar covering, whether or not permanent in nature. Each portion of a building that is completely separated from other portions by firewalls shall be considered as a separate building.

CAIR Authorized Account Representative means, with regard to a general account, a responsible natural person who is authorized, in accordance with 310 CMR 7.32(2), and (6), to transfer and otherwise dispose of CAIR NOx Ozone Season allowances held in the general account and, with regard to a compliance account, the CAIR designated representative of the source.

7.32: continued

CAIR Designated Representative means, for a CAIR NOx Ozone Season source and each CAIR NOx Ozone Season unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with 310 CMR 7.32(2) to represent and legally bind each owner and operator in matters pertaining to the CAIR NOx Ozone Season Trading Program. If the CAIR NOx Ozone Season source is also a CAIR NOx source, then this natural person shall be the same person as the CAIR designated representative under the CAIR NOx Annual Trading Program. If the CAIR NOx Ozone Season source is also a CAIR SO2 source, then this natural person shall be the same person as the CAIR designated representative under the CAIR SO2 Trading Program. If the CAIR NOx Ozone Season source is also subject to the Acid Rain Program, then this natural person shall be the same person as the designated representative under the Acid Rain Program. If the CAIR NOx Ozone Season source is also subject to the Hg Budget Trading Program, then this natural person shall be the same person as the Hg designated representative under the Hg Budget Trading Program.

CAIR NOx Annual Trading Program means a multi-state nitrogen oxides air pollution control and emission reduction program approved and administered by the Administrator in accordance with 40 CFR Part 96 subparts AA through II and 40 CFR 51.123(o)(1) or (2) or established by the Administrator in accordance with subparts AA through II of 40 CFR Part 97 and 40 CFR 51.123(p) and 52.35, as a means of mitigating interstate transport of fine particulates and nitrogen oxides.

CAIR NOx Ozone Season Allowance means a limited authorization issued by a permitting authority or the Administrator under provisions of a State implementation plan that is approved under 40 CFR 51.123(aa)(1) or (2) (and (bb)(1)), (bb)(2), (dd), or (ee), or under subpart EEEE of 40 CFR Part 97 or 97.388, to emit one ton of nitrogen oxides during a control period of the specified calendar year for which the authorization is allocated or of any calendar year thereafter under the CAIR NOx Ozone Season Trading Program or a limited authorization issued by a permitting authority for a control period during 2003 through 2008 under the NOx Budget Trading Program in accordance with 40 CFR 51.121(p) to emit one ton of nitrogen oxides during a control period, provided that the provision in 40 CFR 51.121(b)(2)(ii)(E) shall not be used in applying this definition and the limited authorization shall not have been used to meet the allowance-holding requirement under the NOx Budget Trading Program. An authorization to emit nitrogen oxides that is not issued under provisions of a State implementation plan approved under 40 CFR 51.123(aa)(1) or (2) (and (bb)(1)), (bb)(2), (dd), or (ee) or subpart EEEE of 40 CFR Part 97 or 97.388 or under the NOx Budget Trading Program as described in the prior sentence shall not be a CAIR NOx Ozone Season allowance.

CAIR NOx Ozone Season Allowance Deduction or Deduct CAIR NOx Ozone Season Allowances means the permanent withdrawal of CAIR NOx Ozone Season allowances by the Administrator from a compliance account, *e.g.*, in order to account for a specified number of tons of total nitrogen oxides emissions from all CAIR NOx Ozone Season units at a CAIR NOx Ozone Season source for a control period, determined in accordance with 310 CMR 7.32(8), or to account for excess emissions.

CAIR NOx Ozone Season Allowance Tracking System means the system by which the Administrator records allocations, deductions, and transfers of CAIR NOx Ozone Season allowances under the CAIR NOx Ozone Season Trading Program. Such allowances will be allocated, held, deducted, or transferred only as whole allowances.

CAIR NOx Ozone Season Allowance Tracking System Account means an account in the CAIR NOx Ozone Season Allowance Tracking System established by the Administrator for purposes of recording the allocation, holding, transferring, or deducting of CAIR NOx Ozone Season allowances.

CAIR NOx Ozone Season Allowances Held or Hold CAIR NOx Ozone Season Allowances means the CAIR NOx Ozone Season allowances recorded by the Administrator, or submitted to the Administrator for recordation, in accordance with 310 CMR 7.32(6) and (7), in a CAIR NOx Ozone Season Allowance Tracking System account.

7.32: continued

CAIR NOx Ozone Season Emissions Limitation means, for a CAIR NOx Ozone Season source, the tonnage equivalent, in NOx emissions in a control period, of the CAIR NOx Ozone Season allowances available for deduction for the source under 310 CMR 7.32(6)(e)1. and 2. for the control period.

CAIR NOx Ozone Season Source means a source that includes one or more CAIR NOx Ozone Season units.

CAIR NOx Ozone Season Trading Program means a multi-state nitrogen oxides air pollution control and emission reduction program approved and administered by the Administrator in accordance with subparts AAAA through IIII of 40 CFR Part 96 and 40 CFR 51.123(aa)(1) or (2) (and (bb)(1)), (bb)(2), or (dd) or established by the Administrator in accordance with subparts AAAA through IIII of 40 CFR Part 97 and 40 CFR 51.123(ee) and 52.35, as a means of mitigating interstate transport of ozone and nitrogen oxides.

CAIR NOx Ozone Season Unit means a unit that is subject to the CAIR NOx Ozone Season Trading Program under 310 CMR 7.32(1)(d).

CAIR NOx Source means a source that is subject to the CAIR NOx Annual Trading Program.

CAIR Permit means the legally binding and federally enforceable written document, or portion of such document, issued by the Department under 310 CMR 7.32(3), including any permit revisions, specifying the CAIR NOx Ozone Season Trading Program requirements applicable to a CAIR NOx Ozone Season source, to each CAIR NOx Ozone Season unit at the source, and to the owners and operators and the CAIR designated representative of the source and each such unit.

CAIR SO2 Source means a source that is subject to the CAIR SO2 Trading Program.

CAIR SO2 Trading Program means a multi-state sulfur dioxide air pollution control and emission reduction program approved and administered by the Administrator in accordance with subparts AAA through III of 40 CFR Part 96 and 40 CFR 51.124(o)(1) or (2) or established by the Administrator in accordance with subparts AAA through III of 40 CFR Part 97 and 40 CFR 51.124(r) and 52.36, as a means of mitigating interstate transport of fine particulates and sulfur dioxide.

Clean Air Act or CAA means the Clean Air Act, 42 U.S.C. 7401, *et seq*.

Coal means any solid fuel classified as anthracite, bituminous, subbituminous, or lignite.

Coal-derived Fuel means any fuel (whether in a solid, liquid, or gaseous state) produced by the mechanical, thermal, or chemical processing of coal.

Coal-fired means:

1. Except for purposes of 310 CMR 7.32(5), combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during any year; or
2. For purposes of 310 CMR 7.32(5), combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during a specified year.

Cogeneration Unit means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine:

1. Having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and
2. Producing during the 12-month period starting on the date the unit first produces electricity and during any calendar year after the calendar year in which the unit first produces electricity.

7.32: continued

a. For a topping-cycle cogeneration unit,
i. Useful thermal energy not less than 5% of total energy output; and
ii. Useful power that, when added to ½ of useful thermal energy produced, is not less then 42.5% of total energy input, if useful thermal energy produced is 15% or more of total energy output, or not less than 45% of total energy input, if useful thermal energy produced is less than 15% of total energy output.

b. For a bottoming-cycle cogeneration unit, useful power not less than 45% of total energy input.

Combustion Turbine means:

1. An enclosed device comprising a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and
2. If the enclosed device under 310 CMR 7.32(1)(b): Combustion Turbine1. is combined cycle, any associated duct burner, heat recovery steam generator, and steam turbine.

Commence Commercial Operation means, with regard to a unit:

1. To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, except as provided in 310 CMR 7.32(1)(e).
   a. For a unit that is a CAIR NOx Ozone Season unit under 310 CMR 7.32(1)(d) on the later of November 15, 1990 or the date the unit commences commercial operation as defined in 310 CMR 7.32(1)(b): Commence Commercial Operation1. and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.
   b. For a unit that is a CAIR NOx Ozone Season unit under 310 CMR 7.32(1)(d) on the later of November 15, 1990 or the date the unit commences commercial operation as defined in 310 CMR 7.32(1)(b): Commence Commercial Operation1. and that is subsequently replaced by a unit at the same source (*e.g.*, repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in 310 CMR 7.32(1)(b): Commence Commercial Operation1. or 2. as appropriate.
2. Notwithstanding 310 CMR 7.32(1)(b): Commence Commercial Operation1. and except as provided in 310 CMR 7.32(1)(e), for a unit that is not a CAIR NOx Ozone Season unit under 310 CMR 7.32(1)(d) on the later of November 15, 1990 or the date the unit commences commercial operation as defined in 310 CMR 7.32(1)(b): Commence Commercial Operation1., the unit's date for commencement of commercial operation shall be the date on which the unit becomes a CAIR NOx Ozone Season unit under 310 CMR 7.32(1)(d).
   a. For a unit with a date for commencement of commercial operation as defined in 310 CMR 7.32(1)(b): Commence Commercial Operation2. and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.
   b. For a unit with a date for commencement of commercial operation as defined in 310 CMR 7.32(1)(b): Commence Commercial Operation2. and that is subsequently replaced by a unit at the same source (*e.g.*, repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in 310 CMR 7.32(1)(b): Commence Commercial Operation1. or 2. as appropriate.
3. Notwithstanding 310 CMR 7.32(1)(b): Commence Commercial Operation1. or 2., for a unit not serving a generator producing electricity for sale, the unit's date of commencement of operation shall also be the unit's date of commencement of commercial operation.

Commence Operation means:

1. To have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber.

7.32: continued

a. For a unit that undergoes a physical change (other than replacement of the unit by a unit at the same source) after the date the unit commences operation as defined in 310 CMR 7.32(1)(b): Commence Operation1., such date shall remain the date of commencement of operation of the unit, which shall continue to be treated as the same unit.

b. For a unit that is replaced by a unit at the same source (*e.g.*, repowered) after the date the unit commences operation as defined in 310 CMR 7.32(1)(b): Commence Operation1., such date shall remain the replaced unit's date of commencement of operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of operation as defined in 310 CMR 7.32(1)(b): Commence Commercial1., 1.a.. or 1.b.. as appropriate.

2. Notwithstanding 310 CMR 7.32: Commence Operation1., and solely for purposes of 310 CMR 7.32(8), for a unit that is not a CAIR $NO_x$ Ozone Season unit under 310 CMR 7.32(1)(d)1.a.ii. or b.ii. on the later of November 15, 1990 or the date the unit commences operation as defined in 310 CMR 7.32: Commence Operation1. and that subsequently becomes such a CAIR $NO_x$ Ozone Season unit, the unit's date for commencement of operation shall be the date on which the unit becomes a CAIR $NO_x$ Ozone Season unit under 310 CMR 7.32(1)(d)1.a.ii. or b.ii.

a. For a unit with a date of commencement of operation as defined in 310 CMR 7.32: Commence Operation2. and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of operation of the unit, which shall continue to be treated as the same unit.

b. For a unit with a date of commencement of operation as defined in 310 CMR 7.32: Commence Operation2. and that is subsequently replaced by a unit at the same source (*e.g.*, repowered), such date shall remain the replaced unit's date of commencement of operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of operation as defined in 310 CMR 7.32: Commence Operation1. or 2. as appropriate.

Common Stack means a single flue through which emissions from two or more units are exhausted.

Compliance Account means a CAIR NOx Ozone Season Allowance Tracking System account, established by the Administrator for a CAIR NOx Ozone Season source under 310 CMR 7.32(6), in which any CAIR NOx Ozone Season allowance allocations for the CAIR NOx Ozone Season units at the source are initially recorded and in which are held any CAIR NOx Ozone Season allowances available for use for a control period in order to meet the source's CAIR NOx Ozone Season emissions limitation in accordance with 310 CMR 7.32(6)(e).

Continuous Emission Monitoring System or CEMS means the equipment required under 310 CMR 7.32(8) to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated data acquisition and handling system (DAHS)), a permanent record of nitrogen oxides emissions, stack gas volumetric flow rate, stack gas moisture content, and oxygen or carbon dioxide concentration (as applicable), in a manner consistent with 40 CFR Part 75. The following systems are the principal types of continuous emission monitoring systems required under 310 CMR 7.32(8):

1. A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack gas volumetric flow rate, in standard cubic feet per hour (scfh);

2. A nitrogen oxides concentration monitoring system, consisting of a NOx pollutant concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of NOx emissions, in parts per million (ppm);

3. A nitrogen oxides emission rate (or NOx -diluent) monitoring system, consisting of a NOx pollutant concentration monitor, a diluent gas (CO2 or O2) monitor, and an automated data acquisition and handling system and providing a permanent, continuous record of NOx concentration, in parts per million (ppm), diluent gas concentration, in percent CO2 or O2, and NOx emission rate, in pounds per million British thermal units (lb/MMBtu);

7.32: continued

4. A moisture monitoring system, as defined in 40 CFR 75.11(b)(2) and providing a permanent, continuous record of the stack gas moisture content, in percent H2O;

5. A carbon dioxide monitoring system, consisting of a CO2 pollutant concentration monitor (or an oxygen monitor plus suitable mathematical equations from which the CO2 concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of CO2 emissions, in percent CO2; and

6. An oxygen monitoring system, consisting of an O2 concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O2 in percent O2.

Control Period or Ozone Season means the period beginning May 1st of a calendar year, except as provided in 310 CMR 7.32(1)(f)3.b., and ending on September 30th of the same year, inclusive.

Emissions means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the Administrator by the CAIR designated representative and as determined by the Administrator in accordance with 310 CMR 7.32(8).

Energy Efficiency Project or EEP means one or more of the following voluntary projects that directly result in energy savings in Massachusetts:

1. The construction of a new building or addition that exceeds the requirements of the Massachusetts State Building Code, 780 CMR 1301.0 *et seq.*, Energy Conservation; or

2. The installation, replacement or modification of equipment, fixtures, or materials, including without limitation:

a. windows and doors;
b. caulking and weather-stripping;
c. insulation;
d. automatic energy control systems;
e. refrigeration equipment;
f. hot water systems;
g. equipment required to operate steam, hydraulic, and ventilation systems;
h. plant and distribution systems including replacement of burners, furnaces or boilers;
i. electrical or mechanical furnace ignition systems;
j. lighting fixtures;
k. energy recovery systems excluding landfill gas combustion, or municipal waste combustion systems;
l. motors;
m. variable speed drive installations on industrial fans and pumps; and
n. combined heat and power systems that achieve an actual energy efficiency of 60%; or

3. The commencement or modification of building or facility operation and maintenance procedures.

Reductions in labor, load shifting, and any other measures that do not directly result in energy savings are not EEPs. Projects resulting in energy savings for a CAIR NOx Ozone Season unit are not EEPs.

Excess Emissions means any ton of nitrogen oxides emitted by the CAIR NOx Ozone Season units at a CAIR NOx Ozone Season source during a control period that exceeds the CAIR NOx Ozone Season emissions limitation for the source.

Existing CAIR NOx Ozone Season Unit means for purposes of an allocation, any CAIR NOx Ozone Season unit that has operated and submitted output data for one entire control period under 310 CMR 7.27, 7.28, or 7.32 prior to the year in which the allocation takes place, unless that unit has subsequently been replaced and determined to be a new unit for the year in which the allocation takes place pursuant to 310 CMR 7.32(5)(c)5.

Fossil Fuel means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

7.32: continued

Fossil-fuel-fired means, with regard to a unit, combusting any amount of fossil fuel in any calendar year.

Fossil-fuel-powered means the combustion of fossil fuel or any derivative of fossil fuel alone, or, in combination with any other fuel, if fossil fuel comprises more than 50% of the annual heat input on a Btu basis. Once a unit is considered fossil-fuel-powered, then the unit is always considered fossil-fuel-powered even if the fossil fuel no longer comprises more than 50% of the annual heat input on a Btu basis.

Fuel Oil means any petroleum-based fuel (including diesel fuel or petroleum derivatives such as oil tar) and any recycled or blended petroleum products or petroleum by-products used as a fuel whether in a liquid, solid, or gaseous state.

General Account means a CAIR NOx Ozone Season Allowance Tracking System account, established under 310 CMR 7.32(6), that is not a compliance account.

Generator means a device that produces electricity.

Gross Electrical Output means, with regard to a cogeneration unit, electricity made available for use, including any such electricity used in the power production process (which process includes, but is not limited to, any onsite processing or treatment of fuel combusted at the unit and any on-site emission controls).

Heat Input means, with regard to a specified period of time, the product (in MMBtu/time) of the gross calorific value of the fuel (in Btu/lb) divided by 1,000,000 Btu/MMBtu and multiplied by the fuel feed rate into a combustion device (in lb of fuel/time), as measured, recorded, and reported to the Administrator by the CAIR designated representative and determined by the Administrator in accordance with 310 CMR 7.32(8) and excluding the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

Heat Input Rate means the amount of heat input (in MMBtu) divided by unit operating time (in hr) or, with regard to a specific fuel, the amount of heat input attributed to the fuel (in MMBtu) divided by the unit operating time (in hr) during which the unit combusts the fuel.

Hg Budget Trading Program means a multi-state Hg air pollution control and emission reduction program approved and administered by the Administrator in accordance subpart HHHH of 40 CFR Part 60 and 40 CFR 60.24(h)(6), or established by the Administrator under section 111 of the Clean Air Act, as a means of reducing national Hg emissions.

Indirect Heat Exchanger means combustion equipment in which the flame or the products of combustion are separated from any contact with the principal material in the process by metallic or refractory walls. It includes, but is not limited to, steam boilers, vaporizers, melting pots, heat exchangers, column reboilers, fractioning column feed preheaters, reactor feed preheaters, fuel-fired reactors such as steam hydrocarbon reformer heaters and pyrolysis heaters.

Life-of-the-unit, Firm Power Contractual Arrangement means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract:

1. For the life of the unit;
2. For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or
3. For a period no less than 25 years or 70% of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

7.32: continued

Maximum Design Heat Input means the maximum amount of fuel per hour (in Btu/hr) that a unit is capable of combusting on a steady state basis as of the initial installation of the unit as specified by the manufacturer of the unit.

Monitoring System means any monitoring system that meets the requirements of 310 CMR 7.32(8) including a continuous emissions monitoring system, an alternative monitoring system, or an excepted monitoring system under 40 CFR Part 75.

Most Stringent State or Federal NOx Emissions Limitation means, with regard to a unit, the lowest NOx emissions limitation (in terms of lb/MMBtu) that is applicable to the unit under State or Federal law, regardless of the averaging period to which the emissions limitation applies.

Nameplate Capacity means, starting from the initial installation of a generator, the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings) as of such installation as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings), such increased maximum amount as of such completion as specified by the person conducting the physical change.

New CAIR NOx Ozone Season Unit means for purposes of an allocation, any CAIR NOx Ozone Season unit which has not received an allocation under 310 CMR 7.32(5)(c)3. from the Department for the vintage year for which new unit allocations are being made.

Non-CAIR Unit means a unit that is not subject to the CAIR $NO_x$ Ozone Season Trading Program under 310 CMR 7.32(1)(d).

Operating Permit means a permit issued under title V of the Clean Air Act and 40 CFR Part 70 or Part 71 and 310 CMR 7.00: *Appendix C*.

Operating Permit Regulations means the regulations that the Administrator has approved or issued as meeting the requirements of title V of the Clean Air Act and 40 CFR Part 70 or 71 at 310 CMR 7.00: *Appendix C*.

Operator means any person who operates, controls, or supervises a CAIR NOx Ozone Season unit or a CAIR NOx Ozone Season source and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.

Owner means any of the following persons:

1. With regard to a CAIR NOx Ozone Season source or a CAIR NOx Ozone Season unit at a source, respectively:
   a. Any holder of any portion of the legal or equitable title in a CAIR NOx Ozone Season unit at the source or the CAIR NOx Ozone Season unit; or
   b. Any holder of a leasehold interest in a CAIR NOx Ozone Season unit at the source or the CAIR NOx Ozone Season unit; or
   c. Any purchaser of power from a CAIR NOx Ozone Season unit at the source or the CAIR NOx Ozone Season unit under a life-of-the-unit, firm power contractual arrangement; provided that, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based (either directly or indirectly) on the revenues or income from such CAIR NOx Ozone Season unit; or
2. With regard to any general account, any person who has an ownership interest with respect to the CAIR NOx Ozone Season allowances held in the general account and who is subject to the binding agreement for the CAIR authorized account representative to represent the person's ownership interest with respect to CAIR NOx Ozone Season allowances.

7.32: continued

Permitting Authority means the State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to issue or revise permits to meet the requirements of the CAIR NOx Ozone Season Trading Program or, if no such agency has been so authorized, the Administrator.

Potential Electrical Output Capacity means 33% of a unit's maximum design heat input, divided by 3,413 Btu/kWh, divided by 1,000 kWh/MWh, and multiplied by 8,760 hr/yr.

Public Benefit Set-aside Baseline Period means any one of the three control periods preceding the year in which the Energy Efficiency Project or Renewable Energy Project was first put in use or first became operational. Once CAIR NOx Ozone Season allowances have been granted for a project, the same PBSA baseline period shall be used to calculate CAIR NOx Ozone Season allowances for that project in any subsequent year.

Proponent means any person who owns, leases, operates or controls an Energy Efficiency Project or a Renewable Energy Project, or a party who aggregates one or more Renewable Energy Projects or Energy Efficiency Projects, to equal at least one whole CAIR NOx Ozone Season allowance. Aggregators may include, without limitation, a common owner of projects, an energy service company, an emission trading broker, or a state or municipal entity.

Receive or Receipt Of means, when referring to the Department or the Administrator, to come into possession of a document, information, or correspondence (whether sent in hard copy or by authorized electronic transmission), as indicated in an official log, or by a notation made on the document, information, or correspondence, by the Department or the Administrator in the regular course of business.

Recordation, Record, or Recorded means, with regard to CAIR NOx Ozone Season allowances, the movement of CAIR NOx Ozone Season allowances by the Administrator into or between CAIR NOx Ozone Season Allowance Tracking System accounts, for purposes of allocation, transfer, or deduction.

Reference Method means any direct test method of sampling and analyzing for an air pollutant as specified in 40 CFR 75.22.

Renewable Energy means energy generated by one or more of the following fuels, energy resources or technologies, and that does not emit NOx: solar photovoltaic or solar thermal energy; wind energy; fuel cells that do not employ a fuel processor that emits NOx; ocean thermal, wave or tidal energy; hydro and geothermal energy. Energy generated from nuclear fuel, biomass, landfill gas, fuel cells that employ a fuel processor that emits NOx, and hydro using pumped storage are not renewable energy under 310 CMR 7.32.

Renewable Energy Project or REP means one or more generation units producing renewable energy that is either located in Massachusetts or adjacent to Massachusetts and directly and solely connected to transmission facilities located in Massachusetts. A REP may not receive PBSA CAIR NOx Ozone Season allowances under 310 CMR 7.32 for energy generation that has been awarded NOx allowances under another program administered by the government of the United States, or any other political subdivision thereof.

Replacement, Replace, or Replaced means, with regard to a unit, the demolishing of a unit, or the permanent shutdown and permanent disabling of a unit, and the construction of another unit (the replacement unit) to be used instead of the demolished or shutdown unit (the replaced unit).

Repowered means, with regard to a unit, replacement of a coal-fired boiler with one of the following coal-fired technologies at the same source as the coal-fired boiler:

1. Atmospheric or pressurized fluidized bed combustion;
2. Integrated gasification combined cycle;

7.32: continued

3. Magnetohydrodynamics;
4. Direct and indirect coal-fired turbines;
5. Integrated gasification fuel cells; or
6. As determined by the Administrator in consultation with the Secretary of Energy, a derivative of one or more of the technologies under subdivisions 1. through 6. of this definition and any other coal-fired technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of January 1, 2005.

Sequential Use of Energy means:

1. For a topping-cycle cogeneration unit, the use of reject heat from electricity production in a useful thermal energy application or process; or
2. For a bottoming-cycle cogeneration unit, the use of reject heat from useful thermal energy application or process in electricity production.

Serial Number means, for a CAIR NOx Ozone Season allowance, the unique identification number assigned to each CAIR NOx Ozone Season allowance by the Administrator.

Solid Waste Incineration Unit means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a ''solid waste incineration unit'' as defined in section 129(g)(1) of the Clean Air Act.

Source means all buildings, structures, or installations located in one or more contiguous or adjacent properties under common control of the same person or persons. For purposes of section 502(c) of the Clean Air Act, a ''source,'' including a ''source'' with multiple units, shall be considered a single ''facility.''

State means one of the States or the District of Columbia that adopts the CAIR NOx Ozone Season Trading Program pursuant to 40 CFR 51.123(aa)(1) or (2), (bb), or (dd).

Submit or Serve means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

1. In person;
2. By United States Postal Service; or
3. By other means of dispatch or transmission and delivery. Compliance with any ''submission'' or ''service'' deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

Ton means 2,000 pounds. For the purpose of determining compliance with the CAIR NOx Ozone Season emissions limitation, total tons of nitrogen oxides emissions for a control period shall be calculated as the sum of all recorded hourly emissions (or the mass equivalent of the recorded hourly emission rates) in accordance with 310 CMR 7.32(8), but with any remaining fraction of a ton equal to or greater than 0.50 tons deemed to equal one ton and any remaining fraction of a ton less than 0.50 tons deemed to equal zero tons.

Topping-cycle Cogeneration Unit means a cogeneration unit in which the energy input to the unit is first used to produce useful power, including electricity, and at least some of the reject heat from the electricity production is then used to provide useful thermal energy.

Total Energy Input means, with regard to a cogeneration unit, total energy of all forms supplied to the cogeneration unit, excluding energy produced by the cogeneration unit itself.

Total Energy Output means, with regard to a cogeneration unit, the sum of useful power and useful thermal energy produced by the cogeneration unit.

Unit means a stationary, fossil-fuel-fired or fossil-fuel-powered boiler or combustion turbine or other stationary, fossil-fuel-fired or fossil-fuel-powered combustion device.

7.32: continued

Unit Operating Day means a calendar day in which a unit combusts any fuel.

Unit Operating Hour or Hour of Unit Operation means an hour in which a unit combusts any fuel.

Useful Power means, with regard to a cogeneration unit, electricity or mechanical energy made available for use, excluding any such energy used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any onsite emission controls).

Useful Thermal Energy means:

1. For purposes of defining a cogeneration unit under 310 CMR 7.32(1)(b), thermal energy that is:
   a. Made available to an industrial or commercial process (not a power production process), excluding any heat contained in condensate return or makeup water;
   b. Used in a heating application (*e.g.*, space heating or domestic hot water heating); or
   c. Used in a space cooling application (i.e., thermal energy used by an absorption chiller).
2. For all other purposes, thermal energy that is:
   a. Made available to an industrial or commercial process (not a power production process), excluding any heat contained in condensate return or makeup water;
   b. Used in a heating application (*e.g.*, space heating or domestic hot water heating);
   c. Used in a space cooling application (*i.e.*, thermal energy used by an absorption chiller); or
   d. Used in an industrial or commercial manufacturing process or application.

Utility Power Distribution System means the portion of an electricity grid owned or operated by a utility and dedicated to delivering electricity to customers.

Vintage means the designated year of a CAIR NOx Ozone Season allowance and is the year that a CAIR NOx Ozone Season allowance can first be used by a CAIR NOx Ozone Season unit to demonstrate compliance with 310 CMR 7.32.

Voluntary means an action that is not otherwise required by federal or Massachusetts law, or the ordinance or by-law of any Massachusetts municipality.

(c) Measurements, Abbreviations, and Acronyms. Measurements, abbreviations, and acronyms used in 310 CMR 7.32 are defined in 310 CMR 7.32(2)(c)1. through 17.:

1. Btu--British thermal unit.
2. CO2-carbon dioxide.
3. H2O--water.
4. Hg--mercury.
5. hr-hour.
6. kW--kilowatt electrical.
7. kWh-kilowatt hour.
8. lb-pound.
9. MMBtu-million Btu.
10. MWe-megawatt electrical.
11. MWh--megawatt hour.
12. NOx -nitrogen oxides.
13. O2-oxygen.
14. ppm--parts per million.
15. scfh--standard cubic feet per hour.
16. SO2--sulfur dioxide.
17. yr--year.

7.32: continued

(d) Applicability.

1. Except as provided in 310 CMR 7.32(1)(d)2.:

a. The following units shall be CAIR NOx Ozone Season units, and any source that includes one or more such units shall be a CAIR NOx Ozone Season source, subject to the requirements of 310 CMR 7.32(1) through (9):

i. Any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

ii. For units that are not covered by 310 CMR 7.32(1)(d)1.a.i.:

(i) Any fossil-fuel-powered boiler, combustion turbine or indirect heat exchanger that emits $NO_x$ to a stack and has a maximum design heat input of 250 MMBtu/Hour or more, or a fossil-fuel-powered unit serving a generator of 15 MW nameplate capacity or greater, which provides electricity for sale or use or more; or,

(ii) Any unit that has opted into 310 CMR 7.28, before January 1, 2009, when the Department approves an application under 310 CMR 7.28(4)(c); or,

(iii) Any unit the Department includes in 310 CMR 7.28 pursuant to 310 CMR 7.28(4)(d) before January 1, 2009.

b. i. If a stationary boiler or stationary combustion turbine that, under 310 CMR 7.32(1)(d)1.a., is not a CAIR NOx Ozone Season unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25 MWe producing electricity for sale, the unit shall become a CAIR NOx Ozone Season unit as provided in 310 CMR 7.32(1)(d)1.a.i. on the first date on which it both combusts fossil fuel and serves such generator.

ii. If a boiler, combustion turbine or indirect heat exchanger unit that is not a CAIR NOx Ozone Season unit begins to emit NOx to a stack, increases its maximum design heat input to 250 MMBtu/Hour or more, begins to serve a generator with nameplate capacity of 15 MWe or more, or becomes fossil-fuel-powered, the unit shall become a CAIR NOx Ozone Season unit as provided in 310 CMR 7.32(1)(d)1.a.ii. on the first date on which it meets the criteria established in 310 CMR 7.32(1)(d)1.a.ii.

2. The units in a State that meet the requirements set forth in 310 CMR 7.32(1)(d)2.a.i., 2.b.i., or 2.b.ii. shall not be CAIR NOx Ozone Season units unless they qualify as CAIR NOx Ozone Season units under 310 CMR 7.32(1)(d)2.a.ii. or 2.b.iii.

a. i. Any unit that is a CAIR NOx Ozone Season unit under 310 CMR 7.32(1)(d)1.a.i. or 1.b.i.:

(i) Qualifying as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit; and

(ii) Not serving at any time, since the later of November 15, 1990 or the startup of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe supplying in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale.

ii. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and meets the requirements of 310 CMR 7.32(1)(d)2.a.i. for at least one calendar year, but subsequently no longer meets all such requirements, the unit shall become a CAIR NOx Ozone Season unit starting on the earlier of January 1st after the first calendar year during which the unit first no longer qualifies as a cogeneration unit or January 1st after the first calendar year during which the unit no longer meets the requirements of 310 CMR 7.32(1)(d)2.a.i.(ii).

b. i. Any unit that is a CAIR NOx Ozone Season unit under 310 CMR 7.32(1)(d)1.a.i. or 1.b.i. commencing operation before January 1, 1985:

(i) Qualifying as a solid waste incineration unit; and

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(ii) With an average annual fuel consumption of non-fossil fuel for 1985 through 1987 exceeding 80% (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three consecutive calendar years after 1990 exceeding 80% (on a Btu basis).

ii. Any unit that is a CAIR NOx Ozone Season unit under 310 CMR 7.32(1)(d)1.a.i. or 1.b.i. commencing operation on or after January 1, 1985:

(i) Qualifying as a solid waste incineration unit; and

(ii) With an average annual fuel consumption of non-fossil fuel for the first three calendar years of operation exceeding 80% (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three consecutive calendar years after 1990 exceeding 80% (on a Btu basis).

iii. If a unit qualifies as a solid waste incineration unit and meets the requirements of 310 CMR 7.32(1)(d)2.b.i. or 2.b.ii. for at least three consecutive calendar years, but subsequently no longer meets all such requirements, the unit shall become a CAIR NOx Ozone Season unit starting on the earlier of January 1st after the first calendar year during which the unit first no longer qualifies as a solid waste incineration unit or January 1st after the first tharee consecutive calendar years after 1990 for which the unit has an average annual fuel consumption of fossil fuel of 20% or more.

(e) Retired Unit Exemption.

1. a. Any CAIR NOx Ozone Season unit that is permanently retired shall be exempt from the CAIR NOx Ozone Season Trading Program, except for the provisions of 310 CMR 7.32(1)(e), (1)(b), (1)(c), (1)(d), (1)(f)3.d. through g., (1)(g), (1)(h), (2), and (5) through (7)

b. The exemption under 310 CMR 7.32(1)(e)1.a. shall become effective the day on which the CAIR NOx Ozone Season unit is permanently retired. Within 30 days of the unit's permanent retirement, the CAIR designated representative shall submit a statement to the Department otherwise responsible for administering any CAIR permit for the unit and shall submit a copy of the statement to the Administrator. The statement shall state, in a format prescribed by the Department, that the unit was permanently retired on a specific date and will comply with the requirements of 310 CMR 7.32(1)(e)2.

c. After receipt of the statement under 310 CMR 7.32(1)(e)1.b., the Department will amend any permit under 310 CMR 7.32(3) covering the source at which the unit is located to add the provisions and requirements of the exemption under 310 CMR 7.32(1)(e)1.a. and 1.b.

2. Special Provisions.

a. A unit exempt under 310 CMR 7.32(1)(e)1. shall not emit any nitrogen oxides, starting on the date that the exemption takes effect.

b. The Department will allocate CAIR $NO_x$ Ozone Season allowances under 310 CMR 7.32(5) to a unit exempt under 310 CMR 7.32(1)(e)1. until the unit's average net electric output (AEO) and average net useful steam output (ASO), as defined in 310 CMR 7.32(5)(c)1. and 3., equal zero.

c. For a period of five years from the date the records are created, the owners and operators of a unit exempt under 310 CMR 7.32(1)(e)1. shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The five-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Department or the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

d. The owners and operators and, to the extent applicable, the CAIR designated representative of a unit exempt under 310 CMR 7.32(1)(e)1. shall comply with the requirements of the CAIR NOx Ozone Season Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

7.32: continued

e. A unit exempt under 310 CMR 7.32(1)(e)1. and located at a source that is required, or but for this exemption would be required, to have an Operating Permit shall not resume operation unless the CAIR designated representative of the source submits a complete CAIR permit application under 310 CMR 7.32(3)(c) for the unit not less than 18 months (or such lesser time provided by the Department) before the later of January 1, 2009 or the date on which the unit resumes operation.

f. On the earlier of the following dates, a unit exempt under 310 CMR 7.32(1)(e)1. shall lose its exemption:

i. The date on which the CAIR designated representative submits a CAIR permit application for the unit under 310 CMR 7.32(1)(e)2.e.;

ii. The date on which the CAIR designated representative is required under 310 CMR 7.32(1)(e)2.e. to submit a CAIR permit application for the unit; or

iii. The date on which the unit resumes operation, if the CAIR designated representative is not required to submit a CAIR permit application for the unit.

g. For the purpose of applying monitoring, reporting, and recordkeeping requirements under 310 CMR 7.32(8), a unit that loses its exemption under 310 CMR 7.32(1)(e)1. shall be treated as a unit that commences commercial operation on the first date on which the unit resumes operation.

(f) Standard Requirements.

1. Permit Requirements.

a. The CAIR designated representative of each CAIR NOx Ozone Season source shall:

i. Submit to the Department a complete CAIR permit application under 310 CMR 7.32(3)(c) in accordance with the deadlines specified in 310 CMR 7.32(3)(b); and

ii. Submit in a timely manner any supplemental information that the Department determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

b. The owners and operators of each CAIR NOx Ozone Season source shall have a CAIR permit issued by the Department under 310 CMR 7.32(3) for the source and operate the source and the unit in compliance with such CAIR permit.

2. Monitoring, Reporting, and Recordkeeping Requirements.

a. The owners and operators, and the CAIR designated representative, of each CAIR NOx Ozone Season source and each CAIR NOx Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 310 CMR 7.32(8).

b. The emissions measurements recorded and reported in accordance with 310 CMR 7.32(8) shall be used to determine compliance by each CAIR NOx Ozone Season source with the CAIR NOx Ozone Season emissions limitation under 310 CMR 7.32(1)(f)3.

c. The energy output measurements recorded and reported in accordance with 310 CMR 7.32(9) shall be used to determine CAIR NOx Ozone Season allocations for each CAIR NOx Ozone Season source under 310 CMR 7.32(5).

3. Nitrogen Oxides Ozone Season Emission Requirements.

a. As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NOx Ozone Season source and each CAIR NOx Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NOx Ozone Season allowances available for compliance deductions for the control period under 310 CMR 7.32(6)(e)1. in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NOx Ozone Season units at the source, as determined in accordance with 310 CMR 7.32(8).

b. A CAIR NOx Ozone Season unit shall be subject to the requirements under 310 CMR 7.32(1)(f)3.a. for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 310 CMR 7.32(8)(a)2.a., b., c., or g. and for each control period thereafter.

7.32: continued

c. A CAIR NOx Ozone Season allowance shall not be deducted, for compliance with the requirements under 310 CMR 7.32(1)(f)3.a., for a control period in a calendar year before the year for which the CAIR NOx Ozone Season allowance was allocated.

d. CAIR NOx Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NOx Ozone Season Allowance Tracking System accounts in accordance with 310 CMR 7.32(5), (6), and (7).

e. A CAIR NOx Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NOx Ozone Season Trading Program. No provision of the CAIR NOx Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 310 CMR 7.32(1)(e) and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

f. A CAIR NOx Ozone Season allowance does not constitute a property right.

g. Upon recordation by the Administrator under 310 CMR 7.32(5), (6), and (7), every allocation, transfer, or deduction of a CAIR NOx Ozone Season allowance to or from a CAIR NOx Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

4. Excess Emissions Requirements. If a CAIR NOx Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NOx Ozone Season emissions limitation, then:

a. The owners and operators of the source and each CAIR NOx Ozone Season unit at the source shall surrender the CAIR NOx Ozone Season allowances required for deduction under 310 CMR 7.32(6)(e)4.a. and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.

b. Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 310 CMR 7.32(1), the Clean Air Act, and applicable State law.

5. Recordkeeping and Reporting Requirements.

a. Unless otherwise provided, the owners and operators of the CAIR NOx Ozone Season source and each CAIR NOx Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of five years, in writing by the Department or the Administrator.

i. The certificate of representation under 310 CMR 7.32(2)(d) for the CAIR designated representative for the source and each CAIR NOx Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new certificate of representation under 310 CMR 7.32(2)(d) changing the CAIR designated representative.

ii. All emissions monitoring information, in accordance with 310 CMR 7.32(8), provided that to the extent that 310 CMR 7.32(8) provides for a three-year period for recordkeeping, the three-year period shall apply.

iii. Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NOx Ozone Season Trading Program.

iv. Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NOx Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NOx Ozone Season Trading Program.

b. The CAIR designated representative of a CAIR NOx Ozone Season source and each CAIR NOx Ozone Season unit at the source shall submit the reports required under the CAIR NOx Ozone Season Trading Program, including those under 310 CMR 7.32(8).

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6. Liability.

a. Each CAIR NOx Ozone Season source and each CAIR NOx Ozone Season unit shall meet the requirements of the CAIR NOx Ozone Season Trading Program.

b. Any provision of the CAIR NOx Ozone Season Trading Program that applies to a CAIR NOx Ozone Season source or the CAIR designated representative of a CAIR NOx Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NOx Ozone Season units at the source.

c. Any provision of the CAIR NOx Ozone Season Trading Program that applies to a CAIR NOx Ozone Season unit or the CAIR designated representative of a CAIR NOx Ozone Season unit shall also apply to the owners and operators of such unit.

7. Effect on Other Authorities. No provision of the CAIR NOx Ozone Season Trading Program, a CAIR permit application, a CAIR permit, or an exemption under 310 CMR 7.32(1)(e) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NOx Ozone Season source or CAIR NOx Ozone Season unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, the Clean Air Act, or any other state regulation.

(g) Computation of Time.

1. Unless otherwise stated, any time period scheduled, under the CAIR NOx Ozone Season Trading Program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

2. Unless otherwise stated, any time period scheduled, under the CAIR NOx Ozone Season Trading Program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.

3. Unless otherwise stated, if the final day of any time period, under the CAIR NOx Ozone Season Trading Program, falls on a weekend or a State or Federal holiday, the time period shall be extended to the next business day.

(h) Appeal Procedures. The appeal procedures for decisions of the Administrator under the CAIR NOx Ozone Season Trading Program are set forth in 40 CFR Part 78.

(2) CAIR Designated Representative for CAIR NOx Ozone Season Sources.

(a) Authorization and Responsibilities of CAIR Designated Representative.

1. Except as provided under 310 CMR 7.32(2)(b), each CAIR NOx Ozone Season source, including all CAIR NOx Ozone Season units at the source, shall have one and only one CAIR designated representative, with regard to all matters under the CAIR NOx Ozone Season Trading Program concerning the source or any CAIR NOx Ozone Season unit at the source.

2. The CAIR designated representative of the CAIR NOx Ozone Season source shall be selected by an agreement binding on the owners and operators of the source and all CAIR NOx Ozone Season units at the source and shall act in accordance with the certification statement in 310 CMR 7.32(2)(d)1.d.iv.

3. Upon receipt by the Administrator of a complete certificate of representation under 310 CMR 7.32(2)(d), the CAIR designated representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the CAIR NOx Ozone Season source represented and each CAIR NOx Ozone Season unit at the source in all matters pertaining to the CAIR NOx Ozone Season Trading Program, notwithstanding any agreement between the CAIR designated representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the CAIR designated representative by the Department, the Administrator, or a court regarding the source or unit.

4. No CAIR permit will be issued, no emissions data reports will be accepted, and no CAIR NOx Ozone Season Allowance Tracking System account will be established for a CAIR NOx Ozone Season unit at a source, until the Administrator has received a complete certificate of representation under 310 CMR 7.32(2)(d) for a CAIR designated representative of the source and the CAIR NOx Ozone Season units at the source.

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5. a. Each submission under the CAIR NOx Ozone Season Trading Program shall be submitted, signed, and certified by the CAIR designated representative for each CAIR NOx Ozone Season source on behalf of which the submission is made. Each such submission shall include the following certification statement by the CAIR designated representative: ''I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.''

b. The Department and the Administrator will accept or act on a submission made on behalf of owner or operators of a CAIR NOx Ozone Season source or a CAIR NOx Ozone Season unit only if the submission has been made, signed, and certified in accordance with 310 CMR 7.32(2)(a)5.a.

(b) Alternate CAIR Designated Representative.

1. A certificate of representation under 310 CMR 7.32(2)(d) may designate one and only one alternate CAIR designated representative, who may act on behalf of the CAIR designated representative. The agreement by which the alternate CAIR designated representative is selected shall include a procedure for authorizing the alternate CAIR designated representative to act in *lieu* of the CAIR designated representative.

2. Upon receipt by the Administrator of a complete certificate of representation under 310 CMR 7.32(2)(d), any representation, action, inaction, or submission by the alternate CAIR designated representative shall be deemed to be a representation, action, inaction, or submission by the CAIR designated representative.

3. Except in 310 CMR 7.32(1)(b), (2)(a)1. and 4., (2)(b), (2)(c), (2)(d), (2)(f), and (6)(b), whenever the term ''CAIR designated representative'' is used in 310 CMR 7.32(1) through (9), the term shall be construed to include the CAIR designated representative or any alternate CAIR designated representative.

(c) Changing CAIR designated representative and alternate CAIR designated representative; changes in owners and operators.

1. Changing CAIR Designated Representative. The CAIR designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under 310 CMR 7.32(2)(d). Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CAIR designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new CAIR designated representative and the owners and operators of the CAIR NOx Ozone Season source and the CAIR NOx Ozone Season units at the source.

2. Changing Alternate CAIR Designated Representative. The alternate CAIR designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under 310 CMR 7.32(2)(d). Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate CAIR designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new alternate CAIR designated representative and the owners and operators of the CAIR NOx Ozone Season source and the CAIR NOx Ozone Season units at the source.

3. Changes in Owners and Operators.

a. In the event an owner or operator of a CAIR NOx Ozone Season source or a CAIR NOx Ozone Season unit is not included in the list of owners and operators in the certificate of representation under 310 CMR 7.32(2)(d), such owner or operator shall be deemed to be subject to and bound by the certificate of representation, the representations, actions, inactions, and submissions of the CAIR designated representative and any alternate CAIR designated representative of the source or unit, and the decisions and orders of the Department, the Administrator, or a court, as if the owner or operator were included in such list.

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b. Within 30 days following any change in the owners and operators of a CAIR NOx Ozone Season source or a CAIR NOx Ozone Season unit, including the addition of a new owner or operator, the CAIR designated representative or any alternate CAIR designated representative shall submit a revision to the certificate of representation under 310 CMR 7.32(2)(d) amending the list of owners and operators to include the change.

(d) Certificate of Representation.

1. A complete certificate of representation for a CAIR designated representative or an alternate CAIR designated representative shall include the following elements in a format prescribed by the Administrator:

a. Identification of the CAIR NOx Ozone Season source, and each CAIR NOx Ozone Season unit at the source, for which the certificate of representation is submitted, including identification and nameplate capacity of each generator served by each such unit.

b. The name, address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the CAIR designated representative and any alternate CAIR designated representative.

c. A list of the owners and operators of the CAIR NOx Ozone Season source and of each CAIR NOx Ozone Season unit at the source.

d. The following certification statements by the CAIR designated representative and any alternate CAIR designated representative.

i. ''I certify that I was selected as the CAIR designated representative or alternate CAIR designated representative, as applicable, by an agreement binding on the owners and operators of the source and each CAIR NOx Ozone Season unit at the source.''

ii. ''I certify that I have all the necessary authority to carry out my duties and responsibilities under the CAIR NOx Ozone Season Trading Program on behalf of the owners and operators of the source and of each CAIR NOx Ozone Season unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions.''

iii. ''I certify that the owners and operators of the source and of each CAIR NOx Ozone Season unit at the source shall be bound by any order issued to me by the Administrator, the Department, or a court regarding the source or unit.''

iv. ''Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a CAIR NOx Ozone Season unit, or where a utility or industrial customer purchases power from a CAIR NOx Ozone Season unit under a life-of-the unit, firm power contractual arrangement, I certify that: I have given a written notice of my selection as the 'CAIR designated representative' or 'alternate CAIR designated representative', as applicable, and of the agreement by which I was selected to each owner and operator of the source and of each CAIR NOx Ozone Season unit at the source; and CAIR NOx Ozone Season allowances and proceeds of transactions involving CAIR NOx Ozone Season allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of CAIR NOx Ozone Season allowances by contract, CAIR NOx Ozone Season allowances and proceeds of transactions involving CAIR NOx Ozone Season allowances will be deemed to be held or distributed in accordance with the contract.''

e. The signature of the CAIR designated representative and any alternate CAIR designated representative and the dates signed.

2. Unless otherwise required by the Department or the Administrator, documents of agreement referred to in the certificate of representation shall not be submitted to the Department or the Administrator. Neither the Department nor the Administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

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(e) Objections Concerning CAIR Designated Representative.

1. Once a complete certificate of representation under 310 CMR 7.32(2)(d) has been submitted and received, the Department and the Administrator will rely on the certificate of representation unless and until a superseding complete certificate of representation under 310 CMR 7.32(2)(d) is received by the Administrator.

2. Except as provided in 310 CMR 7.32(2)(c)1. or 2., no objection or other communication submitted to the Department or the Administrator concerning the authorization, or any representation, action, inaction, or submission, of the CAIR designated representative shall affect any representation, action, inaction, or submission of the CAIR designated representative or the finality of any decision or order by the Department or the Administrator under the CAIR NOx Ozone Season Trading Program.

3. Neither the Department nor the Administrator will adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any CAIR designated representative, including private legal disputes concerning the proceeds of CAIR NOx Ozone Season allowance transfers.

(f) Delegation by CAIR Designated Representative and Alternate CAIR Designated Representative.

1. A CAIR designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under 310 CMR 7.32.

2. An alternate CAIR designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under 310 CMR 7.32.

3. In order to delegate authority to make an electronic submission to the Administrator in accordance with 310 CMR 7.32(2)(f)1. or 2., the CAIR designated representative or alternate CAIR designated representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

a. The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such CAIR designated representative or alternate CAIR designated representative;

b. The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to as an ‘‘agent’’);

c. For each such natural person, a list of the type or types of electronic submissions under 310 CMR 7.32(2)(f)1. or 2. for which authority is delegated to him or her; and

d. The following certification statements by such CAIR designated representative or alternate CAIR designated representative:

i. ‘‘I agree that any electronic submission to the Administrator that is by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am a CAIR designated representative or alternate CAIR designated representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 310 CMR 7.32(2)(f)4. shall be deemed to be an electronic submission by me.’’

ii. ‘‘Until this notice of delegation is superseded by another notice of delegation under 310 CMR 7.32(2)(f)4., I agree to maintain an e-mail account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 310 CMR 7.32(2)(f) is terminated.’’.

4. A notice of delegation submitted under 310 CMR 7.32(2)(f)3. shall be effective, with regard to the CAIR designated representative or alternate CAIR designated representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such CAIR designated representative or alternate CAIR designated representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

7.32: continued

5. Any electronic submission covered by the certification in 310 CMR 7.32(2)(f)3.d.i. and made in accordance with a notice of delegation effective under 310 CMR 7.32(2)(f)4. shall be deemed to be an electronic submission by the CAIR designated representative or alternate CAIR designated representative submitting such notice of delegation.

(3) Permits.

(a) General CAIR NOx Ozone Season Trading Program Permit Requirements.

1. Each CAIR NOx Ozone Season source shall have a CAIR permit.

2. For each CAIR NOx Ozone Season source required to have an Operating Permit under 310 CMR 7.00: *Appendix C*, such Operating Permit shall include a CAIR permit administered by the Department. The CAIR portion of the Operating Permit shall be administered in accordance with the Department's Operating Permit regulations promulgated under 310 CMR 7.00: *Appendix C*, except as provided otherwise by 310 CMR 7.32(1)(e) and (3).

3. Each CAIR permit shall contain, with regard to the CAIR NOx Ozone Season source and the CAIR NOx Ozone Season units at the source covered by the CAIR permit, all applicable CAIR NOx Ozone Season Trading Program requirements and shall be a complete and separable portion of the Operating Permit.

(b) Submission of CAIR Permit Applications.

1. Duty to Apply. The CAIR designated representative of any CAIR NOx Ozone Season source required to have an Operating Permit shall submit to the Department a complete CAIR permit application under 310 CMR 7.32(3)(c) for the source covering each CAIR NOx Ozone Season unit at the source at least 18 months (or such lesser time provided by the Department) before the later of January 1, 2009 or the date on which the CAIR NOx Ozone Season unit commences commercial operation.

2. Duty to Reapply. For a CAIR NOx Ozone Season source required to have an Operating Permit, the CAIR designated representative shall submit a complete CAIR permit application under 310 CMR 7.32(3)(c) for the source covering each CAIR NOx Ozone Season unit at the source to renew the CAIR permit in accordance with the Department's Operating Permits regulations addressing permit renewal.

(c) Information Requirements for CAIR Permit Applications. A complete CAIR permit application shall include the following elements concerning the CAIR NOx Ozone Season source for which the application is submitted, in a format prescribed by the Department:

1. Identification of the CAIR NOx Ozone Season source;

2. Identification of each CAIR NOx Ozone Season unit at the CAIR NOx Ozone Season source;

3. The standard requirements under 310 CMR 7.32(1)(f); and,

4. An energy output monitoring plan.

a. The output monitoring plan shall propose a method for quantification of net energy output, including:

i. A diagram that includes the following features where applicable:

(i) If the CAIR NOx Ozone Season unit monitors net electric output, the diagram shall contain all CAIR NOx Ozone Season units and all generators served by each CAIR NOx Ozone Season unit and the relationship between CAIR NOx Ozone Season units and generators. If a generator served by a CAIR NOx Ozone Season unit is also served by a non-CAIR unit, the non-CAIR unit and its relationship to each generator shall be indicated on the diagram as well. The diagram shall indicate where the net electric output is measured and shall include all electrical inputs and outputs to and from the CAIR NOx Ozone Season source. If net electric output is determined using a billing meter, the diagram shall show each billing meter used to determine net sales of electricity and shall show that all electricity measured at the point of sale is generated by the CAIR NOx Ozone Season units.

7.32: continued

(ii) If the CAIR NOx Ozone Season unit monitors net thermal output, the diagram shall include all steam or hot water coming into the net steam system, including steam from CAIR NOx Ozone Season units and non-CAIR units, and all exit points of steam or hot water from the net steam system. In addition, each input and output stream shall have an estimated temperature, pressure and phase indicator, and an enthalpy in Btu/lb. The diagram of the net steam system shall identify all useful loads, house loads, parasitic loads, any other steam loads and all boiler feedwater returns. The diagram shall represent all energy losses in the system as either usable or unusable losses. The diagram shall also indicate all flow meters, temperature or pressure sensors or other equipment used to calculate gross thermal output. If a sales agreement is used to determine net thermal output, the diagram shall show the monitoring equipment used to determine the sales of steam.

ii. A description of each output monitoring system. The description of the output monitoring system shall include a written description of the output system and the equations used to calculate output. For net thermal output systems, descriptions and justifications of each useful load shall be included.

iii. A detailed description of all quality assurance/quality control activities that will be performed to maintain the output system in accordance with 310 CMR 7.32(9)(b).

iv. Documentation supporting any output value(s) to be used as a missing data value should there be periods of invalid output data. The missing data output value shall be either zero or an output value that is likely to be lower than a measured value and that is approved as part of the monitoring plan required under 310 CMR 7.32(3)(c)4.

b. CAIR $NO_x$ Ozone Season sources selling steam shall use billing meters to determine net steam output unless the Department approves an alternative method for quantification of net steam output. A CAIR $NO_x$ Ozone Season source whose steam output is not measured by billing meters or whose steam output is combined with output from a non-CAIR unit prior to measurement by the billing meter shall propose to the Department an alternative method for quantification of net steam output. If data for steam output are not available, the CAIR $NO_x$ Ozone Season source may report heat input providing useful steam output as a surrogate for steam output.

(d) CAIR Permit Contents and Term.

1. Each CAIR permit will contain, in a format prescribed by the Department, all elements required for a complete CAIR permit application under 310 CMR 7.32(3)(c).

2. Each CAIR permit is deemed to incorporate automatically the definitions of terms under 310 CMR 7.32(1)(b) and, upon recordation by the Administrator under 310 CMR 7.32(6) or (7), every allocation, transfer, or deduction of a CAIR NOx Ozone Season allowance to or from the compliance account of the CAIR NOx Ozone Season source covered by the permit.

3. The term of the CAIR permit will be set by the Department, as necessary to facilitate coordination of the renewal of the CAIR permit with issuance, revision, or renewal of the CAIR NOx Ozone Season source's Operating Permit or other federally enforceable permit as applicable.

(e) CAIR Permit Revisions. Except as provided in 310 CMR 7.32(3)(d)2., the Department shall revise the CAIR permit, as necessary. If the facility is required to have an Operating Permit under 310 CMR 7.00: *Appendix C*, such Operating Permit shall be modified upon approval of the revision to the CAIR permit in accordance with the procedures in 310 CMR 7.00: Appendix C(8).

(**(4) [Reserved]**)

7.32: continued

(5) CAIR NOx Ozone Season Allowance Allocations.

(a) State Trading Budgets. The Massachusetts trading budget for annual allocations of CAIR NOx Ozone Season allowances for each control period in 2009 through 2014 is 7,914 tons of NOx, and 6,656 tons of NOx for each control period thereafter.

(b) Timing Requirements for CAIR NOx Ozone Season Allowance Allocations.

1. On or before April 30, 2007, the Department shall submit to the Administrator the CAIR NOx Ozone Season allowance allocations for the control periods in 2009 through 2011, in a format prescribed by the Administrator and in accordance with 310 CMR 7.32(5)(c)3.

2. On or before October 31, 2008 and October 31st of each year thereafter, the Department shall submit to the Administrator the CAIR NOx Ozone Season allowance allocations for existing CAIR NOx Ozone Season units, in a format prescribed by the Administrator and in accordance with 310 CMR 7.32(5)(c)3., for the control period in the fourth year after the year of the applicable deadline for submission under 310 CMR 7.32(5)(b)2.

3. On or before July 31, 2009 and July 31st of each year thereafter, the Department shall submit to the Administrator the CAIR NOx Ozone Season allowance allocations from the New Unit Set-aside, in a format prescribed by the Administrator and in accordance with 310 CMR 7.32(5)(c)1., for the control period in the year of submission under 310 CMR 7.32(5)(b)3.

4. On or before October 31, 2009 and October 31st of each year thereafter, the Department shall submit to the Administrator the CAIR NOx Ozone Season allowance allocations from the Public Benefit Set-aside, in a format prescribed by the Administrator and in accordance with 310 CMR 7.32(5)(c)2., for the control period in the year of submission under 310 CMR 7.32(5)(b)4.

(c) CAIR NOx Ozone Season Allowance Allocations.

1. New Unit Set-aside.

a. General Provisions.

i. From each CAIR NOx Ozone Season allowance vintage, the Department shall allocate 5% of the Massachusetts state trading budget to a New Unit Set-aside account. New Massachusetts' CAIR NOx Ozone Season units may request CAIR NOx Ozone Season allowances from this New Unit Set-aside account and the Department shall allocate CAIR NOx Ozone Season allowances from the New Unit Set-aside account to the new CAIR NOx Ozone Season units according to the procedures in 310 CMR 7.32(5)(c)1.b. If, in total, new CAIR NOx Ozone Season units request more CAIR NOx Ozone Season allowances than are available in the New Unit Set-aside account that calendar year, excluding those allocated under 310 CMR 7.32(5)(c)1.b.ii(ii), then CAIR NOx Ozone Season allowances shall be allocated to the new CAIR NOx Ozone Season units by the Department *pro rata* based on net control period electrical and useful steam output.

ii. If the number of CAIR $NO_x$ Ozone Season allowances in the New Unit Set-aside account that were previously eligible for allocation to new CAIR $NO_x$ Ozone Season units under 310 CMR 7.32(5)(c)1. is 10% or more of the total Massachusetts state trading budget after the Administrator completes the annual deduction process under 310 CMR 7.32(6)(e), then any such CAIR $NO_x$ Ozone Season allowances in excess of 5% of the Massachusetts state trading budget shall be allocated to existing CAIR $NO_x$ Ozone Season units in accordance with 310 CMR 7.32(5)(c)3.b.x.

iii. After a new CAIR $NO_x$ Ozone Season unit has operated for one complete control period, the Department will allocate CAIR $NO_x$ Ozone Season allowances for the control period commencing four years in the future according to 310 CMR 7.32(5)(c)3. The unit shall continue to receive CAIR $NO_x$ Ozone Season allowances from the New Unit Set-aside for each control period according to 310 CMR 7.32(5)(c)1. until the first control period it is allocated pursuant to 310 CMR 7.32(5)©)3.

7.32: continued

iv. The Department will calculate the allocation for each control period and on or before July 7th of each year forward a draft spreadsheet containing all new CAIR $NO_x$ Ozone Season units' allocations, including output data and calculations, to new CAIR $NO_x$ Ozone Season units. This action will commence a comment period ending July 17th during which the Department will accept comments on any errors in the output data and the calculation of the allocations contained in the spreadsheet. If the Department receives any comments, or does not receive the information required under 310 CMR 7.32(5)(c)1.b.ii.(ii), and makes revisions to the spreadsheet, then it will provide a five-day comment period on the revised spreadsheet. The Department shall post the final allocation on the Department website and send it to the Administrator and new CAIR $NO_x$ Ozone Season units on or before July 31st of each year.

b. Allocation Process.

i. Any person who owns, leases, operates or controls a new CAIR NOx Ozone Season unit may request that the Department allocate CAIR NOx Ozone Season allowances to the unit from the New Unit Set-aside account. No later than May 1st of each year, each CAIR NOx Ozone Season unit may request that the Department allocate CAIR NOx Ozone Season allowances to that unit.

ii. Beginning in 2009, on or before July 31st of each year, the Department shall allocate and report to the Administrator CAIR NOx Ozone Season allowances to be recorded from the New Unit Set-aside account to new CAIR NOx Ozone Season units as follows:

(i) For CAIR NOx Ozone Season units with one or more full ozone season(s) of operation:

-1. For electric generation:

$$UUA1(y) = \frac{MWh(y-1) * 1.5 \text{ lbs/MWh}}{2000 \text{ lbs/ton}}$$

$$UUA2(y) = UUA1(y) * PAME(y)$$

Where:

UUA1 = Unit's Unadjusted Allocation;

UUA2 = Unit's Unadjusted Allocation adjusted to match existing units' allocation factor;

MWh = Actual net electric output for the control period in year y-1 in megawatt hours;

PAME(y) = the prorated allocation multiplier for existing CAIR NOx Ozone Season units in year y, calculated in 310 CMR 7.32(5)(c)3.

7.32: continued

-2. For steam generation:

$$UUA1(y) = \frac{SO(y\text{-}1) * 0.44 \text{ lbs/MMBtu output}}{2000 \text{ lbs/ton}}$$

$$UUA2(y) = UUA1(y) * PAME(y)$$

Where:

SO = Actual net steam output for the control period in year y-1 in MMBtu.

-3. If the sum of all UUA2(y) is greater than the number of CAIR NOx Ozone Season allowances available for allocation, then:

$$PAMN(y) = \frac{\text{CAIR NOx Ozone Season Allowances available for allocation to New Units excluding those allocated under 310 CMR 7.32(5)(c)1.b.ii(ii)}}{\text{sum of all UUA2(y)}}$$

$$UAA(y) = UUA2(y) * PAMN(y)$$

Where:

PAMN(y) = the prorated allocation multiplier for new CAIR NOx Ozone Season units in year y;

UAA = Unit's Adjusted Allocation, a unit's allocation, adjusted to match existing units' allocation factor and adjusted so the total new unit control period allocation does not exceed the CAIR NOx Ozone Season allowances available for allocation to new CAIR NOx Ozone Season units.

-4. If the sum of all UUA2(y) is less than or equal to the number of CAIR NOx Ozone Season allowances available for allocation, then:

UAA(y) = UUA2(y)

-5. For CAIR NOx Ozone Season units with both electrical and useful steam output, the Department will add the number of CAIR NOx Ozone Season allowances allocated for each type of output together to determine the total.

(ii) CAIR NOx Ozone Season units with less than one full ozone season of operation shall receive CAIR NOx Ozone Season allowances equal to their maximum ozone season NOx emissions permitted in accordance with 310 CMR 7.02, 310 CMR 7.00: *Appendix A* or the Prevention of Significant Deterioration (PSD) Program, whichever is lowest, as long as they submit proof of the following on or before July 17th:

-1. the CAIR NOx Ozone Season unit has commenced operation; and

-2. electronic data for second calendar quarter NOx emissions has been submitted to the Administrator for the CAIR NOx Ozone Season unit.

(iii) The adjusted allocation for each CAIR NOx Ozone Season source is calculated by summing the adjusted allocation of each source's new CAIR NOx Ozone Season units. Each CAIR NOx Ozone Season source's allocation is then rounded to the nearest whole number. If the total number of rounded adjusted CAIR NOx Ozone Season allowances sums to a number that is below or above the number of CAIR NOx Ozone Season allowances available, additional CAIR NOx Ozone Season allowances are added to or subtracted from the CAIR NOx Ozone Season sources whose decimal portion of their adjusted allocation is closest to 0.5, to ensure the total number of rounded adjusted CAIR NOx Ozone Season allowances sums to the number of CAIR NOx Ozone Season allowances available to new CAIR $No_x$ Ozone Season units.

7.32: continued

2. Public Benefit Set-aside.

a. The Department will annually allocate 10% of the Massachusetts state trading budget to a Public Benefit Set-aside (PBSA) account to provide for allocation of CAIR NOx Ozone Season allowances for Energy Efficiency Projects (EEPs) and Renewable Energy Projects (REPs).

b. In any calendar year, if the Department approves the allocation of more CAIR NOx Ozone Season allowances for EEPs and REPs than are available in the PBSA account, then a maximum of 2% of the Massachusetts state trading budget may be transferred from the New Unit Set-aside account to the PBSA account, if available. The Department will allocate CAIR NOx Ozone Season allowances to the new CAIR NOx Ozone Season sources as requested under 310 CMR 7.32(5)(c)1. before it transfers any surplus new CAIR NOx Ozone Season source CAIR NOx Ozone Season allowances to the PBSA account.

c. In any calendar year, if the Department approves the allocation of more CAIR NOx Ozone Season allowances than are available in the PBSA account for that calendar year, including those surplus New Unit Set-aside CAIR NOx Ozone Season allowances transferred pursuant to 310 CMR 7.32(5)(c)2.b., then CAIR NOx Ozone Season allowances will be allocated to all PBSA projects for that year on a pro rata basis.

d. If the number of CAIR $NO_x$ Ozone Season allowances in the PBSA account that were previously eligible for allocation for EEPs or REPs under 310 CMR 7.32(5)(c)2. is 10% or more of the total Massachusetts state trading budget after the Administrator completes the annual deduction process under 310 CMR 7.32(6)(e), then any such CAIR $NO_x$ Ozone Season allowances in excess of 5% of the Massachusetts state trading budget shall be allocated to existing CAIR $NO_x$ Ozone Season units in accordance with 310 CMR 7.32(5)(c)3.b.x.

e. PBSA CAIR NOx Ozone Season Allowance Calculations. To calculate the number of CAIR NOx Ozone Season allowances that may be allocated under 310 CMR 7.32(5)(c)2., a proponent shall use one of the following formulae, except that other reliable and replicable methods of quantification acceptable to the Department may also be used for projects that in the aggregate do not exceed five PBSA CAIR NOx Ozone Season allowances:

i. REPs Generating Electrical Energy.

CAIR NOx Ozone Season allowances = (MWh * 1.5 lbs/MWh) / (2000 lbs/ton);

Where MWh is the net electrical energy generated by a renewable energy project.

ii. REPs Generating Useful Net Thermal Energy.

CAIR NOx Ozone Season allowances = (MMBtu output * 0.44 lb/MMBtu output) / (2000 lbs/ton);

Where MMBtu output is the useful net thermal energy generated by the REP.

iii. EEPs Saving Electrical Energy.

(i) CAIR NOx Ozone Season allowances = (MWh * 1.5 lbs/MWh) / (2000 lbs/ton);

Where MWh is the amount of electrical energy saved by the EEP.

(ii) Except as provided in 310 CMR 7.32(5)(c)2.e.iii.(iii), the amount of electrical energy saved shall be calculated by comparing, the amount of electrical energy consumed during the control period in the calendar year preceding the year in which the application is submitted, to the amount of electrical energy consumed during the PBSA baseline period. If monthly data for energy consumed is not available, then energy savings shall be calculated by comparing the energy consumed during the calendar years corresponding to the periods described in 310 CMR 7.32(5)(c)2.e.iii.(ii) multiplied by 5/12.

7.32: continued

(iii) For the construction of a new building or addition that exceeds the requirements of 780 CMR 1301.0 *et seq*., Energy Conservation, the amount of electrical energy saved shall be calculated by comparing, the amount of electrical energy consumed during the first full control period immediately preceding the year the application is submitted, to the amount of electrical energy that would have been consumed at the same occupancy level during the control period if the building or addition had been constructed according to 780 CMR 1301.0 *et seq*., Energy Conservation. If monthly data for energy consumed is not available then energy savings shall be calculated by comparing the energy consumed during the calendar years corresponding to the periods described in 310 CMR 7.32(5)(c)2.e.iii.(iii) multiplied by 5/12.

iv. EEPs Saving Thermal Energy.

(i) CAIR NOx Ozone Season Allowances = (MMBtu output * 0.44 lb/MMBtu output) / (2000 lbs/ton);

Where MMBtu output is the amount of thermal energy saved by the EEP.

(ii) Except as provided in 310 CMR 7.32(5)(c)2.e.iv.(iii), the amount of thermal energy saved shall be calculated by comparing, the amount of thermal energy consumed during the control period in the calendar year preceding the year in which the application is submitted, to the amount of thermal energy consumed during the PBSA baseline period. If monthly data for energy consumed is not available, then energy savings shall be calculated by comparing the energy consumed during the calendar years corresponding to the periods described in 310 CMR 7.32(5)(c)2.e.iv.(ii) multiplied by 5/12.

(iii) For the construction of a new building or addition that exceeds the requirements of 780 CMR 1301.0 *et seq*., Energy Conservation, the amount of thermal energy saved shall be calculated by comparing, the amount of thermal energy consumed during the first full control period immediately preceding the year the application is submitted, to the amount of thermal energy that would have been consumed at the same occupancy level during the control period if the building or addition had been constructed according to 780 CMR 1301.0 *et seq*., Energy Conservation. If monthly data for energy consumed is not available then energy savings shall be calculated by comparing the energy consumed during the calendar years corresponding to the periods described in 310 CMR 7.32(5)(c)2.e.iv.(iii) multiplied by 5/12.

v. EEPs Saving Thermal or Mechanical Energy in a Manufacturing Process Where Energy Consumption is Measured on a Unit of Production Basis.

A unit of production as used in this formula may include manufactured items, raw, intermediate, or final materials including steam, or other products measured in discrete units and produced as a result of the consumption of energy in a specific process or piece of equipment (*e.g*., a natural gas compressor).

CAIR NOx Ozone Season Allowances = (((Et1/Pt1) - (Et2/Pt2)) * Pt2* NPt2 * (NPt1/NPt2)) / (2000 lbs/ton);

Where Et1 = Energy consumed during the PBSA baseline period in MMBtu. If monthly data is not available for the control period, then Et1 = the amount of energy consumed during any one of the three calendar years before the year in which the EEP was first put in use or first became operational multiplied by 5/12;

7.32: continued

Pt1 = Units of product produced per PBSA baseline period. If monthly data is not available for the control period, then Pt1 = the units of product produced during any one of the three calendar years before the year in which the EEP was first put in use or first became operational, multiplied by 5/12;

NPt1 = NOx emitted during the consumption of energy, measured in pounds per MMBtu heat input during the PBSA baseline period. If monthly data is not available for the control period, then NPt1 = NOx emitted during any one of the three calendar years before the year in which the EEP was first put in use or first became operational, multiplied by 5/12.

Et2 = Energy consumed during the control period in the year before the calendar year in which the application is submitted. If monthly data is not available for the control period, then Et2 = energy consumed during the calendar year before the year in which the application is submitted, multiplied by 5/12.

Pt2 = Units of product produced during the control period in the year before the calendar year in which the application is submitted. If monthly data is not available for the control period then Pt2 = units of product produced during the calendar year before the year in which the application is submitted, multiplied by 5/12.

NPt2 = NOx emitted during the consumption of energy, measured in pounds per MMBtu heat input during the control period in the year before the calendar year in which the application is submitted. If monthly data is not available for the control period then NPt2 = NOx emitted during the calendar year before the year in which the application is submitted, multiplied by 5/12.

vi. EEPs That are Combined Heat and Power Systems With Actual Energy Efficiency Equal to or Greater Than 60%.

(i) For purposes of determining when a combined heat and power system meets 60% Actual Energy Efficiency, Actual Energy Efficiency shall be based on the combined heat and power system, and calculated using the following formula:

Eff% = (NEO + UTO) / GEI;

Where:

Eff% = Actual energy efficiency;

NEO = Net useful electrical energy output of the system converted to British thermal units, (Btus) per unit of time;

UTO = Net useful thermal energy output, or the energy output in Btus of thermal energy used for heating, cooling, industrial processes, or other beneficial uses, per unit of time; and

GEI = Gross energy input, based upon the higher heating value of fuel, in Btus per unit of time.

7.32: continued

(ii) CAIR NOx Ozone Season allowances = ([NOx conventional] – [NOx CHP system]) / (2,000 lbs/ton)

Where:

[NOx conventional] = (kWh * (3,412 Btu/kWh) / 0.34 + HeatOut / 0.8) / 1,000,000 * (0.15 lbs NOx/MMBtu);

[NOx CHP system] = BtuIn / 1,000,000 * NOxRate;

kWh = The number of kilowatt-hours of net electrical energy generated by the system during the PBSA baseline period. If monthly data is not available for the PBSA baseline period, then the number of kilowatt-hours of net electrical energy generated by the system during any one of the three calendar years before the year in which the system first generated energy, multiplied by 5/12;

HeatOut = The number of British thermal units (Btu) of net useful thermal energy used by the system for space, water, or industrial process heat during a control period. If monthly data is not available for the control period, then HeatOut = the number of British thermal units (Btu) of net useful thermal energy used by the system for space, water, or industrial process heat during a calendar year, multiplied by 5/12;

BtuIn = The heat input of fuel used by the system to produce electrical or thermal energy during the PBSA baseline period. If monthly data is not available for the PBSA baseline period, then BtuIn = the heat input of fuel used by the system to produce electrical or thermal energy during any one of the three calendar years before the year during which the system first generated energy, multiplied by 5/12; and

NOxRate = NOx emitted in normal system operation by the project (lbs NOx/MMBtu).

vii. If the sum of all projects' PBSA CAIR NOx Ozone Season allowances is greater than the number of CAIR NOx Ozone Season allowances available for allocation, then each project's allocation is adjusted as follows:

$$\text{PAA} = \text{Project's allocation} * \frac{\text{CAIR NOx Ozone Season allowances available for allocation to PBSA projects}}{\text{sum of all projects' PBSA CAIR Nox Ozone Season allowances}}$$

Where:

PAA = Project's Adjusted Allocation, a project's allocation, adjusted so the total PBSA control period allocation does not exceed the CAIR NOx Ozone Season allowances available.

viii. If the sum of all projects' PBSA CAIR NOx Ozone Season allowances is less than or equal to the number of CAIR NOx Ozone Season allowances available for allocation, no adjustment is needed to ensure that too many PBSA CAIR NOx Ozone Season allowances are not allocated.

7.32: continued

ix. The adjusted allocation for each proponent is calculated by taking the sum of the adjusted allocation of each proponent's projects. Each proponent's allocation is then rounded to the nearest whole number. If the total number of rounded adjusted CAIR NOx Ozone Season allowances is below or above the number of CAIR NOx Ozone Season allowances available, additional CAIR NOx Ozone Season allowances are added to or subtracted from the proponents whose decimal portion of their adjusted allocation is closest to 0.5, to ensure the total number of rounded adjusted CAIR NOx Ozone Season allowances sums to the number of CAIR NOx Ozone Season allowances available.

f. Measurement and Verification. Measurements of the amount of energy saved or generated by each project:

i. shall adhere to the International Performance Measurement and Verification Protocol, March 2002, DOE/GO-102002-1554, (IPMVP), or U.S. EPA's Conservation Verification Protocol; and

ii. shall adhere to the measurement and verification provisions of ISO New England Operating Procedure No. 18 "Metering and Telemetering Criteria" or other provisions acceptable to the Department; and

iii. shall make normalization adjustments for energy savings in accordance with the IPMVP, (*e.g.*, to correct for increases in lighting capacity in a defined office space, or for weather conditions causing increased or decreased load demands); and

iv. may include without limitation, thermodynamic steam table energy extrapolations; the American Society of Mechanical Engineers' Standard for Measurement of Fluid Flow in Pipes Using Orifice, Nozzle, and Venturi, (ASME MFC-3M-1989); manufacturers' efficiency specifications for useful energy determinations, or other measurement and verification protocols acceptable to the Department.

g. PBSA Procedures.

i. Each proponent shall establish a CAIR NOx Ozone Season Allowance Tracking System account with the Administrator in accordance with 310 CMR 7.32(6)(b).

ii. All applications for CAIR NOx Ozone Season allowances shall:

(i) be submitted on the Department's Public Benefit Set Aside NOx Allowance Application form;

(ii) describe the project, and explain how the amount of energy saved or generated has been measured, verified and calculated, and has been apportioned between multiple proponents;

(iii) provide any additional information requested by the Department, including without limitation, site information, plans, specifications, drawings, calculations and operation and maintenance procedures; and,

(iv) include the following certification signed by a responsible official:

As the project proponent, or the person fully authorized to make this certification on behalf of the project proponent, I certify that I personally examined the foregoing information, am familiar with the information contained in this application and any attachments thereto and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information contained in this application, including without limitation the quantification of the total amount of energy generated or saved by the project, is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment.

h. Timing of CAIR NOx Ozone Season Allowances.

i. Project Start Date. Only REPs that were built and began generating energy and EEPs that were built and in use, or installed and operational, after December 31, 1999 are eligible for CAIR NOx Ozone Season allowances from the PBSA account.

7.32: continued

ii. Application Submission. Proponents shall submit applications for PBSA CAIR NOx Ozone Season allowances to the Department on or before August 1st of each year. The designated year of the PBSA CAIR NOx Ozone Season allowances allocated will correspond to the calendar year in which the application is submitted. The alloc ation will be based on the energy saved or generated in the calendar year preceding the year in which the application is submitted.

iii. Annual Applications. A proponent may request CAIR NOx Ozone Season allowances for only one year at a time. A separate application shall be submitted annually for each year during which an REP generates energy or an EEP saves energy.

iv. Useful Life of EEPs. An EEP is only eligible for CAIR NOx Ozone Season allowances for energy saved during the seven years immediately following the year during which the EEP was first put in use (in the case of new buildings and additions), was first installed (in the case of materials) or first became operational (in the case of equipment or procedures).

i. General Provisions.

i. Limitation. If more than one proponent submits an application for CAIR NOx Ozone Season allowances for the same energy saved or generated, the Department, at its discretion, may disapprove the CAIR NOx Ozone Season allowances for which more than one application has been received. To ensure that proponents are not applying for the same energy saved or generated, proponents shall document the proponent project costs incurred, by indicating and calculating the participant cost divided by the sum of: participant costs; sales, technical assistance, and training costs; and customer incentives.

ii. Aggregation. Proponents may submit an application that aggregates two or more REPs or EEPs that individually result in less than one CAIR NOx Ozone Season allowance, but that equal at a minimum one whole CAIR NOx Ozone Season allowance when aggregated. The Department will not allocate CAIR NOx Ozone Season allowances for REPs or EEPs totaling less than one whole CAIR NOx Ozone Season allowance unless they are aggregated to equal more than one whole allowance.

iii. Banking and Transferring. CAIR NOx Ozone Season allowances from the PBSA account may be banked in accordance with 310 CMR 7.32(6)(f) or transferred in accordance with 310 CMR 7.32(7).

iv. Whole CAIR NOx Ozone Season Allowances. All CAIR NOx Ozone Season allowances shall be allocated, transferred, or used as whole CAIR NOx Ozone Season allowances. To determine the number of whole CAIR NOx Ozone Season allowances, the number of CAIR NOx Ozone Season allowances shall be rounded down for decimals less than 0.5 and rounded up for decimals of 0.5 or greater. Requests for less than 1 CAIR NOx Ozone Season allowance may not be rounded up to 1.0.

v. Relationship to Air Pollution Control Regulations. Proponents applying for CAIR NOx Ozone Season allowances from the PBSA account are not required to apply for Emission Control Plans or Operating Permits solely on account of said application.

vi. Relationship to Other Laws. Proponents shall comply with all applicable state and federal laws and regulations, including without limitation, M.G.L. c. 93A (regarding the Regulation of Business Practices for Consumer Protection); M.G.L. c. 164 (regarding the Manufacture and Sale of Gas and Electricity); 940 CMR 19.00 *et seq*. the regulations of the Office of the Attorney General regarding the Retail Marketing and Sale of Electricity, and 220 CMR 11.00 *et seq*., the Rules Governing the Restructuring of the Electric Industry. Subject to 310 CMR 7.32(5)(c)2.i.vi., nothing in 310 CMR 7.32(5)(c)2. shall be construed to limit any rights under M.G.L. c. 164.

7.32: continued

3. Allocation Process for Existing CAIR NOx Ozone Season Units.

a. General Provisions.

i. For each control period in 2009 and thereafter, the Department shall allocate to existing Massachusetts' CAIR NOx Ozone Season units a total amount of CAIR NOx Ozone Season allowances equal to the tons of NOx emissions in the State trading budget under 310 CMR 7.32(5)(a) minus those CAIR NOx Ozone Season allowances allocated to the New Unit Set-aside and PBSA in accordance with 310 CMR 7.32(5)(c)1.a.i. and 2.a. (except as provided in 310 CMR 7.32(5)(c)3.b.x.).

ii. Beginning with the allocation for the 2012 control period, and for each control period thereafter, CAIR designated representatives shall report control period output data for all CAIR NOx Ozone Season units on an electronic template approved by the Department. After receiving output data from the CAIR designated representatives, the Department will calculate the allocation for the particular control period and forward a draft spreadsheet containing all of the CAIR NOx Ozone Season units' allocations, including output data and calculations, to the CAIR designated representative for each CAIR NOx Ozone Season unit. This action will commence a 30-day comment period during which the Department will accept comments on any errors in the output data and the calculation of the allocations contained in the spreadsheet. If the Department receives any comments and makes revisions to the spreadsheet, then it will provide a ten-day comment period on the revised spreadsheet. The Department will post the final allocation on the Department website and send it to the Administrator and CAIR NOx Ozone Season units on or before October 31st of each year.

b. Allocation Process. The Department will allocate CAIR NOx Ozone Season allowances to existing CAIR NOx Ozone Season units using the following formulae:

i. For electricity generation:

$$UUA(y) = \frac{AEO(y) * 1.5 \text{ lbs/MWh}}{2000 \text{ lbs/ton}}$$

Where:

UUA is a CAIR NOx Ozone Season unit's unadjusted allocation for year y;

AEO is a CAIR NOx Ozone Season unit's average net electric output in MWh as determined in 310 CMR 7.32(5)(c)3.b.vi., vii. and viii.

ii. For useful steam generation:

$$UUA(y) = \frac{ASO(y) * 0.44 \text{ lbs/MMBtu output}}{2000 \text{ lbs/ton}}$$

Where: ASO is a CAIR NOx Ozone Season unit's average net useful steam output in MMBtu as determined in 310 CMR 7.32(5)(c)3.b.vi., vii., and viii.

iii. For CAIR NOx Ozone Season units with both electrical and useful steam output, the Department will add the number of CAIR NOx Ozone Season allowances allocated for each type of output together to determine the total.

iv. A CAIR NOx Ozone Season unit's adjusted allocation (UAA) will be calculated from the UUA as follows:

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PAME(y) = CAIR NOx Ozone Season allowances available for allocation to existing CAIR NOx Ozone Season units / sum of all UUA(y)

UAA(y) = UUA(y) * PAME(y)

Where: PAME(y) = the prorated allocation multiplier for existing CAIR NOx Ozone Season units in year y.

v. The adjusted allocation for each CAIR NOx Ozone Season source is calculated by summing the adjusted allocation of each source's existing CAIR NOx Ozone Season units. Each CAIR NOx Ozone Season source's allocation is then rounded to the nearest whole number. If the total number of rounded adjusted CAIR NOx Ozone Season allowances sums to a number that is below or above the number of CAIR NOx Ozone Season allowances available, additional CAIR NOx Ozone Season allowances are added to or subtracted from the CAIR NOx Ozone Season sources whose decimal portion of their adjusted allocation is closest to 0.5, to ensure the total number of rounded adjusted CAIR NOx Ozone Season allowances sums to the number of CAIR NOx Ozone Season allowances available to existing CAIR $No_x$ Ozone Season units.

vi. For CAIR NOx Ozone Season units with three full control periods of historical output, the Department will determine AEO and ASO according to the following formulae:

AEO(y) = net electric output in MWh for the average of the two highest control periods seven, six and five years prior to year y

ASO(y) = net useful steam output in MMBtu for the average of the two highest control periods seven, six and five years prior to year y

vii. For CAIR NOx Ozone Season units with two full control periods of historical output the Department will determine AEO and ASO according to the following formulae:

AEO(y) = average net electrical output in MWh for the two full control periods six and five years prior to year y

ASO(y) = average useful steam output in MMBtu for the two full control periods six and five years prior to year y

viii. For CAIR NOx Ozone Season units with only one full control period of historical output the Department will determine AEO and ASO according to the following formulae:

AEO(y) = net electrical output in MWh for the one full control period five years prior to year y

ASO(y) = useful steam output in MMBtu for the one full control period five years prior to year y

ix. After a unit has commenced operation, every control period is included in determining the number of full control periods of historical operation, including control periods with an electrical or useful steam output of zero.

7.32: continued

x. If CAIR NOx Ozone Season allowances are designated for allocation to existing CAIR NOx Ozone Season units from the New Unit Set-aside or the PBSA under 310 CMR 7.32(5)(c)1.a.ii. or 310 CMR 7.32(5)(c)2.d., the Department will allocate for each CAIR NOx Ozone Season allowance vintage year to each existing CAIR NOx Ozone Season unit an amount of CAIR NOx Ozone Season allowances equal to the total amount of such designated unallocated CAIR NOx Ozone Season allowances, multiplied by the unit's allocation for the allowance vintage year under 310 CMR 7.32(5)(c)3., divided by the total number of CAIR NOx Ozone Season allowances allocated to existing CAIR NOx Ozone Season units for the allowance vintage year pursuant to 310 CMR 7.32(5)(a), and rounded to the nearest whole CAIR NOx Ozone Season allowance in accordance with 310 CMR 7.32(5)(c)3.b.v.

xi. For control periods 2009 through 2011, the existing CAIR NOx Ozone Season sources will receive allocations based on the procedures in 310 CMR 7.32(5)(c)3.b.i. through ix., but using output data for 2004 through 2006. Allocations for each control period are listed in 310 CMR 7.32(5)(c)3.: *Table A*. Beginning with the allocation for control period 2012, the existing CAIR NOx Ozone Season sources in Table 1 will be allocated CAIR NOx Ozone Season allowances according to the procedures in 310 CMR 7.32(5)(c)3.b.i. through x.

7.32(5)(c)3.: *TABLE A*
Annual CAIR NOx Ozone Season Allowance Allocations for 2009 - 2011

| NAME | ORIS CODE | CAIR $NO_x$ OZONE SEASON ALLOWANCES |
|---|---|---|
| ANP Bellingham Energy Company | 55211 | 368 |
| ANP Blackstone Energy Company | 55212 | 398 |
| Bellingham Cogen | 10307 | 204 |
| Berkshire Power | 55041 | 192 |
| Blackstone Street | 1594 | 10 |
| Brayton Point | 1619 | 1141 |
| Canal Station | 1599 | 612 |
| Cleary Flood | 1682 | 9 |
| Dartmouth Power | 52026 | 32 |
| Deer Island Treatment | 10823 | 3 |
| Dighton | 55026 | 102 |
| Doreen | 1631 | 0 |
| Fore River | 55317 | 552 |
| Framingham Station | 1586 | 0 |
| GE Aircraft Engines Lynn | 10029 | 13 |
| Kendall Square | 1595 | 267 |
| Kneeland Station | 880023 | 92 |
| Lowell Cogeneration | 10802 | 0 |
| Lowell Power | 54586 | 0 |
| Masspower | 10726 | 140 |
| Medway Station | 1592 | 0 |

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| | | |
|---|---|---|
| Milford Power | 54805 | 59 |

| | | |
|---|---|---|
| Millennium Power Partners | 55079 | 293 |
| MIT Central Utility | 54907 | 79 |
| Mount Tom | 1606 | 129 |
| Mystic | 1588 | 1327 |
| New Boston | 1589 | 75 |
| Pepperell | 10522 | 0 |
| Pittsfield Generating | 50002 | 47 |
| Potter | 1660 | 3 |
| Salem Harbor | 1626 | 370 |
| Somerset | 1613 | 121 |
| South Boston Combustion Turbines | 10176 | 0 |
| Stony Brook | 6081 | 59 |
| Waters River | 1678 | 6 |
| West Springfield | 1642 | 24 |
| Woodland | 1643 | 0 |

4. If a person who owns, leases, operates or controls a CAIR NOx Ozone Season unit reduces the CAIR NOx Ozone Season unit's emissions, and transfers those emission reductions under 310 CMR 7.00: *Appendix A* or *B* to a unit not subject to 310 CMR 7.32 or another NOx allowance trading program approved by the Administrator, the transferor must surrender or retire CAIR NOx Ozone Season allowances equal to the emission reductions used each year. This surrender or retirement will not be required if the use occurs after a unit becomes subject to 310 CMR 7.32 or another NOx allowance trading program approved by the Administrator.

5. Any person who owns, leases, operates or controls a new CAIR NOx Ozone Season unit that replaced an existing CAIR NOx Ozone Season unit, as determined by the Department, shall choose one of the following options before the new CAIR NOx Ozone Season unit commences operation:

a. receive CAIR NOx Ozone Season allowances under 310 CMR 7.32(5)(c)1. as a new unit, and remit CAIR NOx Ozone Season allowances equal to the allocation for the existing CAIR NOx Ozone Season unit to the Department, if already allocated; or,

b. retain the allocation for the existing CAIR NOx Ozone Season unit, and receive no CAIR NOx Ozone Season allowances from the Department's New Unit Set-aside account for the new CAIR NOx Ozone Season unit.

(d) After providing notice and an opportunity for public comment, the Department may condition, limit, suspend or terminate any CAIR NOx Ozone Season allowance or the authorization to emit that a CAIR NOx Ozone Season allowance represents.

7.32: continued

(6) CAIR NOx Ozone Season Allowance Tracking System.

(a) [**Reserved**]

(b) Establishment of Accounts.

1. Compliance Acounts. Upon receipt of a complete certificate of representation under 310 CMR 7.32(2)(d), the Administrator will establish a compliance account for the CAIR NOx Ozone Season source for which the certificate of representation was submitted, unless the source already has a compliance account.

2. General Acounts.

a. Application for General Account.

i. Any person may apply to open a general account for the purpose of holding and transferring CAIR NOx Ozone Season allowances. An application for a general account may designate one and only one CAIR authorized account representative and one and only one alternate CAIR authorized account representative who may act on behalf of the CAIR authorized account representative. The agreement by which the alternate CAIR authorized account representative is selected shall include a procedure for authorizing the alternate CAIR authorized account representative to act in *lieu* of the CAIR authorized account representative.

ii. A complete application for a general account shall be submitted to the Administrator and shall include the following elements in a format prescribed by the Administrator:

(i) Name, mailing address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the CAIR authorized account representative and any alternate CAIR authorized account representative;

(ii) Organization name and type of organization, if applicable;

(iii) A list of all persons subject to a binding agreement for the CAIR authorized account representative and any alternate CAIR authorized account representative to represent their ownership interest with respect to the CAIR NOx Ozone Season allowances held in the general account;

(iv) The following certification statement by the CAIR authorized account representative and any alternate CAIR authorized account representative: ''I certify that I was selected as the CAIR authorized account representative or the alternate CAIR authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to CAIR NOx Ozone Season allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the CAIR NOx Ozone Season Trading Program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any order or decision issued to me by the Administrator or a court regarding the general account.''

(v) The signature of the CAIR authorized account representative and any alternate CAIR authorized account representative and the dates signed.

iii. Unless otherwise required by the Department or the Administrator, documents of agreement referred to in the application for a general account shall not be submitted to the Department or the Administrator. Neither the Department nor the Administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

b. Authorization of CAIR Authorized Account Representative and Alternate CAIR Authorized Account Representative.

i. Upon receipt by the Administrator of a complete application for a general account under 310 CMR 7.32(6)(b)2.a.:

(i) The Administrator will establish a general account for the person or persons for whom the application is submitted.

7.32: continued

(ii) The CAIR authorized account representative and any alternate CAIR authorized account representative for the general account shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to CAIR NOx Ozone Season allowances held in the general account in all matters pertaining to the CAIR NOx Ozone Season Trading Program, notwithstanding any agreement between the CAIR authorized account representative or any alternate CAIR authorized account representative and such person. Any such person shall be bound by any order or decision issued to the CAIR authorized account representative or any alternate CAIR authorized account representative by the Administrator or a court regarding the general account.

(ii) Any representation, action, inaction, or submission by any alternate CAIR authorized account representative shall be deemed to be a representation, action, inaction, or submission by the CAIR authorized account representative.

ii. Each submission concerning the general account shall be submitted, signed, and certified by the CAIR authorized account representative or any alternate CAIR authorized account representative for the persons having an ownership interest with respect to CAIR NOx Ozone Season allowances held in the general account. Each such submission shall include the following certification statement by the CAIR authorized account representative or any alternate CAIR authorized account representative: ''I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the CAIR NOx Ozone Season allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.''

iii. The Administrator will accept or act on a submission concerning the general account only if the submission has been made, signed, and certified in accordance with 310 CMR 7.32(6)(b)2.b.ii.

c. Changing CAIR Authorized Account Representative and Alternate CAIR Authorized Account Representative; Changes in Persons with Ownership Interest.

i. The CAIR authorized account representative for a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under 310 CMR 7.32(6)(b)2.a. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CAIR authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new CAIR authorized account representative and the persons with an ownership interest with respect to the CAIR NOx Ozone Season allowances in the general account.

ii. The alternate CAIR authorized account representative for a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under 310 CMR 7.32(6)(b)2.a. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate CAIR authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new alternate CAIR authorized account representative and the persons with an ownership interest with respect to the CAIR NOx Ozone Season allowances in the general account.

7.32: continued

iii. (i) In the event a person having an ownership interest with respect to CAIR NOx Ozone Season allowances in the general account is not included in the list of such persons in the application for a general account, such person shall be deemed to be subject to and bound by the application for a general account, the representation, actions, inactions, and submissions of the CAIR authorized account representative and any alternate CAIR authorized account representative of the account, and the decisions and orders of the Administrator or a court, as if the person were included in such list.

(ii) Within 30 days following any change in the persons having an ownership interest with respect to CAIR NOx Ozone Season allowances in the general account, including the addition of a new person, the CAIR authorized account representative or any alternate CAIR authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the CAIR NOx Ozone Season allowances in the general account to include the change.

d. Objections Concerning CAIR Authorized Account Representative and Alternate CAIR Authorized Account Representative.

i. Once a complete application for a general account under 310 CMR 7.32(6)(b)2.a. has been submitted and received, the Administrator will rely on the application unless and until a superseding complete application for a general account under 310 CMR 7.32(6)(b)2.a. is received by the Administrator.

ii. Except as provided in 310 CMR 7.32(6)(b)2.c.i. or 2.c.ii., no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission of the CAIR authorized account representative or any alternate CAIR authorized account representative for a general account shall affect any representation, action, inaction, or submission of the CAIR authorized account representative or any alternate CAIR authorized account representative or the finality of any decision or order by the Administrator under the CAIR NOx Ozone Season Trading Program.

iii. The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the CAIR authorized account representative or any alternate CAIR authorized account representative for a general account, including private legal disputes concerning the proceeds of CAIR NOx Ozone Season allowance transfers.

e. Delegation by CAIR Authorized Account Representative and Alternate CAIR Authorized Account Representative.

i. A CAIR authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under 310 CMR 7.32(6) and (7).

ii. An alternate CAIR authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under 310 CMR 7.32(6) and (7).

iii. In order to delegate authority to make an electronic submission to the Administrator in accordance with 310 CMR 7.32(6)(b)2.e.i. or 2.e.ii. the CAIR authorized account representative or alternate CAIR authorized account representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

(i) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such CAIR authorized account representative or alternate CAIR authorized account representative;

(ii) The name, address, e-mail address, telephone number, and, facsimile transmission number (if any) of each such natural person (referred to as an ‘‘agent’’);

(iii) For each such natural person, a list of the type or types of electronic submissions under 310 CMR 7.32(6)(b)2.e.i. or 2.e.ii. for which authority is delegated to him or her;

7.32: continued

(iv) The following certification statement by such CAIR authorized account representative or alternate CAIR authorized account representative: ''I agree that any electronic submission to the Administrator that is by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am a CAIR authorized account representative or alternate CAIR authorized representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 310 CMR 7.32(6)(b)2.e.iv. shall be deemed to be an electronic submission by me.''; and

(v) The following certification statement by such CAIR authorized account representative or alternate CAIR authorized account representative: ''Until this notice of delegation is superseded by another notice of delegation under 310 CMR 7.32(6)(b)2.e.iv., I agree to maintain an email account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 310 CMR 7.32(6)(b)2.e. is terminated.''.

iv. A notice of delegation submitted under 310 CMR 7.32(6)(b)2.e.iii. shall be effective, with regard to the CAIR authorized account representative or alternate CAIR authorized account representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such CAIR authorized account representative or alternate CAIR authorized account representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

v. Any electronic submission covered by the certification in 310 CMR 7.32(6)(b)2.e.iii.(iv) and made in accordance with a notice of delegation effective under 310 CMR 7.32(6)(b)2.e.iv. shall be deemed to be an electronic submission by the CAIR designated representative or alternate CAIR designated representative submitting such notice of delegation.

3. Account identification. The Administrator will assign a unique identifying number to each account established under 310 CMR 7.32(6)(b)1. or 2.

(c) Responsibilities of CAIR Authorized Account Representative. Following the establishment of a CAIR NOx Ozone Season Allowance Tracking System account, all submissions to the Administrator pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of CAIR NOx Ozone Season allowances in the account, shall be made only by the CAIR authorized account representative for the account.

(d) Recordation of CAIR NOx Ozone Season Allowance Allocations.

1. On or before September 30, 2007, the Administrator will record in the CAIR NOx Ozone Season source's compliance account the CAIR NOx Ozone Season allowances allocated for the existing CAIR NOx Ozone Season units at the source, as submitted by the Department in accordance with 310 CMR 7.32(5)(b)1., for the control periods in 2009, 2010, and 2011.

2. On or before December 1, 2008 and December 1st of each year thereafter, the Administrator will record in the CAIR NOx Ozone Season source's compliance account the CAIR NOx Ozone Season allowances allocated for the existing CAIR NOx Ozone Season units at the source, as submitted by the Department in accordance with 310 CMR 7.32(5)(b)2., for the control period in the fourth year after the year of the applicable deadline for recordation under this paragraph.

3. On or before September 1, 2009 and September 1st of each year thereafter, the Administrator will record in the CAIR NOx Ozone Season source's compliance account the CAIR NOx Ozone Season allowances allocated for the new CAIR NOx Ozone Season units at the source, as submitted by the Department in accordance with 310 CMR 7.32(5)(b)3., for the control period in the year of the applicable deadline for recordation under this paragraph.

7.32: continued

4. On or before December 1, 2009 and December 1st of each year thereafter, the Administrator will record in the CAIR NOx Ozone Season Allowance Tracking System account the CAIR NOx Ozone Season allowances allocated from the Public Benefit Set-aside, as submitted by the Department in accordance with 310 CMR 7.32(5)(b)3., for the control period in the year of the applicable deadline for recordation under this paragraph.

5. Serial numbers for allocated CAIR NOx Ozone Season allowances. When recording the allocation of CAIR NOx Ozone Season allowances for a CAIR NOx Ozone Season unit in a compliance account, the Administrator will assign each CAIR NOx Ozone Season allowance a unique identification number that will include digits identifying the year of the control period for which the CAIR NOx Ozone Season allowance is allocated.

(e) Compliance with CAIR NOx Ozone Season Emissions Limitation.

1. Allowance Transfer Deadline. The CAIR NOx Ozone Season allowances are available to be deducted for compliance with a source's CAIR NOx Ozone Season emissions limitation for a control period in a given calendar year only if the CAIR NOx Ozone Season allowances:

a. Were allocated for the control period in the year or a prior year; and

b. Are held in the compliance account as of the allowance transfer deadline for the control period or are transferred into the compliance account by a CAIR NOx Ozone Season allowance transfer correctly submitted for recordation 310 CMR 7.32(7)(a) and (b) by the allowance transfer deadline for the control period.

2. Deductions for Compliance. Following the recordation, in accordance with 310 CMR 7.32(7)(b), of CAIR NOx Ozone Season allowance transfers submitted for recordation in a source's compliance account by the allowance transfer deadline for a control period, the Administrator will deduct from the compliance account CAIR NOx Ozone Season allowances available under 310 CMR 7.32(6)(e)1. in order to determine whether the source meets the CAIR NOx Ozone Season emissions limitation for the control period, as follows:

a. Until the amount of CAIR NOx Ozone Season allowances deducted equals the number of tons of total nitrogen oxides emissions, determined in accordance with 310 CMR 7.32(8), from all CAIR NOx Ozone Season units at the source for the control period; or

b. If there are insufficient CAIR NOx Ozone Season allowances to complete the deductions in 310 CMR 7.32(6)(e)2.a., until no more CAIR NOx Ozone Season allowances available under 310 CMR 7.32(6)(e)1. remain in the compliance account.

3. a. Identification of CAIR NOx Ozone Season Allowances by Serial Number. The CAIR authorized account representative for a source's compliance account may request that specific CAIR NOx Ozone Season allowances, identified by serial number, in the compliance account be deducted for emissions or excess emissions for a control period in accordance with 310 CMR 7.32(6)(e)2. or 4. Such request shall be submitted to the Administrator by the allowance transfer deadline for the control period and include, in a format prescribed by the Administrator, the identification of the CAIR NOx Ozone Season source and the appropriate serial numbers.

b. First-in, First-out. The Administrator will deduct CAIR NOx Ozone Season allowances under 310 CMR 7.32(6)(e)2. or 4. from the source's compliance account, in the absence of an identification or in the case of a partial identification of CAIR NOx Ozone Season allowances by serial number under 310 CMR 7.32(6)(e)3.a., on a first-in, first-out (FIFO) accounting basis in the following order:

i. Any CAIR NOx Ozone Season allowances that were allocated to the units at the source, in the order of recordation; and then

ii. Any CAIR NOx Ozone Season allowances that were allocated to any entity and transferred and recorded in the compliance account pursuant to 310 CMR 7.32(7), in the order of recordation.

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4. Deductions for Excess Emissions.

a. after making the deductions for compliance under 310 CMR 7.32(6)(e)2. for a control period in a calendar year in which the CAIR NOx Ozone Season source has excess emissions, the Administrator will deduct from the source's compliance account an amount of CAIR NOx Ozone Season allowances, allocated for the control period in the immediately following calendar year, equal to three times the number of tons of the source's excess emissions.

b. Any allowance deduction required under 310 CMR 7.32(6)(e)4.a. shall not affect the liability of the owners and operators of the CAIR NOx Ozone Season source or the CAIR NOx Ozone Season units at the source for any fine, penalty, or assessment, or their obligation to comply with any other remedy, for the same violations, as ordered under the Clean Air Act or applicable State law.

5. Recordation of Deductions. The Administrator will record in the appropriate compliance account all deductions from such an account under 310 CMR 7.32(6)(e)2. or 4.

6. Administrator's Action on Submissions.

a. The Administrator may review and conduct independent audits concerning any submission under the CAIR NOx Ozone Season Trading Program and make appropriate adjustments of the information in the submissions.

b. The Administrator may deduct CAIR NOx Ozone Season allowances from or transfer CAIR NOx Ozone Season allowances to a source's compliance account based on the information in the submissions, as adjusted under 310 CMR 7.32(6)(e)6.a., and record such deductions and transfers.

(f) Banking.

1. CAIR NOx Ozone Season allowances may be banked for future use or transfer in a compliance account or a general account in accordance with 310 CMR 7.32(6)(f)1.

2. Any CAIR NOx Ozone Season allowance that is held in a compliance account or a general account will remain in such account unless and until the CAIR NOx Ozone Season allowance is deducted or transferred under 310 CMR 7.32(6)(e), (6)(g), or (7).

(g) Account Error. The Administrator may, at his or her sole discretion and on his or her own motion, correct any error in any CAIR NOx Ozone Season Allowance Tracking System account. Within ten business days of making such correction, the Administrator will notify the CAIR authorized account representative for the account.

(h) Closing of General Accounts.

1. The CAIR authorized account representative of a general account may submit to the Administrator a request to close the account, which shall include a correctly submitted allowance transfer under 310 CMR 7.32(7)(a) and (b) for any CAIR NOx Ozone Season allowances in the account to one or more other CAIR NOx Ozone Season Allowance Tracking System accounts.

2. If a general account has no allowance transfers in or out of the account for a 12-month period or longer and does not contain any CAIR NOx Ozone Season allowances, the Administrator may notify the CAIR authorized account representative for the account that the account will be closed following 20 business days after the notice is sent. The account will be closed after the 20-day period unless, before the end of the 20-day period, the Administrator receives a correctly submitted transfer of CAIR NOx Ozone Season allowances into the account under 310 CMR 7.32(7)(a) and (b) or a statement submitted by the CAIR authorized account representative demonstrating to the satisfaction of the Administrator good cause as to why the account should not be closed.

(7) CAIR NOx Ozone Season Allowance Transfers.

(a) Submission of CAIR NOx Ozone Season Allowance Transfers. A CAIR authorized account representative seeking recordation of a CAIR NOx Ozone Season allowance transfer shall submit the transfer to the Administrator. To be considered correctly submitted, the CAIR NOx Ozone Season allowance transfer shall include the following elements, in a format specified by the Administrator:

1. The account numbers for both the transferor and transferee accounts;

2. The serial number of each CAIR NOx Ozone Season allowance that is in the transferor account and is to be transferred; and

3. The name and signature of the CAIR authorized account representative of the transferor account and the date signed.

7.32: continued

(b) EPA Recordation.

1. Within five business days (except as provided in 310 CMR 7.32(7)(b)2.) of receiving a CAIR NOx Ozone Season allowance transfer, the Administrator will record a CAIR NOx Ozone Season allowance transfer by moving each CAIR NOx Ozone Season allowance from the transferor account to the transferee account as specified by the request, provided that:

a. The transfer is correctly submitted under 310 CMR 7.32(7)(a); and

b. The transferor account includes each CAIR NOx Ozone Season allowance identified by serial number in the transfer.

2. A CAIR NOx Ozone Season allowance transfer that is submitted for recordation after the allowance transfer deadline for a control period and that includes any CAIR NOx Ozone Season allowances allocated for any control period before such allowance transfer deadline will not be recorded until after the Administrator completes the deductions under 310 CMR 7.32(6)(e) for the control period immediately before such allowance transfer deadline.

3. Where a CAIR NOx Ozone Season allowance transfer submitted for recordation fails to meet the requirements of 310 CMR 7.32(7)(b)1., the Administrator will not record such transfer.

(c) Notification.

1. Notification of Recordation. Within five business days of recordation of a CAIR NOx Ozone Season allowance transfer under 310 CMR 7.32(7)(b), the Administrator will notify the CAIR authorized account representatives of both the transferor and transferee accounts.

2. Notification of Non-recordation. Within ten business days of receipt of a CAIR NOx Ozone Season allowance transfer that fails to meet the requirements of 310 CMR 7.32(7)(b)1., the Administrator will notify the CAIR authorized account representatives of both accounts subject to the transfer of:

a. A decision not to record the transfer, and

b. The reasons for such nonrecordation.

3. Nothing in 310 CMR 7.32(7)(c)3. shall preclude the submission of a CAIR NOx Ozone Season allowance transfer for recordation following notification of non-recordation.

(8) Monitoring and Reporting.

(a) General Requirements. The owners and operators, and to the extent applicable, the CAIR designated representative, of a CAIR NOx Ozone Season unit, shall comply with the monitoring, recordkeeping, and reporting requirements as provided in 310 CMR 7.32(8) and in subpart H of 40 CFR Part 75. For purposes of complying with such requirements, the definitions in 310 CMR 7.32(1)(b) and in 40 CFR 72.2 shall apply, and the terms ''affected unit,'' ''designated representative,'' and ''continuous emission monitoring system'' (or ''CEMS'') in 40 CFR Part 75 shall be deemed to refer to the terms ''CAIR NOx Ozone Season unit,'' ''CAIR designated representative,'' and ''continuous emission monitoring system'' (or ''CEMS'') respectively, as defined in 310 CMR 7.32(1)(b). The owner or operator of a unit that is not a CAIR NOx Ozone Season unit but that is monitored under 40 CFR 75.72(b)(2)(ii) shall comply with the same monitoring, recordkeeping, and reporting requirements as a CAIR NOx Ozone Season unit.

1. Requirements for Installation, Certification, and Data Accounting. The owner or operator of each CAIR NOx Ozone Season unit shall:

a. Install all monitoring systems required under 310 CMR 7.32(8) for monitoring NOx mass emissions and individual unit heat input (including all systems required to monitor NOx emission rate, NOx concentration, stack gas moisture content, stack gas flow rate, CO2 or O2 concentration, and fuel flow rate, as applicable, in accordance with 40 CFR 75.71 and 75.72);

b. Successfully complete all certification tests required under 310 CMR 7.32(8)(b) and meet all other requirements of 310 CMR 7.32(8) and 40 CFR Part 75 applicable to the monitoring systems under 310 CMR 7.32(8)(a)1.a.; and

c. Record, report, and quality-assure the data from the monitoring systems under 310 CMR 7.32(8)(a)1.a.

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2. Compliance Deadlines. Except as provided in 310 CMR 7.32(8)(a)5., the owner or operator shall meet the monitoring system certification and other requirements of 310 CMR 7.32(8)(a)1.a. and b. on or before the following dates. The owner or operator shall record, report, and quality-assure the data from the monitoring systems under 310 CMR 7.32(8)(a)1.a. on and after the following dates.

a. For the owner or operator of a CAIR NOx Ozone Season unit that commences commercial operation before July 1, 2007, on or before May 1, 2008.

b. For the owner or operator of a CAIR NOx Ozone Season unit that commences commercial operation on or after July 1, 2007 and that reports on an annual basis under 310 CMR 7.32(8)(e)4., by the later of the following dates:

i. 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which the unit commences commercial operation; or

ii. May 1, 2008.

c. For the owner or operator of a CAIR NOx Ozone Season unit that commences commercial operation on or after July 1, 2007 and that reports on a control period basis under 310 CMR 7.32(8)(e)4.b.ii., by the later of the following dates:

i. 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which the unit commences commercial operation; or

ii. If the compliance date under 310 CMR 7.32(8)(a)2.c.i. is not during a control period, May 1st immediately following the compliance date under 310 CMR 7.32(8)(a)2.c.i.

d. For the owner or operator of a CAIR NOx Ozone Season unit for which construction of a new stack or flue or installation of add-on NOx emission controls is completed after the applicable deadline under 310 CMR 7.32(8)(a)2.a., 2.b., 2.f., or 2.g. and that reports on an annual basis under 310 CMR 7.32(8)(e)4., by 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NOx emissions controls.

e. For the owner or operator of a CAIR NOx Ozone Season unit for which construction of a new stack or flue or installation of add-on NOx emission controls is completed after the applicable deadline under 310 CMR 7.32(8)(a)2.a., 2.c., 2.f., or 2.g. and that reports on a control period basis under 310 CMR 7.32(8)(e)4.b.ii, by the later of the following dates:

i. 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NOx emissions controls; or

ii. If the compliance date under 310 CMR 7.32(8)(a)2.e.i. is not during a control period, May 1st immediately following the compliance date under 310 CMR 7.32(8)(a)2.e.i.

3. Reporting Data. The owner or operator of a CAIR NOx Ozone Season unit that does not meet the applicable compliance date set forth in 310 CMR 7.32(8)(a)2. for any monitoring system under 310 CMR 7.32(8)(a)1.a. shall, for each such monitoring system, determine, record, and report maximum potential (or, as appropriate, minimum potential) values for NOx concentration, NOx emission rate, stack gas flow rate, stack gas moisture content, fuel flow rate, and any other parameters required to determine NOx mass emissions and heat input in accordance with 40 CFR 75.31(b)(2) or (c)(3), section 2.4 of appendix D to 40 CFR Part 75, or section 2.5 of appendix E to 40 CFR Part 75, as applicable.

4. Prohibitions.

a. No owner or operator of a CAIR NOx Ozone Season unit shall use any alternative monitoring system, alternative reference method, or any other alternative to any requirement of 310 CMR 7.32(8) without having obtained prior written approval in accordance with 310 CMR 7.32(8)(f).

b. No owner or operator of a CAIR NOx Ozone Season unit shall operate the unit so as to discharge, or allow to be discharged, NOx emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of 310 CMR 7.32(8) and 40 CFR Part 75.

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c. No owner or operator of a CAIR NOx Ozone Season unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NOx mass emissions discharged into the atmosphere or heat input, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of 310 CMR 7.32(8) and 40 CFR Part 75.

d. No owner or operator of a CAIR NOx Ozone Season unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved monitoring system under 310 CMR 7.32(8), except under any one of the following circumstances:

i. During the period that the unit is covered by an exemption under 310 CMR 7.32(1)(e) that is in effect;

ii. The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of 310 CMR 7.32(8) and 40 CFR Part 75, by the Department for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

iii. The CAIR designated representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with 310 CMR 7.32(8)(b)4.c.i.

5. Long-term Cold Storage. The owner or operator of a CAIR NOx Ozone Season unit is subject to the applicable provisions of 40 CFR Part 75 concerning units in long-term cold storage.

(b) Initial Certification and Recertification Procedures.

1. The owner or operator of a CAIR NOx Ozone Season unit shall be exempt from the initial certification requirements of 310 CMR 7.32(8)(b)1. for a monitoring system under 310 CMR 7.32(8)(a)1.a. if the following conditions are met:

a. The monitoring system has been previously certified in accordance with 40 CFR Part 75; and

b. The applicable quality-assurance and quality-control requirements of 40 CFR 75.21 and appendix B, appendix D, and appendix E to 40 CFR Part 75 are fully met for the certified monitoring system described in 310 CMR 7.32(8)(b)1.a.

2. The recertification provisions of 310 CMR 7.32(8)(b)2. shall apply to a monitoring system under 310 CMR 7.32(8)(a)1.a. exempt from initial certification requirements under 310 CMR 7.32(8)(b)1.

3. If the Administrator has previously approved a petition under 40 CFR 75.17(a) or (b) for apportioning the NOx emission rate measured in a common stack or a petition under 40 CFR 75.66 for an alternative to a requirement in 40 CFR 75.12 or 75.17, the CAIR designated representative shall resubmit the petition to the Administrator under 310 CMR 7.32(8)(f)1. to determine whether the approval applies under the CAIR NOx Ozone Season Trading Program.

4. Except as provided in 310 CMR 7.32(8)(b)1., the owner or operator of a CAIR NOx Ozone Season unit shall comply with the following initial certification and recertification procedures for a continuous monitoring system (*i.e.*, a continuous emission monitoring system and an excepted monitoring system under appendices D and E to 40 CFR Part 75) under 310 CMR 7.32(8)(a)1.a. The owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology under 40 CFR 75.19 or that qualifies to use an alternative monitoring system under subpart E of 40 CFR Part 75 shall comply with the procedures in 310 CMR 7.32(8)(b)5. or 6. respectively.

a. Requirements for Initial Certification. The owner or operator shall ensure that each continuous monitoring system under 310 CMR 7.32(8)(a)1.a. (including the automated data acquisition and handling system) successfully completes all of the initial certification testing required under 40 CFR 75.20 by the applicable deadline in 310 CMR 7.32(8)(a)2. In addition, whenever the owner or operator installs a monitoring system to meet the requirements of 310 CMR 7.32(8) in a location where no such monitoring system was previously installed, initial certification in accordance with 40 CFR 75.20 is required.

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b. Requirements for Recertification. Whenever the owner or operator makes a replacement, modification, or change in any certified continuous emission monitoring system under 310 CMR 7.32(8)(a)1.a. that may significantly affect the ability of the system to accurately measure or record NOx mass emissions or heat input rate or to meet the quality assurance and quality-control requirements of 40 CFR 75.21 or appendix B to 40 CFR Part 75, the owner or operator shall recertify the monitoring system in accordance with 40 CFR 75.20(b). Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify each continuous emission monitoring system whose accuracy is potentially affected by the change, in accordance with 40 CFR 75.20(b). Examples of changes to a continuous emission monitoring system that require recertification include: Replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site. Any fuel flowmeter systems, and any excepted NOx monitoring system under appendix E to 40 CFR Part 75, under 310 CMR 7.32(8)(a)1.a. are subject to the recertification requirements in 40 CFR 75.20(g)(6).

c. Approval Process for Initial Certification and Recertification. 310 CMR 7.32(8)(b)4.c.i. through iv. apply to both initial certification and recertification of a continuous monitoring system under 310 CMR 7.32(8)(a)1.a. For recertifications, replace the words ''certification'' and ''initial certification'' with the word ''recertification'', replace the word ''certified'' with the word ''recertified,'' and follow the procedures in 40 CFR 75.20(b)(5) and (g)(7) in *lieu* of the procedures in 310 CMR 7.32(8)(b)4.c.v.

i. Notification of Certification. The CAIR designated representative shall submit to the Department, the appropriate EPA Regional Office, and the Administrator written notice of the dates of certification testing, in accordance with 310 CMR 7.32(8)(d).

ii. Certification Application. The CAIR designated representative shall submit to the Department a certification application for each monitoring system. A complete certification application shall include the information specified in 40 CFR 75.63.

iii. Provisional Certification Date. The provisional certification date for a monitoring system shall be determined in accordance with 40 CFR 75.20(a)(3). A provisionally certified monitoring system may be used under the CAIR NOx Ozone Season Trading Program for a period not to exceed 120 days after receipt by the Department of the complete certification application for the monitoring system under 310 CMR 7.32(8)(b)4.c.ii. Data measured and recorded by the provisionally certified monitoring system, in accordance with the requirements of 40 CFR Part 75, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the Department does not invalidate the provisional certification by issuing a notice of disapproval within 120 days of the date of receipt of the complete certification application by the Department.

iv. Certification Application Approval Process. The Department will issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application under 310 CMR 7.32(8)(b)4.c.ii. In the event the Department does not issue such a notice within such 120-day period, each monitoring system that meets the applicable performance requirements of 40 CFR Part 75 and is included in the certification application will be deemed certified for use under the CAIR NOx Ozone Season Trading Program.

(i) Approval Notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR Part 75, then the Department will issue a written notice of approval of the certification application within 120 days of receipt.

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(ii) Incomplete Application Notice. If the certification application is not complete, then the Department will issue a written notice of incompleteness that sets a reasonable date by which the CAIR designated representative must submit the additional information required to complete the certification application. If the CAIR designated representative does not comply with the notice of incompleteness by the specified date, then the Department may issue a notice of disapproval under 310 CMR 7.32(8)(b)4.c.iv.(iii). The 120-day review period shall not begin before receipt of a complete certification application.

(iii) Disapproval Notice. If the certification application shows that any monitoring system does not meet the performance requirements of 40 CFR Part 75 or if the certification application is incomplete and the requirement for disapproval under 310 CMR 7.32(8)(b)4.c.iv.(ii) is met, then the Department will issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the Department and the data measured and recorded by each uncertified monitoring system shall not be considered valid quality assured data beginning with the date and hour of provisional certification (as defined under 40 CFR 75.20(a)(3)). The owner or operator shall follow the procedures for loss of certification in 310 CMR 7.32(8)(b)4.c.v. for each monitoring system that is disapproved for initial certification.

(iv) Audit Decertification. The Department may issue a notice of disapproval of the certification status of a monitor in accordance with 310 CMR 7.32(8)(c)2.

v. Procedures for Loss of Certification. If the Department issues a notice of disapproval of a certification application under 310 CMR 7.32(8)(b)4.c.iv.(iii) or a notice of disapproval of certification status under 310 CMR 7.32(8)(b)4.c.iv.(iv), then:

(i) The owner or operator shall substitute the following values, for each disapproved monitoring system, for each hour of unit operation during the period of invalid data specified under 40 CFR 75.20(a)(4)(iii), § 75.20(g)(7), or 75.21(e) and continuing until the applicable date and hour specified under 40 CFR 75.20(a)(5)(i) or (g)(7):

-1. For a disapproved NOx emission rate (i.e., NOx-diluent) system, the maximum potential NOx emission rate, as defined in 40 CFR 72.2.

-2. For a disapproved NOx pollutant concentration monitor and disapproved flow monitor, respectively, the maximum potential concentration of NOx and the maximum potential flow rate, as defined in sections 2.1.2.1 and 2.1.4.1 of appendix A to 40 CFR Part 75.

-3. For a disapproved moisture monitoring system and disapproved diluent gas monitoring system, respectively, the minimum potential moisture percentage and either the maximum potential CO2 concentration or the minimum potential O2 concentration (as applicable), as defined in sections 2.1.5, 2.1.3.1, and 2.1.3.2 of appendix A to 40 CFR Part 75.

-4. or a disapproved fuel flowmeter system, the maximum potential fuel flow rate, as defined in section 2.4.2.1 of appendix D to 40 CFR Part 75.

-5. For a disapproved excepted NOx monitoring system under appendix E to 40 CFR Part 75, the fuel-specific maximum potential NOx emission rate, as defined in 40 CFR 72.2.

(ii) The CAIR designated representative shall submit a notification of certification retest dates and a new certification application in accordance with 310 CMR 7.32(8)(b)4.c.i. and ii.

(iii) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Department's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

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5. Initial Certification and Recertification Procedures for Units Using the Low Mass Emission Excepted Methodology under 40 CFR 75.19. The owner or operator of a unit qualified to use the low mass emissions (LME) excepted methodology under 40 CFR 75.19 shall meet the applicable certification and recertification requirements in 40 CFR 75.19(a)(2) and 75.20(h). If the owner or operator of such a unit elects to certify a fuel flowmeter system for heat input determination, the owner or operator shall also meet the certification and recertification requirements in 40 CFR 75.20(g).

6. Certification/Recertification Procedures for Alternative Monitoring Systems. The CAIR designated representative of each unit for which the owner or operator intends to use an alternative monitoring system approved by the Administrator and, if applicable, the Department under subpart E of 40 CFR Part 75 shall comply with the applicable notification and application procedures of 40 CFR 75.20(f).

(c) Out of Control Periods.

1. Whenever any monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of 40 CFR 75, data shall be substituted using the applicable missing data procedures in subpart D or subpart H of, or appendix D or appendix E to, 40 CFR Part 75.

2. Audit Decertification. Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement under 310 CMR 7.32(8)(b) or the applicable provisions of 40 CFR Part 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the Department will issue a notice of disapproval of the certification status of such monitoring system. For the purposes of 310 CMR 7.32(8)(c), an audit shall be either a field audit or an audit of any information submitted to the Department. By issuing the notice of disapproval, the Department revokes prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the applicable initial certification or recertification procedures in 310 CMR 7.32(8)(b) for each disapproved monitoring system.

(d) Notifications. The CAIR designated representative for a CAIR NOx Ozone Season unit shall submit written notice to the Department and the Administrator in accordance with 40 CFR 75.61.

(e) Recordkeeping and Reporting.

1. General Provisions. The CAIR designated representative shall comply with all recordkeeping and reporting requirements in 310 CMR 7.32(8)(e), the applicable recordkeeping and reporting requirements under 40 CFR 75.73, and the requirements of 310 CMR 7.32(2)(a)5.a.

2. Monitoring Plans. The owner or operator of a CAIR NOx Ozone Season unit shall comply with requirements of 40 CFR 75.73(c) and (e).

3. Certification Applications. The CAIR designated representative shall submit an application to the Department within 45 days after completing all initial certification or recertification tests required under 310 CMR 7.32(8)(b), including the information required under 40 CFR 75.63.

4. Quarterly Reports. The CAIR designated representative shall submit quarterly reports, as follows:

a. If the CAIR NOx Ozone Season unit is subject to an Acid Rain emissions limitation or the CAIR $NO_x$ Annual Trading Program or monitors NOx emissions using CEMS or if the owner or operator of such unit chooses to report on an annual basis under 310 CMR 7.32(8), the CAIR designated representative shall meet the requirements of subpart H of 40 CFR Part 75 (concerning monitoring of NOx mass emissions) for such unit for the entire year and shall report the NOx mass emissions data and heat input data for such unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with:

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i. For a unit that commences commercial operation before July 1, 2007, the calendar quarter covering May 1, 2008 through June 30, 2008; and

ii. For a unit that commences commercial operation on or after July 1, 2007, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under 310 CMR 7.32(8)(a)2., unless that quarter is the third or fourth quarter of 2007 or the first quarter of 2008, in which case reporting shall commence in the quarter covering May 1, 2008 through June 30, 2008.

b. If the CAIR NOx Ozone Season unit is not subject to an Acid Rain emissions limitation or the CAIR NOx Annual Trading Program, and does not monitor NOx emissions using CEMS, then the CAIR designated representative shall either:

i. Meet the requirements of subpart H of 40 CFR Part 75 (concerning monitoring of NOx mass emissions) for such unit for the entire year and report the NOx mass emissions data and heat input data for such unit in accordance with 310 CMR 7.32(8)(e)4.a.; or

ii. Meet the requirements of subpart H of 40 CFR Part 75 for the control period (including the requirements in 40 CFR 75.74(c)) and report NOx mass emissions data and heat input data (including the data described in 40 CFR 75.74(c)(6)) for such unit only for the control period of each year and report, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with:

(i) For a unit that commences commercial operation before July 1, 2007, the calendar quarter covering May 1, 2008 through June 30, 2008; and

(ii) For a unit that commences commercial operation on or after July 1, 2007, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under 310 CMR 7.32(8)(a)2., unless that date is not during a control period, in which case reporting shall commence in the quarter that includes May 1st through June 30th of the first control period after such date.

c. The CAIR designated representative shall submit each quarterly report to the Administrator within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR 75.73(f).

d. For CAIR NOx Ozone Season units that are also subject to an Acid Rain emissions limitation or the CAIR NOx Annual Trading Program, CAIR SO2 Trading Program, or Hg Budget Trading Program, or that monitor NOx emissions with CEMS, quarterly reports shall include the applicable data and information required by subparts F through I of 40 CFR Part 75 as applicable, in addition to the NOx mass emission data, heat input data, and other information required by 310 CMR 7.32(8).

5. Compliance Certification. The CAIR designated representative shall submit to the Administrator a compliance certification (in a format prescribed by the Administrator) in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

a. The monitoring data submitted were recorded in accordance with the applicable requirements of 310 CMR 7.32(8) and 40 CFR Part 75, including the quality assurance procedures and specifications;

b. For a unit with add-on NOx emission controls and for all hours where NOx data are substituted in accordance with 40 CFR 75.34(a)(1), the add-on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under appendix B to 40 CFR Part 75 and the substitute data values do not systematically underestimate NOx emissions; and

c. For a unit that is reporting on a control period basis under 310 CMR 7.32(8)(e)4.b.ii., the NOx emission rate and NOx concentration values substituted for missing data under subpart D of 40 CFR Part 75 are calculated using only values from a control period and do not systematically underestimate NOx emissions.

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(f) Petitions.

1. Except as provided in 310 CMR 7.32(8)(f)2.b., the CAIR designated representative of a CAIR NOx Ozone Season unit that is subject to an Acid Rain emissions limitation may submit a petition under 40 CFR 75.66 to the Administrator requesting approval to apply an alternative to any requirement of 310 CMR 7.32(8). Application of an alternative to any requirement of 310 CMR 7.32(8) is in accordance with 310 CMR 7.32(8) only to the extent that the petition is approved in writing by the Administrator, in consultation with the Department.

2. a. The CAIR designated representative of a CAIR NOx Ozone Season unit that is not subject to an Acid Rain emissions limitation may submit a petition under 40 CFR 75.66 to the Department and the Administrator requesting approval to apply an alternative to any requirement of 310 CMR 7.32(8). Application of an alternative to any requirement of 310 CMR 7.32(8) is in accordance with 310 CMR 7.32(8) only to the extent that the petition is approved in writing by both the Department and the Administrator.

b. The CAIR designated representative of a CAIR NOx Ozone Season unit that is subject to an Acid Rain emissions limitation may submit a petition under 40 CFR 75.66 to the Department and the Administrator requesting approval to apply an alternative to a requirement concerning any additional continuous emission monitoring system required under 40 CFR 75.72. Application of an alternative to any such requirement is in accordance with 310 CMR 7.32(8) only to the extent that the petition is approved in writing by both the Department and the Administrator.

(9) Monitoring and Recordkeeping for Energy Output.

(a) Initial Certification. The CAIR designated representative shall submit a certification stating that the output monitoring system meets one of the following requirements. This certification shall be submitted in accordance with the compliance deadlines established in 310 CMR 7.32(8)(a)2.

1. Billing Meters. The billing meter shall record the electric or thermal output. Any electric or thermal output values that the facility reports shall be the same as the values used in billing for the output. Any output measurement equipment used as a billing meter in commercial transactions requires no additional certification or testing.

2. Non-billing Meters. For non-billing meters and systems that include a mixture of billing meters and non-billing meters, the output monitoring system shall meet the accuracy criteria in 310 CMR 7.32(9)(a)2.a. or b., whichever is less stringent.

a. System Approach to Accuracy. The system approach to accuracy shall include a determination of how the system accuracy of within less than or equal to 10.0% of the reference value is achieved using the individual components in the system and shall include data loggers and any wattmeters used to calculate the final net electric output data and/or any flowmeters for steam or condensate, temperature measurement devices, absolute pressure measurement devices, and differential pressure devices used for measuring thermal energy.

b. Component Approach to Accuracy. If testing a piece of output measurement equipment shows that the output readings are not accurate to within less than or equal to 3.0% of the full scale value, then the equipment shall be repaired or replaced to meet that requirement. Data shall remain invalid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test.

(b) Ongoing QA/QC. For non-billing meters, the operator shall perform the following ongoing quality assurance/quality control activities:

1. Certain types of equipment such as potential transformers, current transformers, nozzle and venturi type meters, and the primary element of an orifice plate only require an initial certification of calibration and do not require periodic recalibration unless the equipment is physically changed. However, the pressure and temperature transmitters accompanying an orifice plate require periodic retesting. For other types of equipment, either recalibrate or re-verify the meter accuracy at least once every two years (i.e., every eight calendar quarters), unless a consensus standard allows for less frequent calibrations or accuracy tests. For non-billing meters, the output monitoring system shall either meet an accuracy of within less than or equal to 10.0% of the reference value, or each component monitor for the output system shall meet an accuracy of within less than or equal to 3.0% of the full scale

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value, whichever is less stringent. If testing a piece of output measurement equipment shows that the output readings are not accurate to within less than or equal to 3.0% of the full scale value, then the equipment shall be repaired or replaced to meet that requirement.

2. Out-of-control Periods. If testing a piece of output measurement equipment shows that the output readings are not accurate to the certification value, data remain invalid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test. All invalid data shall be replaced by either zero or an output value that is likely to be lower than a measured value and that is approved as part of the monitoring plan required under 310 CMR 7.32(3)(c)4.

(c) Recordkeeping and Reporting.

1. General Provisions. The CAIR designated representative shall comply with all the following recordkeeping and reporting requirements.

2. Recordkeeping. Facilities shall retain data used to monitor, determine, or calculate energy output for five years.

3. Output Reports. The output report shall include unit level net electric output (in MWh), all useful steam output (in MMBtu) and a certification statement from the CAIR designated representative stating the following, "I am authorized to make this submission on behalf of the owners and operators of the CAIR NOx Ozone Season source or CAIR NOx Ozone Season unit for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment." Data shall be submitted both electronically and in hardcopy. The CAIR designated representative for a CAIR NOx Ozone Season unit shall submit to the Department ozone season output reports on or before December 1, 2009 and December 1st of each year thereafter, for the immediately preceding ozone season.

## 7.33: MB City of Boston/South Boston Parking Freeze

(1) Applicability.

(a) 310 CMR 7.33 is applicable to the Massachusetts Port Authority, the body politic and corporate, created by and existing pursuant to St. 1956, c. 456, as amended, hereafter referred to as Massport. Massport shall be responsible for administering the South Boston Parking Freeze on all Massport owned property.

(b) 310 CMR 7.33 is applicable to the City of Boston which shall be responsible for administering the South Boston Parking Freeze on all lands other that Massport owned property under the authority of the Boston Air Pollution Control Commission (BAPCC). Under M.G.L., c. 111, § 31C, BAPCC is responsible for administering local air pollution control programs including parking freezes within the geographic and political boundaries of the City of Boston.

(c) 310 CMR 7.33 applies to the parking of motor vehicles in the South Boston Parking Freeze Area. The South Boston Parking Freeze area shall be divided into three zones defined as: (1) the South Boston Piers Zone, (2) the South Boston Industrial/Commercial Zone and (3) the South Boston Residential Zone. These geographic areas shall be bounded as follows:

The South Boston Piers Zone:

Beginning at the point where Mount Washington Street meets the high water line of the Fort Point Channel and continuing in a westerly direction to the center point of the Channel; then northeasterly along the imaginary center line of the Channel to the Boston Inner Harbor; then continuing southeasterly along the high water line to the southern most edge of the Boston Marine Industrial Park property; then easterly in a straight line to the center point of the Reserved Channel and continuing westerly in a straight line along the Channel to the point where it meets Summer Street; then following Summer Street in a northwesterly direction to a point where it meets Fargo Street; then following Summer Street in a northwesterly direction to a point along Fargo Street where it meets B Street; then westerly along an imaginary straight line back to the point where Mount Washington meets the high water line.

7.33: continued

The South Boston Industrial/Commercial Zone:

Beginning at the point where Southampton Street meets the railroad tracks and continuing northerly along the railroad tracks, to the West Fourth Street Bridge; then southeasterly along the Bridge to the center point of the Fort Point Channel; then north and northeasterly along the center line of the Channel to the point where it meets the imaginary line extending to the point of the beginning of the Piers Zone; then following along the southeast boundary line of the Piers Zone to its end point where it meets the imaginary line extending easterly along the center line of the Reserved Channel and then southerly in a straight line to the point where it meets the northeastern edge of the residential Zone boundary line; then following said boundary line westerly, northerly, and southerly back to the point where Southampton Street meets the railroad tracks.

The South Boston Residential Zone:

Beginning at the point where Southampton Street meets Dorchester Avenue and continuing in a northerly direction along Dorchester Avenue to West Second Street; then southeasterly along West Second Street to B Street; then northwesterly along B Street to West First Street; then southeasterly along West First Street to the point where it meets East First Street and continuing along East First Street to the point where it meets O'Day Boulevard; then easterly along O'Day Boulevard to the high water line of Boston Harbor; then along the high water line of Boston Harbor around Castle Island to the point where it meets the rock jetty enclosing Pleasure Bay and continuing along to the point where it meets O'Day Boulevard; then following along O'Day Boulevard in a southwesterly direction to the point where it meets Preble Street and continuing along Preble Street back to the point where Southampton Street meets Dorchester Avenue.

(2) Definition of the Parking Freeze. There is hereby established a freeze on the availability of motor vehicle parking spaces within the South Boston Piers Zone and the Industrial/Commercial Zone and a freeze on the availability of remote parking spaces within the South Boston Residential Zone within the South Boston Parking Freeze Area. No owner, operator or tenant within the South Boston Parking Freeze Area Piers Zone and Industrial/Commercial Zones shall allow for the parking of motor vehicles in excess of the allowed number of motor vehicle parking spaces established by the parking freeze. No person within the South Boston Parking Freeze Area Residential Zone shall allow for the parking of motor vehicles in excess of the allowed number of remote parking spaces established by the parking freeze.

(3) Parking Space Inventory.

(a) Not later than one year from the date 310 CMR 7.33 is first published in the *Massachusetts Register*, the BAPCC and Massport shall each submit to the Department, an inventory of all existing motor vehicle parking spaces and motor vehicle parking spaces which were part of any project submitted for review under the Massachusetts Environmental Policy Act process set forth in 301 CMR 11.00 or the Federal Environmental Review Process set forth in 42 U.S.C. 4321 *et seq*. as of August 1, 1990 and remote parking spaces for each of their respective areas. Said inventory shall include a map and supportive descriptive material of sufficient detail to identify the type, location, and quantity of motor vehicle parking spaces, including parking spaces for commercial, remote, employee, restricted use, off-peak uses and parking spaces eliminated during the Central Artery/Third Harbor Tunnel project construction, located in the South Boston Parking Freeze Area.

(b) Within 60 days of receipt of said inventory, the Department shall, after review and consultation with interested parties, including but not limited to the BAPCC, Massport, Chairman of the Boston MPO, and the EPA, issue a finding of adequacy or inadequacy in writing. If found adequate, the number of motor vehicle parking spaces and remote parking spaces by zone shall be the Department-certified parking freeze base number for the South Boston Parking Freeze Area.

NON-TEXT PAGE

7.33: continued

(c) If found inadequate, the BAPCC and/or Massport, in consultation with the Department, shall have an additional 60 days to resolve the inadequacies. If no agreement is reached, the Department shall, at the end of the second 60 day period, certify a parking freeze base number for the South Boston Parking Freeze Area in writing. If within 60 days of receipt of said initial inventory, the Department has not issued a finding of adequacy or inadequacy, the inventory shall be deemed adequate.

(d) Property Transfers. In the event that Massport acquires any interest in property in the South Boston Freeze area, Massport shall assume responsibility for administering the freeze on the properties acquired and shall amend the Parking Space Inventory submitted pursuant to 310 CMR 7.33(3).

(4) Elimination of Parking Spaces During Central Artery/Third Harbor Tunnel Construction. Motor vehicle parking spaces removed or eliminated permanently during the Seaport Access Road and Third Harbor Tunnel construction project shall be incorporated into the parking space inventory submitted pursuant to 310 CMR 7.33(3).

(5) Establishment of Parking Freeze Banks.

(a) The number of motor vehicle parking spaces in the South Boston Parking Freeze Area will be limited to the base inventory of all motor vehicle parking spaces in each zone. From this base inventory of motor vehicle parking spaces, parking freeze banks shall be created equal to 10% of the base inventory of motor vehicle parking spaces. The Parking freeze banks shall be administered separately by the BAPCC and Massport and hereafter referred to as the BAPCC Bank and the Massport Bank.

(b) Motor vehicle parking spaces eliminated for use in the South Boston Parking Freeze Area shall be credited to the appropriate parking freeze bank for reallocation and are not privately transferrable.

(6) Parking Freeze Plan.

(a) Not later than one year from the date 310 CMR 7.33 is published in the *Massachusetts Register*, the BAPCC and Massport shall each submit a plan to the Department, with copies to the Governor, the Boston Metropolitan Planning Organization and the Environmental Protection Agency Region I, a South Boston Parking Freeze plan, developed in coordination and consultation with the Boston Zoning Board of Appeals, the Boston Department of Transportation, the Department and other city and state authorities as may be appropriate which sets forth the procedures by which the South Boston Parking Freeze shall be implemented and enforced and the permitting of parking facilities shall be administered. The plans shall, at a minimum, include the following elements:

1. identification of the city agencies, authorities or entities that will be responsible for the various components of the Freeze and authority and responsibilities of the City entities supporting the implementation and enforcement of each of the components of the South Boston Parking Freeze;
2. a description of modifications needed to local ordinances, rules, regulations and/or policies to enable the city and Massport to implement and enforce the freeze, and a schedule for their adoption;
3. procedures for allocation of motor vehicle parking spaces from the parking freeze banks which includes methods for determining the need for such spaces consistent with street and intersection capacity; consultation procedures between BAPCC and Massport for allocation of spaces; and incentives for High Occupancy Vehicle (HOV) parking;
4. proposed text of amendments to the current BAPCC "Procedures and Criteria for Issuance of Parking Freeze Permits" and similar procedures for Massport. These guidelines shall pertain to the permitting of parking facilities, taking into consideration land use, commitments to specific trip-reduction measures, and the availability of improved transit;
5. A procedure to relocate motor vehicle parking spaces from the South Boston Piers Zone to the South Boston Industrial/Commercial Zone.

7.33: continued

6. A procedure to ensure that motor vehicle parking spaces designated as off-peak parking spaces pursuant to 7.33(4) are not being utilized between the hours of 7:30 AM and 9:30 AM. Said procedures shall be enforced by the BAPCC and Massport upon approval by the Department of the Parking Freeze Plan required by 310 CMR 7.33(6).

(b) Within 60 days of receipt of said Parking Freeze Plans, the Department, after review and a non-adjudicatory public hearing shall issue a finding of adequacy or inadequacy, depending upon the results of the review. If within 60 days of receipt of said Parking Freeze Plans, the Department has not issued a finding of adequacy or inadequacy, the Parking Freeze Plans shall be deemed adequate. If found inadequate, the BAPCC and/or Massport, in consultation with the Department, shall have an additional 60 days to resolve the inadequacies. Failure to submit an acceptable Parking Freeze Plan by the end of the second 60 day period may result in the Department issuing a Parking Freeze Plan which the BAPCC and Massport shall proceed to implement and enforce; provided, however that no parking spaces shall be allocated unless a Department-approved or Department-issued Parking Freeze Plan under 310 CMR 7.33 is in effect.

(c) Following approval by the Department, the Parking Freeze Plans and Permitting Procedures shall be implemented and enforced by the BAPCC and Massport.

(7) Off-Peak Parking.

(a) A minimum of 10% of the existing motor vehicle parking spaces available in the South Boston Piers Zone shall be designated for use as off-peak parking spaces and shall not be open for entering customers between 7:30 A.M. and 9:30 A.M.. At the opening of service of the South Boston Transitway, 20% of the existing motor vehicle parking spaces available in the South Boston Piers Zone shall be designated for use as off-peak parking spaces and shall not be open for entering customers between 7:30 A.M. and 9:30 A.M..

(8) Completion of Central Artery/Third Harbor Tunnel.

(a) At such time that the Central Artery/Third Harbor Tunnel project is open for general public use, an inventory of existing motor vehicle parking spaces available in the South Boston Piers Zone shall be submitted by BAPCC and Massport to the Department following the procedures in 310 CMR 7.33(2). Following Department re-certification of the parking freeze number for the South Boston Piers Zone, 10% of the inventory of motor vehicle parking spaces shall be added to the BAPCC bank in the South Boston Piers Zone. Nothing in 310 CMR 7.33(8) shall prohibit the Department from requiring Massport and/or BAPCC to submit an updated inventory at any time prior to the opening of the Central Artery/Third Harbor Tunnel Project.

(9) Restricted Use Parking.

(a) Restricted Use parking may only be provided in the parking freeze area administered by the BAPCC in the South Boston Piers Zone or the South Boston Industrial/Commercial Zone for up to ten days per year on the conditions of 310 CMR 7.24. Massport is prohibited from providing restricted use parking in the South Boston Freeze area for any purpose. The provision of restricted use parking shall require substantial documentation including demand management plans and programs to be provided to the Department by the BAPCC to explain such use and to document how such use will be avoided in the future. The documentation requirements will be detailed by the BAPCC in the "Procedures and Criteria for Issuance of Parking Freeze Permits".

(b) Restricted use parking spaces shall be subject to the following monitoring and reporting provisions:

1. On December 31 of each calendar year BAPCC shall submit to the Department a letter containing an estimate of the number of days and dates on which the BAPCC anticipates the need over the following calendar year to invoke the use of restricted use parking spaces, including the estimated number and location of said spaces;

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2. BAPCC shall monitor and track the use of these restricted use parking spaces continuously throughout the year and on March 1 of the following year shall submit a report to the Department describing actual dates, locations, and numbers of restricted use parking spaces used in the preceding calendar year.

(c) Should the actual number of days when restricted use parking spaces is invoked by the BAPCC exceed six days by July 1 of any year, BAPCC shall submit to the Department on or before August 1, a report outlining strategies the BAPCC commits to undertake during the remainder of the calendar year so as not to have to invoke the use of the of restricted use parking spaces more than the four additional days that calendar year.

(d) Should the BAPCC invoke the use of restricted use parking spaces for more than ten days during the calendar year, BAPCC shall submit to the Department, on or before March 1 of the following year, a report containing:

1. an explanation of why the ten day limit on the use of restricted use parking spaces was exceeded;
2. a determination of whether this exceedance was temporary or may be expected to continue into future years and technical support for this determination;
3. a projection of future need to use restricted use parking spaces in terms of the number of days and the number of spaces;
4. a plan and a schedule for initiating actions which will reduce the projected need identified in 310 CMR 7.22(3);
5. a commitment from BAPCC to implement the identified actions.

(10) Relocation of Parking Spaces. Relocation of motor vehicle parking spaces is not allowed into the South Boston Residential Freeze Zone or into the Industrial/Commercial Freeze Zone from the South Boston Freeze Piers Zone. To ensure greater flexibility in land use planning and development, a procedure shall be developed by the BAPCC and Massport, which will enable the relocation of motor vehicle parking spaces from the South Boston Piers Zone to the South Boston Industrial/Commercial Zone.

(11) Remote Parking.

(a) Additional remote parking spaces over and above the existing remote parking space inventory established in the parking space inventory approved by the Department pursuant to 310 CMR 7.33(3) shall not be allowed or permitted in the South Boston Parking Freeze Area. Remote parking facilities already in use upon the effective date of 310 CMR 7.00 shall be allowed to continue.

(b) Remote parking spaces which are eliminated for any purpose shall not be transferred to other owners, operators or tenants within the South Boston Freeze Area and shall return to the BAPCC Bank and Massport Bank for reallocation as motor vehicle parking spaces.

(12) "Procedures and Criteria for Issuance of Parking Freeze Permits"

(a) Two years from the date 310 CMR 7.33 is published in the *Massachusetts Register*, the BAPCC shall amend the existing "Procedures and Criteria for Issuance of Parking Freeze Permits", and submit these amendments to the Department for review and approval.

(b) Two years from the date 310 CMR 7.33 is published in the *Massachusetts Register*, Massport shall submit procedures and criteria for issuance of parking freeze permits to the Department for review and approval. Such procedures shall contain a process by which Massport shall consult with the BAPCC prior to allocating motor vehicle parking spaces from the Massport Bank, and shall provide BAPCC with a period of up to 30 days to comment on any proposed allocation of motor vehicle parking spaces from the Massport Bank. Massport shall respond in writing to any comments from BAPCC which Massport does not accept.

7.33: continued

(13) Record Keeping and Reporting.

(a) On or before June 15 of each year following submission of the parking freeze inventory pursuant to 310 CMR 7.33(3), BAPCC and Massport shall each submit a report to the Department and EPA Region I detailing the progress and status of each provision of 310 CMR 7.33 during the preceding calendar year.

(b) Every third year following the promulgation of the regulation, the annual status report submitted to the Department shall include an updated inventory of parking spaces in the South Boston Parking Freeze Area. The inventory conducted immediately following the completion of the Central Artery/Third Harbor Tunnel project shall establish a new three year reporting cycle.

(c) Copies of local ordinances adopted or modified in support of the South Boston Parking freeze shall be submitted to the Department as they become effective.

(14) Prohibitions. In the event the BAPCC and/or Massport fails to submit "Procedures and Criteria for Issuance of Parking Freeze Permits" by the date required pursuant to 310 CMR 7.33(12) or fails to follow a procedure once approved, no person shall develop motor vehicle parking spaces regulated herein until such time that a parking freeze permit is obtained in accordance with a permit program adopted under 310 CMR 7.33.

(15) Enforcement.

(a) The Department may enforce 310 CMR 7.33 under applicable law.

(b) The Department may enforce any requirement of 310 CMR 7.33, including but not limited to, the requirements of any Department approved parking freeze plan or parking freeze permit procedures adopted by BAPCC or Massport to satisfy the requirements of 310 CMR 33.00 in the event the BAPCC or Massport fail to do so.

(c) The failure of BAPCC or Massport to adequately comply with the requirements of the section may be cause for the Department to make a finding of nonconformity under Section 176(c) of the Clean Air Act Amendments of 1990, 42 U.S.C. 7506(c).

(7.34 and 7.35: Reserved)

7.36: U Transit System Improvements

(1) Applicability. 310 CMR 7.36 shall apply to the Executive Office of Transportation, hereafter referred to as EOT, and any successor agency to EOT.

(2) Transit System Improvement Projects. EOT shall plan and construct and render available for public use, transit system improvement projects including the following projects in accordance with the schedules and requirements set forth in 310 CMR 7.36:

(a) Before December 31, 1992 construction of the following facilities shall be completed and opened to full public use:

1. Lynn Central Square Station and Parking Garage
2. North Station high platforms and new tracks
3. Lynn Transit Station Bus Terminal

(b) Before December 31, 1994 construction of the following facilities shall be completed and opened to full public use:

1. South Station Bus Terminal
2. South Station Track #12
3. Ipswich Commuter Rail Line extension to Newburyport

(c) Before December 31, 1996 construction of the following facilities shall be complete and opened to full public use:

1. Old Colony Commuter Rail Line Extensions to Middleboro and Plymouth
2. Framingham Commuter Rail line extension to Worcester
3. 10,000 Park and Ride and Commuter Rail Station parking spaces system-wide outside of the Boston core area as defined by a report to be submitted to the Department by EOT which identifies the location, size and market area of each facility constructed to satisfy this requirement. Said report will be submitted three months prior to the deadline for this project.

7.36: continued

(d) Before December 31, 1999 construction of the following facilities shall be completed and opened to full public use:

10,000 Park and Ride and Commuter Rail Station Parking spaces system-wide outside of the Boston Core Area in addition to those spaces developed pursuant to 310 CMR 7.36(2)(c)3. as defined by a report to be submitted to the Department by EOT which identifies the location, size and market area of each facility constructed to satisfy this requirement. Said report shall be submitted three months prior to the deadline for this project.

(e) Before December 31, 2001 construction of the following facility shall be completed and opened to full public use:

South Boston Piers Electric Bus Service

(f) Before December 31, 2007, construction of the following facility shall be completed and opened to full public use:

Old Colony Commuter Rail Line Extension to Scituate (Greenbush).

(g) Before December 31, 2008, construction of the following facility shall be completed and opened to full public use:

Blue Line Platform Lengthening and Modernization.

(h) Before December 31, 2011, construction of the following facilities shall be completed and opened to full public use:

1. Fairmount Line improvements consisting of enhancements of existing stations including, without limitation: platform extensions; improved lighting and improved access; a new station in the general location of Four Corners, and a new station in each of the neighborhoods of Dorchester, Mattapan and Roxbury; and bridge upgrades and other measures to improve service and increase ridership (the Fairmount Line project). EOT shall meet the following interim deadlines for the Fairmount Line Project:

a. One year from the effective date of 310 CMR 7.36, develop a Request for Proposals for a design consultant, complete the competitive procurement process, and issue a notice to proceed for a design consultant; and

b. Within two years following completion of the requirements of 310 CMR 7.36(2)(h)1.a., complete the requirements of 310 CMR 7.36(3)(e)1. through 6. and 310 CMR 7.36(3)(f).

2. 1000 new park and ride parking spaces serving commuter transit facilities, in addition to those required by 310 CMR 7.36(2)(c)3. and 310 CMR 7.36(2)(d), within the 101 cities and towns constituting the Boston Metropolitan Planning Organization.

(i) Before December 31, 2011, complete final design of the Red Line/Blue Line Connector, from the Blue Line at Government Center to the Redline at Charles Station.

(j) Before December 31, 2014, construction of the following facilities shall be completed and opened to full public use:

1. The Green Line Extension from Lechmere Station to Medford Hillside;
2. The Green Line Union Square spur of the Green Line Extension to Medford Hillside; and

(3) Project Interim Deadlines. For each project required by 310 CMR 7.36(2)(h)2. and (j), EOT shall meet the following Interim Deadlines.

(a) On or before 18 months following December 1, 2006, EOT shall:

1. Develop a Request for Proposals for a design consultant;
2. Complete the competitive procurement process; and
3. Issue a Notice to Proceed for a design consultant.

(b) On or before 15 months following the interim deadline established by 310 CMR 7.36(3)(a), EOT shall:

1. Complete the Conceptual Design as contracted for under 310 CMR 7.36(3)(a); and
2. File an Environmental Notification Form (ENF) with MEPA.

(c) On or before two years following MEPA's issuance of a Scope for a Draft EIR or a Singe EIR pursuant to 301 CMR 11.06(7) or (8) EOT shall:

1. Complete preliminary design; and

7.36: continued

2. File a Draft EIR or, where applicable, a Single EIR with MEPA.

(d) On or before one year following MEPA's issuance of a Scope for the Final EIR, EOT shall: Develop and file the Final EIR with MEPA.

(e) On or before 18 months following MEPA's issuance of a certificate on a Final EIR or a Single EIR, EOT shall:

1. Complete final design necessary to begin the construction phase sufficient to make application for: all local, state, and federal permits; any necessary federal funds and grants; any legislation and public land application which will be required; and any private land takings;

2. Identify all local, state, and federal approval, grants, permits, legislation, and other required actions necessary for completion of the final project construction and completion schedule required by 310 CMR 7.36(3)(f).

3. Apply for all necessary local, state, and federal permits;

4. Apply for necessary federal funds and grants;

5. File required legislation and initiate public land acquisition; and

6. Initiate private land takings to proceed to construction.

(f) EOT shall make all reasonable efforts to obtain all necessary approvals, grants, permits, or legislation consistent with meeting these interim deadlines.

(g) For the project required by 310 CMR 7.36(2)(j), following the completion of the requirements of 310 CMR 7.36(3)(a) through (f) and the receipt of all necessary approvals, grants, permits, or legislation, EOT and the Department shall establish a schedule for project construction and deadlines for project completion meaning that the project is opened to full public use. Final deadlines established under 310 CMR 7.36(3)(g) shall replace project deadlines included in 310 CMR 7.36(2)(j). However, interim emission reduction offset measures or projects shall be implemented for the period of delay from the project deadline included in 310 CMR 7.36(2)(j) until the project is completed and opened to full public use.

(4) Project Delays and Implementation of Interim Emission Reduction Offset Projects and Measures.

(a) Provided that the requirements of 310 CMR 7.36(7) and 310 CMR 7.36(4)(b) and (c) are met, the projects listed in 310 CMR 7.36(2)(h) and (j) may be delayed beyond the project deadlines established pursuant to 310 CMR 7.36(2).

(b) For delayed projects, EOT shall implement interim emission reduction offset projects or measures during the period of delay. Such interim emission offset projects or measures shall achieve emission reductions of NMHC, CO and NOx equal to or greater than the emission reductions that would have been achieved had the project not been delayed. EOT shall meet the requirement of 310 CMR 7.36(4)(b) by either:

1. Implementing projects or measures that are not otherwise required by any contractual or other legal obligation, state or federal law or regulation including without limitation 310 CMR 7.36 and 310 CMR 7.38, or by any state or federal enforcement action; Such projects shall include providing new park and ride parking spaces serving commuter transit facilities or the retrofit of diesel engines with verified diesel retrofit technologies in the transit ridership area of the delayed project; or

2. Implementing a project required by 310 CMR 7.36(2)(h) through (j) prior to its required completion date.

(c) Following a disclosure pursuant to 310 CMR 7.36(7)(a)4. that a project will be delayed, EOT shall submit to the Department a petition to delay the project. Such petition shall include, without limitation, the reasons for project delay, the measures being taken to minimize such delays, the amount of time the project will be delayed, and, if required, identification of the interim offset project or measures that will be implemented pursuant 310 CMR 7.36 (4)(b). Following public review, such petition shall be subject to approval, approval with conditions, or denial by the Department, in writing.

(5) Substitute Transit System Improvement Projects.

(a) Following EOT's completion of the requirements of 310 CMR 7.36(2)(h)1. and 310 CMR 7.36(3)(a) through (c), EOT may propose substitute projects for projects required by 310 CMR 7.36(2)(h)1. and (j) provided that:

(b) Substitute projects shall be projects that enhance or improve existing public transit service, or provide new transit service in the areas listed in 310 CMR 7.36(5)(c) and (d).

7.36: continued

(c) Substitute projects proposed for the Fairmount Line project shall be within the Dorchester, Hyde Park, Mattapan, and Roxbury neighborhoods of the City of Boston.

(d) Substitute projects proposed for the Green Line Extension and the Green Line Union Square spur of the Green Line Extension to Medford Hillside shall be within the municipalities of Boston, Cambridge, Somerville, and Medford.

(e) Proposed substitute shall be prioritized for funding in the Regional Transportation Plan for the Boston Region and the Transportation Improvement Program of the Boston MPO.

(f) EOT shall submit to the Department a proposed project substitution determination that includes the following information:

1. The reasons for seeking a project substitution;
2. The proposed substitute project(s) that will be implemented and a proposed project implementation schedule that meets the requirements of 310 CMR 7.36(2)(h)1. and 310 CMR 7.36(3);
3. A demonstration that the proposed substitute project will achieve 110% of the emission reductions of NMHC, CO and NOx that would have been achieved had all components of the project required by 310 CMR 7.36(2)(h)1. and (j) been completed; and
4. The interim emission reduction offset projects or measures that will be implemented until the substitute project(s) is completed. Such interim emission offset projects or measures shall achieve emission reductions of NMHC, CO and NOx equal to or greater than the emission reductions that would have been achieved had all components of the project been completed by the deadlines established pursuant to 310 CMR 7.36(2)(h)1. and (j).

(g) EOT shall conduct a public meeting for the sole purpose of taking public comment on the proposed substitution determination and shall;

1. Provide public notice at least 30 days prior to the public meeting by publishing in a newspaper of general circulation in the Boston and surrounding area and in the Environmental Monitor pursuant to 310 CMR 11.19 notice of the meeting and of the availability of the material identified in 310 CMR 7.36(5)(f) at the locations specified therein;
2. At least 30 days prior to the public meeting, make available to the public at the City Hall of Boston, Cambridge, Somerville, and Medford and at the State Transportation Library copies of the proposed substitution determination;
3. Following the close of the public comment period, summarize and respond to, in writing, all public comments.
4. Within 90 days following the close of the public comment period pursuant to 310 CMR 7.36 (5)(g)1, EOT shall assemble and submit to the Department the administrative record, which shall include, without limitation, a copy of:
   a. The public notice required pursuant to 310 CMR 7.36(5)(g)1.;
   b. All written comments received by EOT within the public comment period; and
   c. The summary of and response to public comments required pursuant to 310 CMR 7.36(5)(g)3.

(h) Within 90 days of receipt of EOT's submittal pursuant to 310 CMR 7.36(5)(g)4., the Department shall determine, in writing, whether the requirements of 310 CMR 7.36(5) have been met and whether the administrative record reasonably supports EOT's substitution determination.

(6) Transit System Improvement Studies.

(a) Before December 31, 1991, EOT shall draft and issue for public comment an initial study of transit improvement strategies which are in addition to those specified by 310 CMR 7.00, with the intent of incorporating the findings of said study in the Program for Mass Transportation.

(b) Development of the Program for Mass Transportation shall, in addition to the requirements of 310 CMR 7.36(6)(a), include for each strategy identified in 310 CMR 7.36(6)(a), an analysis of the following:

1. An analysis of funding implications and a comprehensive funding plan for transit projects and programs.
2. Estimates of transit project impacts on cities and towns.
3. Discussion of public education efforts that will be undertaken in implementing transit projects.

7.36: continued

(c) Before December 31, 1991, EOT shall draft and issue for public comment, studies of other transportation system improvements including but not limited to:

1. A study of the feasibility of using toll pricing to regulate single occupant vehicle trips to Logan Airport.
2. A study of the feasibility of relocating some of the existing Sumner Tunnel Toll booth to Route 1A.
3. A study of the feasibility of providing water shuttle service between Boston and communities on the North shore.
4. A study of transit system improvements which could be made in addition to those improvements listed in 310 CMR 7.36(2).
5. A study on the feasibility of constructing a rail connection between South Station and Logan Airport.
6. Expanding the size and number of suburban locations of Logan airport express service parking and transit facilities.
7. Expanding the high occupancy vehicle lanes and services within the boundaries of Logan Airport.

(d) Before December 31, 1994, EOT shall draft and issue for public comment a study of transit system improvements including but not limited to:

1. Connecting circumferential transit facilities and radial transit services.
2. Improving travel time and upgrading rail service to New York City, NY; Worcester, MA; Springfield, MA; Hartford, CT and Portland, ME.
3. Indexing transit fares so as to encourage maximum use of transit facilities.

(e) The studies identified in 310 CMR 7.36(6)(a) through (e) shall contain an analysis of the technical feasibility of each measure, an estimate of the time and cost involved in implementing the measure and an estimate of the potential air quality impacts of the measure. After providing an opportunity for final comment and consultation with other members of the Boston Metropolitan Planning Organization and the Department, the studies shall be released as final reports and submitted to the Department by no later than March 30th of the year following the deadline of the draft study. The final reports shall contain a recommendation and schedule for further action to be taken in regard to the measures contained in the studies.

(7) Public Process Requirements.

(a) By July 1st of each year beginning in 2007 and until all projects required by 310 CMR 7.36(2)(f) through (j) and any project implemented pursuant to 310 CMR 7.36(4) and (5) are complete, EOT, in consultation with the MBTA, shall develop and submit to the Department an update and status report for each project required by 310 CMR 7.36(2)(f) through (j) and any project implemented pursuant to 310 CMR 7.36(4) and (5). This report shall include:

1. Detailed information on the status of Project Interim Deadline requirements of 310 CMR 7.36(3);
2. Detailed information about project funding including a demonstration that all relevant planning documents, including the Regional Transportation Plan for the Boston Region, the Transportation Improvement Program for the Boston MPO, the MBTA's Program for Mass Transportation, and the MBTA's Capital Investment Program contain adequate funds to comply with the Project Interim Deadline requirements of 310 CMR 7.36(2)(h)1. and 310 CMR 7.36(3).
3. Detailed information about any actual or known funding, engineering, or other obstacles to meeting the Project Interim Deadline requirements of 310 CMR 7.36(2)(h)1. and 310 CMR 7.36(3) and measures being taken to address those obstacles;
4. Detailed information about any actual or known potential need and reasons for project delays or substitution;
5. Detailed information on any interim offset projects or measures implemented or proposed to be implemented pursuant to 310 CMR 7.36(4)(b) or (5)(g)4., including without limitation an air quality analysis demonstrating that the actual emission reductions meet or will meet the requirements of the delayed project.

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(b) Within 60 days of receipt of a report required by 310 CMR 7.36(7)(a), the Department shall conduct a public meeting to take public comment on the report. For each public meeting required by 310 CMR 7.36(7)(b), the Department shall:

1. Provide public notice at least 30 days prior to the public meeting by publishing in a newspaper of general circulation in the Boston and surrounding area and in the Environmental Monitor pursuant to 310 CMR 11.19 notice of the meeting and the availability of the material identified in 310 CMR 7.36(7)(a) at the locations specified therein; and

2. At least 30 days prior to the public meeting, make available to the public copies of the report required by 310 CMR 7.36(7)(a).

(c) Within 120 days following each public meeting required by 310 CMR 7.36(7)(b), EOT shall submit a summary of and response to all public comments and a written certification to the Department, with copies to the U.S. Environmental Protection Agency and the Boston Metropolitan Planning Organization, that:

1. EOT has provided complete information for all requirements of 310 CMR 7.36(7)(a).

2. EOT has provided complete information about any actual or known potential need and reasons to delay any project required by 310 CMR 7.36(2)(f) through (j);

3. EOT has provided complete information about any actual or known potential need and reasons for a project substitution pursuant to 310 CMR 7.36(5); and

4. EOT has provided complete information on the interim offset projects implemented or proposed to be implemented pursuant to 310 CMR 7.36(4)(b) and (5)(g)4.

(d) Within 60 days of receipt of EOT's annual submission required by 310 CMR 7.36(7)(c), the Department shall make a determination, in writing, whether the public process and other requirements of 310 CMR 7.36(7) were met.

(8) Determination of Air Quality Emission Reductions.

(a) EOT shall determine baseline air quality emission reductions by:

1. Calculating the NMHC, CO, and NOx emission reductions that would have been achieved by completion of each of the following projects, using latest planning assumptions and latest air quality emission models: the Green Line Arborway Restoration; the Blue Line Connection from Bowdoin Station to the Red Line at Charles Station; and the Green Line Extension to Ball Square/Tufts University; and

2. Adding 10% to the NMHC, CO, and NOx emission reductions calculated in 310 CMR 7.36(8)(a)1.

(b) EOT shall determine the projected emissions reductions in NMHC, CO, and NOx that will be achieved by implementation of each of the projects required by 310 CMR 7.36(2)(h) and (j), using latest planning assumptions and latest air quality emission models.

(c) On or before January 2, 2007, EOT shall complete a report with supporting rationale and documentation that includes:

1. A description of the modeling assumptions and analysis methodology employed under 310 CMR 7.36(8)(a) and (b);

2. The total NMHC, CO, and NOx baseline emissions reductions derived pursuant to 310 CMR 7.36(8)(a) for each project;

3. A demonstration that the implementation of the projects required by 310 CMR 7.36(2)(h) and (j) are projected to achieve the total NMHC, CO, and NOx baseline air quality emissions reductions determined under 310 CMR 7.36(8)(a);

4. The total NMHC, CO, and NOx emission reductions as determined by 310 CMR 7.36(8)(b) for each of the projects required by 310 CMR 7.36(2)(h) and (j).

5. If EOT concludes that implementation of the projects listed in 310 CMR 7.36(2)(h) and (j) will not achieve the baseline air quality emission reductions established in 310 CMR 7.36(8)(a)1., EOT shall implement additional projects to achieve the baseline air quality emission reductions, on a schedule consistent with the deadlines established pursuant 310 CMR 7.36(2)(h) and (j). Such projects shall be implemented in the geographic areas consistent with 310 CMR 7.36(5)(c) and (d). Interim emission reduction offset measures or projects shall be implemented for any period of delay from the project deadlines included in 310 CMR 7.36(2)(h) and (j).

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(d) On or before January 2, 2007, EOT shall commence a 45-day public comment period on the report required pursuant to 310 CMR 7.36(8)(c) and shall:

1. Provide public notice of the public comment period by publishing in a newspaper of general circulation in the Boston and surrounding area and in the Environmental Monitor pursuant to 310 CMR 11.19 notice of the availability of the material identified in 310 CMR 7.36(8)(d)2. at the locations specified in 310 CMR 7.36 (8)(d)2.;
2. At the commencement of the public comment period make available to the public at the City Hall of Boston, Cambridge, Somerville, and Medford and at the State Transportation Library the report with supporting rationale, and all information and documentation relied upon to support the results and conclusions of the report; and
3. Following the close of the public comment period summarize and respond to, in writing, all public comments.

(e) On or before March 1, 2007, EOT shall assemble and submit to the Department the administrative record, which shall include, without limitation a copy of:

1. The public notice required pursuant to 310 CMR 7.36(8)(d)1.;
2. The report, rationale, information, and documentation required pursuant to 310 CMR 7.36(8)(d)2;
3. All written comments received by EOT within the public comment period; and
4. The summary of and response to public comments required pursuant to 310 CMR 7.36(8)(d)3.

(f) Within 90 days of EOT's submittal pursuant to 310 CMR 7.36(8)(e), the Department shall determine, in writing, whether EOT has met the requirements of 310 CMR 7.36(8)(d) and (e) and whether the administrative record reasonably supports the results and conclusions of the report required pursuant to 310 CMR 7.36(8)(c).

(9) Demonstration of Air Quality Emission Reductions.

(a) When all projects required by 310 CMR 7.36 are substantially complete, as defined in the federal register at *Approval and Promulgation of Air Quality Implementation Plans: Massachusetts – Amendments to Massachusetts' SIP,59* Fed. Reg. 50,495-50,498 (1994), EOT shall complete an analysis of the total air quality benefits of such projects. Such analysis shall be performed in accordance with EPA requirements in effect at the time of the analysis.

(b) EOT shall submit the air quality analysis required by 310 CMR 7.36(9)(a) to the Department within four months following the substantial completion of all projects.

(c) Within 90 days of EOT's submittal pursuant to 310 CMR 7.36(9)(b), the Department shall determine, in writing, whether EOT has met the requirements of 310 CMR 7.36(9)(a) and (b).

## 7.37: MB High Occupancy Vehicle Lanes

(1) Definitions. As used in 310 CMR 7.37:

BASELINE ROADWAY CONDITIONS means the average weekday peak hour trip time in minutes for each roadway segment based on monitoring of traffic and recording of trip times during the 12 month period from April 1, 1992 to April 1, 1993.

FEASIBILITY STUDY means a study which analyzes the environmental, operational, engineering, right-of-way, construction, and financial issues affecting the implementation of high occupancy vehicle lanes on each roadway segment described in 310 CMR 7.37(3). The analysis of environmental issues shall include the impacts of HOV lanes on all mobile source emissions of CO, VOC and NOX as well as the impacts of such lanes on general purpose traffic flow. Operational issues may include enforcement and public safety issues. Notwithstanding the foregoing, in cases in which feasibility studies submitted to the Department on or before November 1, 1994 have not included an analysis of the impact of HOV lanes on NOx emissions, an analysis of such impacts will be submitted to the Department for inclusion in the Transportation Improvement Program for the metropolitan Boston area, as required by 23 CFR 450.

FINANCIAL as used in 310 CMR 7.37(1) and 7.37(8)(a) means the availability of funds from any federal, state or local sources for the design and construction of a high occupancy vehicle lane or facility.

PERFORMANCE STANDARDS means a level of roadway performance that at a minimum: 1. is equal to or better than a Level of Service C, and 2. will result in average HOV trip times that are at least one minute per mile less than average trip times on adjacent general purpose traffic lanes during peak hours of travel, as defined in 310 CMR 7.37(6)(b)2. Either the MHD or the MTA may propose substitute roadway performance standards which attempt to maximize: travel time savings, reductions in emissions of ozone precursors, operational efficiency, and person throughput, and which require vehicle throughput of no less than 400 HOVs per hour for a high occupancy vehicle lane provided that such standard provides for greater improvement in air quality for VOC, CO and NOX in the area where the HOV lane is targeted, in both the short and long term. The Department shall review any proposed substitute roadway performance standard, and shall either reject or accept it within 60 days after it has been submitted to the Department.

ROADWAY THRESHOLD STANDARDS means Baseline Roadway Conditions increased by 35%.

(2) Applicability. 310 CMR 7.37 applies where indicated, to the Executive Office of Transportation and Construction (EOTC), the Massachusetts Highway Department (MHD), and the Massachusetts Turnpike Authority (MTA).

(3) Feasibility Studies.

(a) By December 31, 1992, the MHD shall submit to the Department a study of the feasibility of establishing high occupancy vehicle lanes for the following roadways:

1. The northward extension of the existing southbound high occupancy vehicle lane on Interstate-93, north of the southern bank of the Charles River to I-95;
2. Interstate-93 northbound between the Charles River Crossing and Interstate-95; and
3. Interstate-93 northbound and southbound between Interstate-90 and Route 3 in Braintree.

(b) As part of the environmental review on the Charles River portion of the Central Artery/Tunnel project, the MHD shall complete a study of the feasibility of establishing high occupancy vehicle lanes for the Charles River Crossing. Said study shall be completed within 30 days from the date of the Federal Highway Administration issuance of a Record of Decision in connection with said review.

(c) By June 30, 1994, the MTA shall submit to the Department a study of the feasibility of establishing high occupancy vehicle lanes for Interstate-90 eastbound and westbound between Interstate-93 and Interstate-95. Said study shall include analyses of the feasibility of:

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1. Implementing full-scale high occupancy vehicle lanes;
2. Implementing a program of special high occupancy vehicle toll booths and full head-of-queue privileges including consideration of establishing specially demarcated lanes leading to high occupancy vehicle toll booths wherever found practical at appropriate turnpike interchanges; and
3. Installing electronic identification systems to facilitate high occupancy vehicle flow through turnpike toll booths.

(4) Implementation of Certain High Occupancy Vehicle Lanes.

(a) If the northward extension of the existing southbound high occupancy vehicle lane on Interstate-93 north of the Charles River is found to be feasible pursuant to the feasibility study to be completed in accordance with 310 CMR 7.37(3)(a), the MHD shall establish the high occupancy vehicle lane and make it available for public use according to a reasonable schedule, as defined in 310 CMR 7.37(4)(d), agreed upon between the Department and the MHD, but in no event later than November 1, 1994. The extension shall be subject to the following conditions:

1. The extension of the high occupancy vehicle lane shall not be accomplished by the addition of a new lane or lanes to Interstate-93.
2. Prior to the lane opening, MHD shall submit to the Department information relating to the length of the lane including a demonstration that the lane has been extended northward to the most appropriate geographical location.

(b) The final design of the Charles River Crossing portion of the Central Artery/Tunnel project on Interstate-93 shall include a high occupancy vehicle lane that shall be made available for public use at the time the Charles River Crossing of the Central Artery/Tunnel project is opened for public use. The high occupancy vehicle facility shall be located southbound on the I-93 mainline between the northernmost point appropriate to maximize use of the lane, and the Charles River crossing bridge. The northernmost terminus of the HOV lane shall be located at a point just south of the Mystic Avenue exit ramp in Medford.

(c) If high occupancy vehicle lanes northbound and southbound on Interstate-93 beginning at the intersection of Interstate-93 with Interstate-90 and extending to Route 3 in Braintree are found to be feasible pursuant to the feasibility study performed in accordance with 310 CMR 7.37(3), said high occupancy vehicle lanes shall be implemented and made available for public use according to a reasonable schedule, as defined in 310 CMR 7.37(4)(d), to be agreed upon by the Department and the MHD, but in no event later than November 15, 1995.

(d) A reasonable schedule for implementing a high occupancy vehicle lane shall include starting dates and ending dates of the following:

1. Public review of the feasibility study;
2. Environmental review, including any approvals required under the Massachusetts Environmental Policy Act, M.G.L. c. 30, § 61 *et seq.* or the National Environmental Policy Act, 42 U.S.C. section 4321 *et seq.*;
3. Final design approval;
4. Acquisition of required right of way; and
5. Construction of the high occupancy vehicle lane.

(5) Roadway Threshold Monitoring and Baseline Roadway Conditions.

(a) Beginning April 1, 1992, the MHD and the MTA shall monitor traffic volumes and trip times on the roadway segments identified for the MHD in 310 CMR 7.37(3)(a) and (b) and for the MTA in 310 CMR 7.37(3)(c) on a monthly basis. All records and data shall be maintained for a period of five years and shall be readily available for Department inspection.

(b) By May 1, 1993 the MHD shall complete collection of the information necessary to identify and document Baseline Roadway Conditions for the roadway segments identified in 310 CMR 7.37(3)(a) and (b), and the MTA shall complete collection of such information for the roadway segments identified in 310 CMR 7.37(3)(c).

(c) By July 1, 1993, the MHD shall submit to the Department a report that documents the Baseline Roadway Conditions for the roadway segments identified in 310 CMR 7.37(3)(a) and (b), and the MTA shall submit such a report for the roadway segments identified in 310 CMR 7.37(3)(c). The report shall contain appropriate traffic monitoring data and trip time records to support the Baseline Roadway Conditions documented in the report. Within

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60 days of receipt of a complete report, the Department shall review the report and take such action as it may deem appropriate. Any action taken on the report shall be in writing. Within 90 days of receipt of a complete report, the Department shall file a copy of the report and of any Department action taken, with the U.S. EPA, Region I and with the agency that filed the report.

(6) Addition of High Occupancy Vehicle Lanes.

(a) Should the Roadway Threshold Standards as defined in 310 CMR 7.37(1) be exceeded for three consecutive months, the MHD, for roadway segments identified in 310 CMR 7.37(3)(a) and the MTA for roadway segments identified in 310 CMR 7.37(3)(c), shall:

1. Notify the Department of the exceedance. The notice shall identify the roadway segment that has exceeded Roadway Threshold Standards and set out a reasonable schedule for implementing high occupancy vehicle lanes on the applicable roadway segment, and

2. Implement a high occupancy vehicle lane on the respective roadway segment according to a reasonable schedule as defined in 310 CMR 7.37(4)(d).

(b) The addition of high occupancy vehicle lanes pursuant to 310 CMR 7.37 shall be subject to the following conditions:

1. Additions of high occupancy vehicle lanes on Interstate-93 northbound and southbound between Interstate-90 and Route 3 in Braintree shall extend onto Route 3 if found feasible through the study conducted pursuant to 310 CMR 7.37(3)(a).

3. All high occupancy vehicle lanes shall be dedicated for exclusive high occupancy vehicle use during peak periods of travel. Peak periods of travel shall:

a. include at a minimum, three hours between the hours of 6:00 A.M. and 10:00 A.M. on the following:

i. the roadway segment described in 310 CMR 7.37(3)(a)1.;

ii northbound lanes of traffic on I-93 between I-90 and a Route 3 in Braintree, and

iii. eastbound lanes of traffic on I-90; and

b. shall also include at a minimum the hours of 3:00 P.M. to 7:00 P.M. on high occupancy vehicle lanes on the following:

i the roadway segment described in 310 CMR 7.37(3)(a)2.,

ii southbound lanes of traffic on I-93 between I-90 and Route 3, and

iii westbound lanes of traffic on I-90 demand forecasts.

3. Incorporation of additional high occupancy vehicle lanes shall not be accomplished by the addition of a new lane or lanes to Interstate-93 northbound beginning at the Charles River Crossing and extending north towards Interstate-95.

4. Incorporation of additional high occupancy vehicle lanes shall not be accomplished by the addition of a new lane or lanes to Interstate-90.

(c) Beginning January 1, 1994, the MHD and the MTA shall provide the Department with an annual assessment of the potential for exceedances of the Roadway Threshold Standards. The assessment shall be based on monitoring information collected and traffic projections using a method which has been agreed to in advance through consultation with the Department. The annual assessment shall, at a minimum, forecast when Roadway Threshold Standards will be exceeded on the roadway segments identified for the MHD in 310 CMR 7.37(3)(a) and (b) and for the MTA in 310 CMR 7.37(3)(c). If the Roadway Threshold Standards have already been exceeded as of one month prior to the date of submission of the annual assessment, the annual assessment shall also identify the time of day and travel conditions that were evident when Roadway Threshold Standards were exceeded.

(7) Attainment of Performance Standards.

(a) At the time that a new high occupancy vehicle lane or facility opens for public use, and at the time that any existing high occupancy vehicle lane is expanded, the MHD with respect to the roadway segments identified in 310 CMR 7.37(3)(a), and the MTA with respect to the roadway segments identified in 310 CMR 7.37(3)(c), shall monitor the high occupancy vehicle lane or facility performance, as measured by trip times, during peak periods of travel, to ensure that high occupancy vehicle performance standards are being met. Trip times shall

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be measured at least monthly and during at least five sample days each month. Measurements shall be taken on at least one Monday, Tuesday, Wednesday, Thursday and Friday during each month. On each of the sample days, a minimum of two time runs shall be made during peak hours of travel in each direction for each high occupancy vehicle lane roadway segment.

(b) The MHD and the MTA shall use all appropriate and feasible measures to maintain compliance with the high occupancy vehicle lane performance standards.

(c) Should high occupancy vehicle lane or facility performance standards for a given roadway segment be violated for 75% of the time runs in a particular month, the agency responsible for the operation of the lane shall file a written report describing the violations with the Department within ten days following the end of the month in which the violation was detected. This report shall describe the violations and shall describe a commitment by the responsible agency to take whatever measures are feasible and necessary to return the high occupancy vehicle lane to compliance with the performance standards, including but not limited to changes in high occupancy vehicle eligibility or high occupancy vehicle facility metering, and measures to increase the use of buses, car-pools and van-pools.

(d) Such reports shall be submitted to the Department for a period of two years following the opening of each HOV lane or facility. Thereafter the MHD and the MTA shall continue to monitor high occupancy vehicle lane and facility performance, to measure trip times as required by 310 CMR 7.37(7)(a), and to maintain records of such monitoring and measurements, and upon written request shall send reports to the Department containing the information and commitments described in 310 CMR 7.37(7)(c), provided however that trip times shall be measured at least quarterly and during at least five sample days each quarter, and provided further that compliance with performance standards during this later period shall be determined on a quarterly basis.

(8) Substitute High Occupancy Vehicle Projects.

(a) Based on the feasibility studies conducted pursuant to 310 CMR 7.37(3), if the MHD or the MTA can demonstrate to the Department that a specific HOV lane listed in 310 CMR 7.37(3) is not feasible due to adverse environmental impacts or associated engineering and financial issues, an alternative project shall be substituted in the following manner:

1. The MHD with respect to the roadway segments identified in 310 CMR 7.37(3)(a) and (b), and the MTA with respect to the roadway segments identified in 310 CMR 7.37(3)(c), must petition the Department to accept a substitute project. All such petitions shall be approved by EOTC prior to submission to the Department. All such petitions shall include a demonstration that the substitute project achieves equal or greater emission reductions of VOC, CO and $NO_X$ from mobile sources, than the installation of an HOV lane, and that said substitute project provides for greater improvement in air quality for VOC, CO and $NO_X$ in the area where the required high occupancy vehicle lane is targeted, in both the short and long terms. Park and ride facilities may be proposed as substitutes for the requirements for HOV lanes pursuant to the substitution provisions of 310 CMR 7.37(8). Any park and ride facilities which have been built to fulfill the requirements of, or are required to be built pursuant to 310 CMR 7.36(2), or are proposed and accepted as substitute projects pursuant to 310 CMR 7.36, cannot also be proposed as substitute projects pursuant to, 310 CMR 7.37(8).

2. Within 30 days of receipt of a petition and demonstration for project substitution, the Department shall make a determination whether all information necessary for review of said petition has been submitted, and shall notify the project proponent. The Department shall review the petition and shall, after notice and public hearing, accept or reject said petition in writing no later than 90 days after the Department determines that all information necessary to review the petition and demonstration has been submitted.

3. Within 30 days after the Department accepts or rejects such a petition and demonstration for project substitution, the Department shall file a copy of said petition and supporting documentation and a copy of the Department action with U.S. EPA, Region I.

(9) High Occupancy Vehicle Enforcement and Promotion.

(a) By January 31, 1993, the MHD and the MTA shall each prepare and submit to the Department a plan describing the general program for enforcement of the high occupancy

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vehicle lane system. These program submittals shall include a commitment to implementation of the enforcement program as defined therein. Within 30 days of receiving the enforcement program plans, the Department shall review and make recommendations regarding the plans. Said recommendations shall be incorporated by the MHD and the MTA into the final enforcement program plan for each agency. Specific enforcement measures applicable to a particular high occupancy vehicle lane shall be identified in the final design phase of the high occupancy vehicle system.

(b) By May 31, 1992, the MHD and the MTA shall prepare and submit to the Department a plan for a general program designed to promote high occupancy vehicle use. Said plan shall be based on a comprehensive review of techniques used to manage or promote high occupancy vehicle use in other locations throughout the United States and Canada. The MHD and the MTA shall, in said program, commit to implementation of selected measures to promote the use of the high occupancy vehicle system of each agency. A specific promotional plan for each roadway segment shall be prepared in conjunction with the final design for each high occupancy vehicle facility.

(10) High Occupancy Vehicle Expansion to the Local Roadway Network.

(a) EOTC and MHD shall encourage the City of Boston to incorporate high occupancy vehicle lanes and non-lane based incentives or mechanisms which promote the use of high occupancy vehicles.

(b) EOTC shall work with the Massachusetts Port Authority to conduct studies of high occupancy vehicle needs at Logan Airport.

(11) Reports Regarding Effects on Air Quality. Within two years from the opening for public use of each HOV lane or substitute project on any of the roadway segments described in 310 CMR 7.37(3), the MHD, for roadway segments described in 310 CMR 7.37(3)(a) and (b), and the MTA for roadway segments described in 310 CMR 7.37(3)(c) shall submit a report to the Department documenting the quantitative effects of such HOV lanes or projects on levels of VOC, CO and NOX in the areas affected. The method of determining the quantitative effects of such HOV lanes or substitute project on air quality shall be determined in consultation with the Department.

(12) HOV Lanes and Substitute Projects Permanent. All HOV lanes built pursuant to 310 CMR 7.37(1) through (7) and all substitute projects implemented pursuant to 310 CMR 7.37(8) shall be permanently operated and maintained by the MHD for all HOV lanes and projects built and implemented by it and by the MTA for all HOV lanes and projects built and implemented by it. Either transportation agency may petition the Department to either reduce or terminate the operation, maintenance or implementation of any HOV lane or substitute project built or implemented by it, by petitioning the Department to build another HOV lane, extend an existing HOV lane, or implement a substitute project by demonstrating that such lane or project will achieve equal or greater emission reductions of VOC, CO and NOX from mobile sources and will provide for greater improvement in air quality for VOC, CO and NOX in both the short and long term. The Department shall act upon such petitions as provided in 310 CMR 7.37(8)(a)2. and 3.

7.38: Certification of Tunnel Ventilation Systems in the Metropolitan Boston Air Pollution Control District

(1) Applicability.

(a) The requirements of 310 CMR 7.38 shall apply to the construction and operation of any tunnel ventilation system for highway projects proposed to be built in the Metropolitan Boston Air Pollution Control District, construction of which begins on or after January 1, 1991, including, but not limited to, the Central Artery/Third Harbor Tunnel project. The requirements of 310 CMR 7.38 apply in addition to requirements to implement guidelines of the Department to ensure comprehensive and systematic air quality analysis of highway projects, and all other review procedures applicable to highway projects pursuant to the State Implementation Plan (SIP), the purpose of said review to ensure the consistency of such projects with the requirements of the SIP. Tunnel ventilation systems subject to 310 CMR 7.38 are not subject to the requirements of 310 CMR 7.02.

(b) Any tunnel ventilation system which, when constructed, is subject to a federal New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants, shall be subject to such standard and shall operate in compliance with such standard.

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(2) Preconstruction Certification. No person shall cause, permit or allow the construction of any tunnel ventilation system and project roadway subject to 310 CMR 7.00 without first certifying to the

Department, and receiving the Department's written acceptance of such certification, that any tunnel ventilation system, project roadway and roadway network within the project area, when operated in strict accordance with its design, standard operating and standard maintenance procedure, will not:

(a) cause or exacerbate a violation of any National Ambient Air Quality Standard, as set forth at 40 CFR 50, or a Massachusetts Ambient Air Quality Standard as set forth at 310 CMR 6.00; or

(b) cause or exacerbate a violation of the Department's one hour ambient $NO_2$ guideline of 320 $ug/m^3$; or

(c) result in an actual or projected increase in the total amount of non-methane hydrocarbons measured within the project area when compared with the no-build alternative.

(3) Preconstruction Department Certification Process.

(a) Any proponent of a project subject to 310 CMR 7.38 is required to submit such information sufficient for the Department to review the certification. Such information shall include, but is not limited to, the following:

1. an analysis of the existing and projected non-methane hydrocarbon emissions from the project area, including the emissions from the tunnel ventilation system, the project roadway and the roadway network in the project area;

2. a comparative analysis which quantifies the air quality impact within the project area predicted to occur after the project is built and the no-build alternative;

3. information concerning ventilation building heights and locations, conceptual site plan, design criteria for the proposed ventilation equipment and project roadway, standard operating procedures and standard maintenance procedures for the tunnel ventilation system;

4. an analysis of the projected vehicle miles traveled, average vehicle speeds and vehicle hours that are expected to occur within the project area when the project is completed compared with the projected vehicle miles traveled, projected average vehicle speeds, and projected vehicle hours travelled under the no-build alternative; and

5. an identification and analysis of feasible pollution prevention measures designed to reduce vehicle miles travelled including identification of the available short and long-term measures, commitments to implement said measures, and a schedule for implementing said measures.

(b) The Department shall within 30 days of receipt of a certification required by 310 CMR 7.38(2), make a determination whether all information necessary for review of said certification has been submitted. Upon making this determination, the Department shall notify the project proponent. The Department shall review the certification and shall, after notice and public hearing, accept or reject said certification in writing no later than 90 days after the Department determines that all information necessary to review the certification has been submitted. No construction on a tunnel ventilation system or project roadway shall commence until the certification has been accepted. The Department may impose such conditions on any acceptance of a certification issued pursuant to 310 CMR 7.38(3) as it deems are necessary to meet the criteria of 310 CMR 7.38(2)(a) through (c).

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(4) Operating Certification.

(a) Except as provided herein, no person shall operate any tunnel ventilation system or open for general public use any project roadway which is served by a tunnel ventilation system subject to 310 CMR 7.38, without receiving written acceptance of its certification to do so from the Department as provided for in 310 CMR 7.38(3). Any person who has received written acceptance of certification to construct a tunnel ventilation system pursuant to 310 CMR 7.38(3) may commence operation of said tunnel ventilation system and open the project roadway to general public use for a period not to exceed 18 months, provided that said person submits to the Department an operating certification. Said operating certification submission shall be no earlier than 12 nor later than 15 months after the commencement of full operation of said tunnel ventilation system or opening of the project roadway for general public use. Any operating certification shall demonstrate that the operation of the tunnel ventilation system shall, at a minimum, be in strict accordance with the certification criteria set forth in 310 CMR 7.38(2)(a) through (c) and the certification accepted by the Department pursuant to 310 CMR 7.38(3) as demonstrated through actual measured emissions and traffic data, or other approaches allowed by 310 CMR 7.38(8)(a).

(b) In addition to the demonstration of compliance with the certification criteria set forth in 310 CMR 7.38(2)(a) through (c) and the certification accepted by the Department pursuant to 310 CMR 7.38(3), the operating certificate submittal shall include a contingency plan consisting of measures which could be implemented in cases of exceedence of the emission limitations in the certification. Said contingency plan shall identify available contingency measures including, but not limited to, alternative tunnel ventilation system operations and maintenance, and transportation control measures; a commitment for implementing said measures; a schedule for implementing measures on a days-to-full effectiveness basis; and an analysis of the daily air quality impact of the measures on the emissions from the tunnel ventilation system and within the project area.

(c) Any operating certification accepted by the Department pursuant to 310 CMR 7.38(4) shall remain in effect for five years from the date of acceptance and shall contain such conditions as the Department deems necessary to meet the certification criteria established in 310 CMR 7.38(2)(a) through (c) Any operating certification accepted by the Department pursuant to 310 CMR 7.38(4) shall be subject to renewal upon application to the Department. The Department shall apply the same criteria that apply to the acceptance of pre-construction certification and the initial operating certification to the renewal of an operating certification. The requirement to obtain an operating certification, or renewal thereof, shall be in addition to the certification required in 310 CMR 7.38(2).

(5) Operating Certification Department Process. The Department shall, within 30 days of receipt of an initial operating certification or renewal of an operating certification required by 310 CMR 7.38(4), make a determination whether all information necessary for review of said certification has been submitted. Upon making this determination, the Department shall notify the project proponent. The Department shall review the certification and shall, after notice and public hearing, accept or reject said certification in writing no later than 90 days after the Department determines that all information necessary to review the certification has been submitted. The Department may impose such conditions on any acceptance of a certification issued pursuant to 310 CMR 7.38(5) as it deems are necessary to meet the criteria of 310 CMR 7.38(2)(a) through (c) and of the certification accepted pursuant to 310 CMR 7.38(3).

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(6) Mitigation Plan Review and Acceptance.

(a) If the Department finds, based upon a review of information submitted by the operator in support of any operating certification, and such other information as the Department has available to it, that one or more of the criteria set forth in 310 CMR 7.38(2)(a) through (c) or established in the acceptance of the certification pursuant to 310 CMR 7.38(3) through (5) are being violated, or are likely to be violated within the period for which the operating certification is valid, the operator of the tunnel ventilation system shall:

1. Implement the measures identified in the contingency plan submitted and accepted as part of the initial operating certificate pursuant to 310 CMR 7. 38(4), and necessary,

2. Within four months after being notified of such a finding, submit to the Department for review and approval a mitigation plan which identifies specific measures the operator intends to implement to bring the tunnel ventilation system and associated project area into compliance with criteria set forth in 310 CMR 7.38(2)(a) through (c) and the conditions of the Department's acceptance of the certification set forth in 310 CMR 7.38(3) through (5). The mitigation plan shall at minimum contain the following:

a. a study that identifies the factors which are causing or contributing to the violation identified in any notice by the Department issued under 310 CMR 7.38(6);

b. identification and an affirmative demonstration of specific measures which will result in compliance with the criteria in 310 CMR 7.38(2)(a) through (c), and the Departments acceptance of the certification issued pursuant to 310 CMR 7.38(3) through (5).

c. a demonstration of adequate funding mechanisms for implementation of said measures; and

d. a schedule for implementing said measures.

(b) A mitigation plan submitted pursuant to 310 CMR 7.38(6) shall include examination of measures which address the operation of the ventilation system as well as examination of measures which address operation of the tunnel roadway and roadway network within the project area. The latter shall include, but not be limited to:

1. improvements in public transit,
2. programs to increase the use of high occupancy vehicles,
3. restriction of additional roads or lanes to high-occupancy vehicles,
4. employer-based transportation demand management plans,
5. expansion of fringe and transportation corridor parking facilities,
6. programs to limit or restrict vehicle use in downtown areas or other areas of high emission concentration particularly during periods of peak use,
7. ridesharing programs, and
8. other measures to shift demand to non-automotive modes of travel or to increase vehicle occupancy rates.

(c) The Department shall, within 30 days of receipt of the mitigation plan, make a determination that all information necessary for review of said plan has been submitted. Upon making this determination, the Department shall notify the project proponent. The Department shall review the mitigation plan and shall, after notice and public hearing, accept, or reject said plan in writing no later than 90 days after the Department determines that all information necessary to review the plan has been submitted. The Department may impose such conditions on any acceptance of the plan prepared pursuant to 310 CMR 7.38(6) as it deems are necessary to meet the criteria of 310 CMR 7.38(2)(a) through (c) and of the certification accepted pursuant to 310 CMR 7.38(3) through (5). The terms of the accepted plan shall be incorporated into the operating certification for the applicable renewal period.

7.38: continued

(7) Review of Operations. If at any time the Department finds that one or more of the criteria set forth in 310 CMR 7.38(2)(a) through (c) or the criteria established in the acceptance of certification issued pursuant to 310 CMR 7. 38(3) through (5) is not being met, the Department may order the operator to implement the contingency measures and to submit a mitigation plan as set forth in 310 CMR 7.38(6) to bring the operation of the tunnel ventilation system into compliance with said criteria. Any plan submission made pursuant to 310 CMR 7.38(7) shall contain the same elements as required pursuant to 310 CMR 7.38(5) and (6) as well as such other information as the Department may require.

(8) Compliance Monitoring. Any person who constructs and operates a tunnel ventilation system on or after January 1,1991 shall comply with the following monitoring requirements:

(a) Emissions Monitoring. Any person who constructs and operates a tunnel ventilation system which is subject to the requirements of 310 CMR 7.38 shall, prior to commencing operation of the tunnel ventilation system or opening the project roadway for public use, develop and submit to the Department for review and approval an "Air Emissions Monitoring Protocol" and shall install and operate emissions monitoring and recording equipment in accordance with the approved protocol. Monitoring as approved by the Department shall be required at the exhaust stacks or exhaust plenums of ventilation buildings as well as at exit portals that utilize longitudinal ventilation. The Department will consider for approval hybrid monitoring systems that incorporate elements of the federal regulations for monitoring ambient air pollution, for monitoring stationary source emissions, and for pollutant emission trading (*i.e.*, 40 CFR Parts 58, 60, and 75) as practicable, as well as statistical analysis, computer modeling, and innovative technologies. The "Air Emissions Monitoring Protocol" may also be modified with prior written approval of the Department.

(b) Traffic Monitoring. Any person who constructs and operates a tunnel ventilation system which is subject to the requirements of 310 CMR 7.38 shall install, operate and maintain traffic monitoring equipment within the project area, the numbers and locations of which shall be determined in consultation with the Department.

(9) Record Keeping and Reporting.

(a) Any person who constructs and operates a tunnel ventilation system on or after January 1, 1991 shall comply with the following record keeping and reporting requirements:

1. All records and data from the continuous emissions monitors, recorders and traffic monitors shall be maintained for a period of five years. The most recent two years of data shall be readily available for Department inspection.

2. Emissions Reporting. For the first year of operations monthly reports shall be filed with the Department no later than 30 days following the end of the preceding calendar month. Said monthly reports shall contain a summary of continuous monitoring data showing any excursions from allowable emission limitations contained in the Department's acceptance of the certification. In the event any of the reported data shows an excursion of the emission limitations set forth in the acceptance of certification, a written explanation of any excursion shall be included. Evidence of each calibration event on the monitoring devices shall be included in such monthly reports.

3. Traffic Reporting. For the first year of operation monthly reports shall be filed with the Department no later than 30 days following the end of the preceding calendar month. Said monthly reports shall contain a summary of average daily and peak hour counts of vehicle miles travelled as well as average daily and peak hour vehicle speeds and vehicle hours travelled as identified through the traffic monitoring network established pursuant to 310 CMR 7.38(8).

4. Tunnel Ventilation System Maintenance. For the first year of operations monthly reports shall be filed with the Department no later than 30 days following the end of the preceding calendar month. Said monthly reports shall contain a summary of routine maintenance checks performed, repairs of ventilation equipment, amount of time during which ventilation equipment was not operating in accordance with standard operating procedures and measures taken to remedy this situation.

7.38: continued

(b) After the first year of operation, the reports required by 310 CMR 7.38(9) shall be submitted to the Department on a quarterly basis, with the first such quarterly report being due no later than 30 days after the end of the quarter and every three months thereafter.

(10) Removal of Air Pollution Control and Monitoring Equipment. No person shall cause, suffer, allow, or permit the removal, alteration or shall otherwise render inoperative any air pollution control equipment or equipment used to monitor emissions or operations which has been installed as a requirement of 310 CMR 7.38, other than for routine maintenance periods or unexpected and unavoidable failure of the equipment, provided that the Department is notified of such failure. For the purpose of 310 CMR 7.38(10), the term, air pollution control equipment, shall mean the tunnel ventilation system as defined in 310 CMR 7.00.

(11) Public Participation. The purpose of the public hearings provided for in 310 CMR 7.38 shall be to allow any person to make their views known to the Department. Such a hearing shall not be adjudicatory in nature, but shall be in the nature of a public forum for the presentation of any comment that may be relevant to the consideration of a request for acceptance of pre-construction certification, operating certification, renewal of operating certification or acceptance of a mitigation plan. Any decision related to the review and acceptance or rejection of a preconstruction certification; review, acceptance or rejection of a request for operating certification; review, acceptance or rejection of the renewal of an operating certification; or review, acceptance or rejection of a mitigation plan in accordance with the provisions of 310 CMR 7.38, is not an adjudicatory proceeding within the meaning of M.G.L. c. 30A.

7.40: U Low Emission Vehicle Program

(1) U Applicability and Definitions.

(a) Under the authority of 42 U.S.C. 7507 and M.G.L. c. 111, §§ 142A through 142M, the Department hereby adopts the California Low Emission Vehicle program.

(b) Definitions. When used in 310 CMR 7.40 or in communications, notices or orders relative thereto, the following words and phrases shall have the meanings ascribed to them below:

ADD-ON PART means any aftermarket part which is not a modified part or a replacement part.

AFTERMARKET PART means any part of a motor vehicle emission control system sold for installation on a vehicle after the original retail sale of the vehicle.

CONSOLIDATED PART means a part which is designed to replace a group of original equipment parts and which is functionally identical of those original equipment parts in all respects which in any way affect emissions (including durability).

EMERGENCY VEHICLES means any publicly owned vehicle operated by a peace officer in performance of their duties, any authorized emergency vehicle used for fighting fires or responding to emergency fire calls, any publicly owned authorized emergency vehicle used by an emergency medical technician or paramedic, or used for towing or servicing other vehicles, or repairing damaged lighting or electrical equipment, any motor vehicle of mosquito abatement, vector control, or pest abatement agencies and used for those purposes, or any ambulance used by a private entity under contract with a public agency.

EMISSION CONTROL LABELS means a paper, plastic, metal or other permanent material, welded, riveted or otherwise permanently attached to an area within the engine compartment (if any) or to the engine in such a way that it will be visible to the average person after installation of the engine in all 1995 and subsequent model year passenger cars and light-duty trucks and 2003 and subsequent model year medium-duty vehicles and 2005 and subsequent model year heavy-duty engines and vehicles certified for sale in California, in accordance with Title 13 CCR § 1965 and "California Motor Vehicle Emission Control and Smog Index Label Specifications".

EMISSION CONTROL WAIVER means an exemption from the requirements of 310 CMR 7.40 granted by the Department in conjunction with the Massachusetts Registry of Motor Vehicles, pursuant to M.G.L. c. 90, § 2 or regulations promulgated thereunder.

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EMISSIONS-RELATED PART means any automotive part, which affects any regulated emissions from a motor vehicle which is subject to California or federal emission standards. This includes, at a minimum, those parts specified in the "Emissions-Related Parts List," adopted by the California Air Resources Board.

ENVIRONMENTAL PERFORMANCE LABEL means a decal securely affixed by the manufacturer to a window of all 2010 and subsequent model year passenger cars, light-duty trucks, and medium-duty passenger vehicles which discloses the smog and global warming scores for the vehicle in accordance with Title 13, CCR § 1965 and the "California Motor Vehicle Emission Control, Smog Index, and Environmental Performance Label Specifications".

EXECUTIVE ORDER means a document issued by the California Air Resources Board certifying that a specified engine family, test group or model year vehicle has met all applicable Title 13 CCR requirements for certification and sale in California.

FLEETWIDE AVERAGE means a motor vehicle manufacturer's average vehicle emissions of all non-methane organic gases and all greenhouse gases from all vehicles subject to 310 CMR 7.40, delivered for sale to Massachusetts in any model year, based on the calculation in Title 13 CCR § 1960.1(g)(2), 1961 or 1961.1.

GREENHOUSE GAS means any of the following gases: carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons.

GREENHOUSE GAS VEHICLE TEST GROUP means vehicles that have an identical test group, vehicle make and model, transmission class and driveline, aspiration method (*e.g.*, naturally aspirated, turbocharged), camshaft configuration, valvetrain configuration, and inertia weight class.

HEAVY-DUTY ENGINE means any engine used to propel a heavy-duty vehicle.

HEAVY-DUTY VEHICLE means any motor vehicle having a manufacturer’s gross vehicle weight rating greater than 6,000 lbs., except passenger cars.

INDEPENDENT LOW VOLUME MANUFACTURER means a manufacturer with California annual sales of less than 10,000 new passenger cars, light-duty trucks and medium-duty vehicles following aggregation of sales pursuant to Title 13 CCR § 1900(b)(8). Annual sales shall be determined as the average number or sales sold for the three previous consecutive model years for which a manufacturer seeks certification; however, for a manufacturer certifying for the first time in California, annual sales shall be based on projected California sales for the model year. A manufacturer’s California sales shall consist of all vehicles or engines produced by the manufacturer and delivered for sale in California, except that vehicles or engines produced by the manufacturer and marketed in California by another manufacturer under the other manufacturer’s nameplate shall be treated as California sales of the marketing manufacturer. The annual sales from different firms shall be aggregated in the following situations:

(a) vehicles produced by two or more firms, one of which is 10% or greater part owned by another; or

(b) vehicles produced by any two or more firms if a third party has equity ownership of 10% or more in each of the firms; or

(c) vehicles produced by two or more firms having a common corporate officer(s) who is (are) responsible for the overall direction of the companies; or

(d) vehicles imported or distributed by all firms where the vehicles are manufactured by the same entity and the importer or distributor is an authorized agent of the entity.

INTERMEDIATE VOLUME MANUFACTURER means any pre-2001 model year manufacturer with California sales between 3,001 and 60,000 new light- and medium-duty vehicles per model year based on the average number of vehicles sold by the manufacturer each model year from 1989 to 1993; any 2001 through 2002 model year manufacturer with California sales between 4,501 and 60,000 new light- and medium-duty vehicles per model year based on the average number of vehicles sold by the manufacturer each model year from 1989 to 1993; and any 2003

7.40: continued

and subsequent model year manufacturer with California sales between 4,501 and 60,000 new light- and medium-duty vehicles based on the average number of vehicles sold for the three previous consecutive model years for which a manufacturer seeks certification. For a manufacturer certifying for the first time in California, model year sales shall be based on projected California sales. A manufacturer's California sales shall consist of all vehicles or engines produced by the manufacturer and delivered for sale in California, except that vehicles or engines produced by the manufacturer and marketed in California by another manufacturer under the other manufacturer's nameplate shall be treated as California sales of the marketing manufacturer.

(a) For purposes of applying the 2005 and subsequent model year zero-emission vehicle requirements for intermediate-volume manufacturers under Title 13 CCR § 1962(b), the annual sales from different firms shall be aggregated in the case of:

1. vehicles produced by two or more firms, each one of which either has a greater than 50% equity ownership in another or is more than 50% owned by another; or
2. vehicles produced by any two or more firms if a third party has equity ownership of greater than 50% in each firm.

(b) For purposes of applying the 2009 and subsequent model year Greenhouse Gas requirements for intermediate volume manufacturers under Title 13 CCR § 1961.1, the annual sales from different firms shall be aggregated in the following situations:

1. vehicles produced by two or more firms, each one of which either has a greater than 10% equity ownership in another or is more than 10% owned by another; or
2. vehicles produced by any two or more firms if a third party has equity ownership of greater than 10% in each firm.

LARGE VOLUME MANUFACTURER means any 2000 and subsequent model year manufacturer that is not a small volume manufacturer, or an independent low volume manufacturer, or an intermediate volume manufacturer.

LIGHT-DUTY TRUCK means any 2000 and subsequent model year motor vehicle certified to the standards in Title 13 CCR § 1961(a)(1) rated at 8,500 lbs. gross vehicle weight or less, and any other motor vehicle rated at 6,000 lbs. gross vehicle weight or less, which is designed primarily for purposes of transportation of property or is a derivative of such a vehicle, or is available with special features enabling off-street or off-highway operation and use.

MAIL OUT means a widely distributed general correspondence issued by the California Air Resources Board whenever said Board needs information from the public, or when it wishes to inform the public of new information.

MANUFACTURER means any small, intermediate or large volume motor vehicle manufacturer which offers, delivers or arranges for the delivery of new motor vehicles for sale or lease in Massachusetts as defined in Title 13 CCR § 1900, except as otherwise provided in 310 CMR 7.40(12).

MANUFACTURERS ADVISORY CORRESPONDENCE means a document issued by the California Air Resources Board, which is a policy interpretation for further clarification of the California Code of Regulations (CCR).

MEDIUM-DUTY PASSENGER VEHICLE means any medium-duty vehicle with a gross vehicle weight rating of less than 10,000 pounds that is designed primarily for the transportation of persons. The medium-duty passenger vehicle definition does not include any vehicle which:

(a) is an "incomplete truck" *i.e.*, is a truck that does not have the primary load carrying device or container attached; or

(b) has a seating capacity of more than 12 persons; or

(c) is designed for more than nine persons in seating rearward of the driver's seat; or

(d) is equipped with an open cargo area of 72.0 inches in interior length or more. A covered box not readily accessible from the passenger compartment will be considered an open cargo area, for purposes of 310 CMR 7.40(1): MEDIUM-DUTY PASSENGER VEHICLE.

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MEDIUM-DUTY VEHICLE means any 2003 through 2006 model year heavy-duty low-emission, ultra-low-emission, super-ultra-low-emission or zero-emission vehicle certified to the standards in Title 13 CCR § 1956.8(g) or (h) or 1960.1(h)(2), having a manufacturer's gross vehicle weight rating of 14,000 lbs. or less; any 2003 heavy-duty vehicle certified to the standards in Title 13 CCR §1960.1(h)(1), 1956.8(g) or (h) having a manufacturer's gross vehicle weight rating of 14,000 lbs. or less; and any 2003 and subsequent model heavy-duty low-emission, ultra-low-emission, super-ultra-low-emission or zero-emission vehicle certified to the standards in Title 13 CCR § 1956.8(c), (g) or (h), 1961(a)(1) or 1962 having a manufacturer's gross vehicle weight rating between 8,501 and 14,000 lbs.

MODEL YEAR means a manufacturer's annual production period which includes January 1st of a calendar year or, if the manufacturer has no annual production period, the calendar year. In the case of any vehicle manufactured in two or more stages, the time of manufacture shall be the date of completion of the chassis.

MODIFIED PART means any aftermarket part intended to replace an original equipment emissions-related part and which is not functionally identical to the original equipment part in all respects which in any way affect emissions, excluding a consolidated part.

MOTOR VEHICLE POLLUTION CONTROL SYSTEM means the combination of emission-related parts which controls air pollutant emissions from a motor vehicle or motor vehicle engine.

NEW VEHICLE means any passenger car, light-duty truck or 2003 and subsequent model year medium-duty vehicle and 2005 and subsequent model year heavy-duty engine and vehicle with 7,500 miles or fewer on its odometer.

PASSENGER CAR means any motor vehicle designed primarily for transportation of persons and having a design capacity of 12 persons or less.

PLACED IN SERVICE means having been sold or leased to an end-user and not just to a dealer or other distribution chain entity, and having been individually registered for on-road use in Massachusetts.

PROJECT MANAGER means the person responsible for the administration of Transportation System Projects pursuant to Title 13 CCR § 1962 (g)(5) and 310 CMR 7.40.

RECALL means:

(a) A manufacturer's issuing of notices directly to consumers that vehicles in their possession or control should be corrected;

(b) A manufacturer's efforts to actively locate and correct vehicles in the possession or control of consumers.

RECALL CAMPAIGN means that plan approved by the California Air Resources Board or the Department, by which the manufacturer will effect the recall of noncomplying vehicles.

REPLACEMENT PART means any aftermarket part which is intended to replace an original equipment emissions-related part and which is functionally identical to the original equipment part in all respects which in any way affect emissions (including durability), or a consolidated part.

7.40: continued

SMALL VOLUME MANUFACTURER means, with respect to the 2001 and subsequent model-years, a manufacturer with California sales less than 4,500 new passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles and heavy-duty engines based on the average number of vehicles sold for the three previous consecutive model years for which a manufacturer seeks certification as a small volume manufacturer; however, for manufacturers certifying for the first time in California model-year sales shall be based on projected California sales. A manufacturer's California sales shall consist of all vehicles or engines produced by the manufacturer and delivered for sale in California, except that vehicles or engines produced by the manufacturer and marketed in California by another manufacturer under the other manufacturer's nameplate shall be treated as California sales of the marketing manufacturer. Except as provided in the next paragraph, beginning with the 2009 model year, the annual sales from different firms shall be aggregated in the following situations:

(a) vehicles produced by two or more firms, one of which is 10% or greater part owned by another; or

(b) vehicles produced by any two or more firms if a third party has equity ownership of 10% or more in each of the firms; or

(c) vehicles produced by two or more firms having a common corporate officer(s) who is (are) responsible for the overall direction of the companies; or

(d) vehicles imported or distributed by all firms where the vehicles are manufactured by the same entity and the importer or distributor is an authorized agent of the entity.

(e) For purposes of compliance with the zero-emission vehicle requirements, heavy-duty vehicles and engines shall not be counted as part of a manufacturer's sales. For purposes of applying the 2005 and subsequent model year zero-emission vehicle requirements for small-volume manufacturers under Title 13 CCR § 1962(b), the annual sales from different firms shall be aggregated in the case of:

1. vehicles produced by two or more firms, each one of which either has a greater than 50% equity ownership in another or is more than 50% owned by another; or

2. vehicles produced by any two or more firms if a third party has equity ownership of greater than 50% in each firm.

SMOG INDEX LABEL means a decal securely affixed by the manufacturer to a window of all 2001 through 2009 model year passenger cars and light-duty trucks which discloses the smog index for the vehicle in accordance with Title 13 CCR 1965 and the "California Motor Vehicle Emission Control and Smog Index Label Specifications".

TEST VEHICLE means an experimental or prototype motor vehicle which appears to have very low emission characteristics or a used motor vehicle within which an experimental motor vehicle pollution control device is installed, and which has also received a test vehicle or fleet permit from the California Air Resources Board pursuant to Manufacturers Advisory Correspondence No. 83-01.

USED VEHICLE means any passenger car, light-duty truck or 2003 and subsequent model year medium-duty vehicle with more than 7,500 miles on its odometer.

VEHICLE means any passenger car, light duty truck or 2003 and subsequent model year medium-duty vehicle or 2005 and subsequent model year heavy-duty vehicle.

ZERO EMISSION VEHICLE (or "ZEV") means any passenger car, light-duty truck, or medium duty vehicle certified to the zero emission vehicle standards in Title 13 CCR § 1962.

(c) The Low Emission Vehicle Program at 310 CMR 7.40, refer to various sections of Title 13 of the California Code of Regulations (CCR). Wherever 310 CMR 7.40 refers to a specific section of the CCR, the reference is made to that version of the section as of the amended date provided for that section in 310 CMR 7.40(1)(c): *Table 1*. The Department hereby incorporates by reference each of the sections of Title13 CCR that are listed in Table 1 as of such section's respective Amended Date.

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310 CMR 7.40(1)(c): TABLE 1

| Title 13 CCR | Title | Section Amended Date |
|---|---|---|
| CHAPTER 1. Motor Vehicle Pollution Control Devices. | | |
| Article 1. General Provisions. | | |
| 1900 | Definitions. | 38717 |
| Article 2. Approval of Motor Vehicle Pollution Control Devices (New Vehicles). | | |
| 1956.8(a)(2) - (4), (b), (c), (d), (e), (f), (g), (h) | Exhaust Emissions Standards and Test Procedures - 1985 and Subsequent Model Heavy-duty Engines and Vehicles. | 37958 |
| 1960.1 | Exhaust Emissions Standards and Test Procedures - 1981 through 2006 Model Passenger Cars, Light-duty Trucks and Medium-duty Vehicles. | 37399 |
| 1960.1.5 | Optional NOx Standards for 1983 and Later Model Passenger Cars, and Light-duty Trucks and Medium-duty Vehicles Less Than 4000 Lbs. Equivalent Inertia Weight (EIW) or 3751 Lbs. Loaded Vehicle Weight (LVW). | 9/30/91 |
| 1960.5 | Certification of 1983 and Subsequent Model-year Federally Certified Light-duty Motor Vehicles for Sale in California. | 9/30/91 |
| 1961 | Exhaust Emission Standards and Test Procedures - 2004 and Subsequent Model Passenger Cars, Light-duty Trucks, and Medium-duty Vehicles. | 38717 |
| 1961.1 | Greenhouse Gas Exhaust Emission Standards and Test Procedures – 2009 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles. | 38717 |
| 1962(a), (b), (c), (d), (e), (f), (g)(1-7), (h), (i), (j) | Zero-Emission Vehicle Standards for 2003 and Subsequent Model Passenger Cars, Light-duty Trucks, and Medium-duty Vehicles, including California Exhaust Emission Standards and Test Procedures for 2003 and Subsequent Model Zero-emission Vehicles, and 2001 and Subsequent Model Hybrid Electric Vehicles, in the Passenger Car, Light-duty Truck and Medium-duty Vehicle Classes except for Section C.7.8. | 38071 |
| 1964 | Special Test Procedures for Certification and Compliance - New Modifier Certified Motor Vehicles. | 2/23/90 |
| 1965 | Emission Control, Smog Index, and Environmental Performance Labels - 1979 and Subsequent Model-year Motor Vehicles. | 6/16/08 |
| 1968.1 | Malfunction and Diagnostic System Requirements - 1994 and Subsequent Model-year Passenger Cars, Light-duty Trucks and Medium-duty Vehicles and Engines. | 36490 |
| 1976 | Standards and Test Procedures for Motor Vehicle Fuel Evaporative Emissions. | 36490 |
| 1978 | Standards and Test Procedures for Vehicle Refueling Emissions. | 36490 |
| Article 6. Emission Control System Warranty. | | |
| 2035 | Purpose, Applicability, and Definitions. | 12/26/90 |

7.40: continued

| Title 13 CCR | Title | Section Amended Date |
|---|---|---|
| 2036 | Defects Warranty Requirements for 1979 Through 1989 Model Passenger Cars, Light-duty Trucks, and Medium-duty Vehicles; 1979 and Subsequent Model Motorcycles and Heavy-duty Vehicles; and Motor Vehicle Engines Used in Such Vehicles. | 5/15/99 |
| 2037 | Defects Warranty Requirements for 1990 and Subsequent Model Passenger Cars, Light-duty Trucks, and Medium-duty Vehicles, and Motor Vehicle Engines Used in Such Vehicles. | 36490 |
| 2038 | Performance Warranty for 1990 and Subsequent Model Passenger Cars, Light-duty Trucks, Medium-duty Vehicles and Motor Vehicle Engines Used in Such Vehicles. | 36490 |
| 2039 | Emissions Control System Warranty Statement. | 12/26/90 |
| 2040 | Vehicle Owner Obligations. | 12/26/90 |
| 2041 | Mediation; Finding of Warrantable Condition. | 12/26/90 |
| Article 7. Procedures for Certifying Used Modifier-certified Motor Vehicles and Licensing Requirements for Vehicle Emission Test Laboratories. | | |
| 2047 | Certification Procedures for Used Modifier-certified Motor Vehicles. | 5/31/88 |
| CHAPTER 2. Enforcement of Vehicle Emission Standards and Surveillance Testing. | | |
| Article 1. Assembly-line Testing. | | |
| 2061 | Assembly-line Test Procedures - 1983 and Subsequent Model-Years. | 10/23/96 |
| 2062 | Assembly-line Test Procedures - 1998 and Subsequent Model Years. | 36490 |
| Article 1.5 Enforcement of Vehicle Emission Standards and Surveillance Testing for 2005 and Subsequent Model Year Heavy-duty Engines and Vehicles | | |
| 2065 | Applicability of Chapter 2 to 2005 and Subsequent Model Year Heavy-duty Engines and Vehicles | 7/2501 |
| Article 2. Enforcement of New and In-Use Vehicle Standards. | | |
| 2101 | Compliance Testing and Inspection - New Vehicle Selection, Evaluation, and Enforcement Action. | 36490 |
| 2106 | New Vehicle Assembly-line Inspection Testing. | 36490 |
| 2107 | Assembly-line Quality-audit Testing. | 36490 |
| 2108 | Order of Executive Officer. | 11/30/83 |
| 2109 | New Vehicle Recall Provisions. | 11/30/83 |
| 2110 | Remedial Action for Assembly-line Quality Audit Testing of Less Than a Full Calendar Quarter of Production Prior to the 2001 Model Year. | 36490 |
| Article 2.1 Procedures for In-Use Vehicle Voluntary and Influenced Recalls. | | |
| 2111 | Applicability. | 1/26/95 |
| 2112 | Definitions. | 36490 |
| | Appendix A to Article 2.1. | 36490 |
| 2113 | Initiation and Approval of Voluntary and Influenced Emission-related Recalls. | 1/26/95 |
| 2114 | Voluntary and Influenced Recall Plans. | 36490 |

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| Title 13 CCR | Title | Section Amended Date |
|---|---|---|
| 2115 | Eligibility for Repair. | 1/26/95 |
| 2116 | Repair Label. | 1/26/95 |
| 2117 | Proof of Correction Certificate. | 1/26/95 |
| 2118 | Notification. | 1/26/95 |
| 2119 | Recordkeeping and Reporting Requirements. | 36490 |
| 2120 | Other Requirements Not Waived. | 1/26/95 |
| 2121 | Penalties. | 1/26/95 |
| Article 2.2. Procedures for In-use Vehicle Ordered Recalls. | | |
| 2122 | General Provisions. | 1/26/95 |
| 2123 | Initiation and Notification of Ordered Emission-related Recalls. | 1/26/95 |
| 2124 | Availability of Public Hearing. | 1/26/95 |
| 2125 | Ordered Recall Plan. | 1/26/95 |
| 2126 | Approval and Implementation of Recall Plan. | 1/26/95 |
| 2127 | Notification of Owners. | 1/26/95 |
| 2128 | Repair Label. | 1/26/95 |
| 2129 | Proof of Correction Certificate. | 1/26/95 |
| 2130 | Capture Rates and Alternative Measures. | 36490 |
| 2131 | Preliminary Tests. | 1/26/95 |
| 2132 | Communication with Repair Personnel. | 1/26/95 |
| 2133 | Recordkeeping and Reporting Requirements. | 1/26/95 |
| 2134 | Penalties. | 1/26/95 |
| 2135 | Extension of Time. | 1/26/95 |
| Article 2.3. In-use Vehicle Enforcement Test Procedures. | | |
| 2136 | General Provisions. | 1/26/95 |
| 2137 | Vehicle Selection. | 36490 |
| 2138 | Restorative Maintenance. | 36490 |
| 2139 | Testing. | 36490 |
| 2140 | Notification and Use of Test Results. | 36490 |
| Article 2.4. Procedures for Reporting Failure of Emission-related Components. | | |
| 2141 | General Provisions. | 2/23/90 |
| 2142 | Alternative Procedures. | 2/23/90 |
| 2143 | Failure Levels Triggering Recall. | 36490 |
| 2144 | Emission Warranty Information Report. | 36490 |
| 2145 | Field Information Report. | 36490 |
| 2146 | Emissions Information Report. | 36490 |
| 2147 | Demonstration of Compliance with Emission Standards. | 36490 |

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| Title 13 CCR | Title | Section Amended Date |
|---|---|---|
| 2148 | Evaluation of Need for Recall. | 36490 |
| 2149 | Notification of Subsequent Action. | 2/23/90 |
| Article 3. Surveillance Testing. | | |
| 2150 | Assembly-line Surveillance. | 11/30/83 |
| 2151 | New Motor Vehicle Dealer Surveillance. | 11/30/83 |
| 2152 | Surveillance of Used Cars at Dealerships | 11/30/83 |
| Chapter 4. Criteria for the Evaluation of Motor Vehicle Pollution Control Devices and Fuel Additives. | | |
| Article 2. Aftermarket Parts. | | |
| 2221 | Replacement Parts. | 11/30/83 |
| 2222 | Add-on Parts and Modified Parts. | 8/16/90 |
| 2224 | Surveillance. | 33100 |

(d) Pursuant to the requirements of M.G.L. c. 111, § 142K, 310 CMR 7.40 is applicable to all 1995 and subsequent model year passenger cars and light-duty trucks and 2003 and subsequent model year medium-duty vehicles and 2005 and subsequent model year heavy-duty engines and vehicles sold, leased, offered for sale or lease, imported, delivered, purchased, rented, acquired, received, or registered in Massachusetts.

(e) All documentation referenced in the CCR Title 13 sections listed in Table 1, including but not limited to California Test Procedures, California Health and Safety Code and 40 CFR, Part 86 are also hereby incorporated by reference.

(f) Pursuant to the requirements of 42 U.S.C. 7507, the Department shall apply technical guidance issued by the California ARB relative to the implementation of Title 13 CCR, including but not limited to Manufacturers Advisory Correspondences and Mail Outs to all vehicles subject to 310 CMR 7.40.

(2) Emissions Requirements and Prohibitions.

(a) No corporation, person or other entity shall sell, import, deliver, purchase, lease, rent, acquire, receive, or register a new vehicle subject to 310 CMR 7.40 in Massachusetts that has not received a California ARB Executive Order for all applicable requirements of Title 13 CCR § 1956.8(c), (g) or (h), 1960.1, 1960.1.5, 1960.5, 1961, 1961.1, 1964, 1968.1, 1976, 1978 and 2047, unless the vehicle is sold directly from one dealer to another dealer, sold for the purpose of being wrecked or dismantled, sold exclusively for off-highway use, or sold for registration out of state, and except as provided in 310 CMR 7.40(2)(c).

1. Effective for model years 1999 and 2000, each manufacturer shall comply with the Fleet Average Non-methane Organic Gas Exhaust Emission Requirement in Massachusetts, including the generation of non-methane organic gas credits and debits, hereinafter referred to as NMOG credits and debits, and the requirement to make up an NMOG debit, in accordance with the procedures in Title 13 CCR § 1960.1(g)(2), based on passenger cars and light-duty trucks delivered for sale in Massachusetts.

7.40: continued

2. Effective for 2001 and subsequent model years, each manufacturer shall comply with the Fleet Average Non-methane Organic Gas Exhaust Emission Requirement in Massachusetts, including the generation of NMOG credits and debits and the requirement to make up an NMOG debit, in accordance with the procedures in Title 13 CCR § 1961(b) and (c) based on passenger cars and light-duty trucks delivered for sale in Massachusetts.

3. Effective for 2004 and subsequent model years, each manufacturer shall comply with the phase-in requirements in accordance with Title 13 CCR § 1961(b) based on passenger cars and light-duty trucks delivered for sale in Massachusetts.

4. Effective for 2003 and subsequent model years, each manufacturer shall comply with the medium-duty vehicle phase-in requirements, including the generation of vehicle equivalent NMOG credits and debits and the requirement to make up a vehicle equivalent NMOG debit, in accordance with Title 13 CCR § 1960.1(h) and 1961(b) and (c), based on vehicles delivered for sale in Massachusetts.

5. Effective for 2007 and subsequent model years, each manufacturer shall comply with the California general percentage ZEV requirement based on the number of PCs, LDT1s, and LDT2s to the extent required by Title 13 CCR § 1962(b), produced by the manufacturer and delivered for sale in Massachusetts in accordance with the requirements and procedures in Title 13 CCR § 1962 as those requirements and procedures apply in Massachusetts as set forth in 310 CMR 7.40(13).

6. Effective for 2009 and subsequent model years, each manufacturer shall comply with the fleet average greenhouse gas emission levels from passenger cars, light-duty trucks and medium-duty passenger vehicles, including but not limited to the generation and use of credits, in accordance with Title 13 CCR § 1961.1, based on vehicles delivered for sale in Massachusetts.

(b) No motor vehicle dealer shall sell, offer for sale or lease, or deliver any new or used vehicle subject to 310 CMR 7.40 unless said vehicle conforms to the standards below:

1. Ignition timing set to manufacturer's specifications with an allowable tolerance of ± 3°.

2. Idle speed is set to manufacturer's specifications with an allowable tolerance of ± 100 rpm;

3. All required exhaust and evaporative emission controls, including without limitation EGR valves, are operating properly;

4. All vacuum hoses and electrical wiring for emission controls are correctly routed; and

5. Idle mixture is set to manufacturer's specifications or according to manufacturer's recommended service procedures.

(c) Exceptions.

1. Motor vehicles held for daily lease or rental to the general public or engaged in interstate commerce which are registered and principally operated outside Massachusetts, shall not be subject to the requirements of 310 CMR 7.40(2)(a) and (b).

2. Motor vehicles defined as test vehicles, as emergency vehicles, or qualifying for exemption under Section 43656 of the California Health and Safety Code, incorporated herein by reference, shall not be subject to the requirements of 310 CMR 7.40(2)(a), (b), and (d).

(d) No corporation, person, or other entity shall register or attempt to register in Massachusetts any new vehicle subject to 310 CMR 7.40(2) unless said vehicle possesses one of the following:

1. A valid Emission Control Label pursuant to the requirements of Title 13 CCR § 1965; or

2. a Massachusetts Emission Control Waiver which may be granted by the Department in conjunction with the Massachusetts Registry of Motor Vehicles prior to submitting a vehicle's registration application exempting the vehicle from the requirements of 310 CMR 7.40(2)(a), only in the following circumstances:

a. vehicle purchased by nonresident prior to establishing residency in Massachusetts; or

b. vehicle transfer by inheritance, or by decree of divorce, dissolution or legal separation entered by a court of competent jurisdiction; or

c. vehicle acquired by a resident of the Commonwealth for the purpose of replacing a vehicle registered to said resident which was damaged or inoperative, beyond reasonable repair, or was stolen while out of the Commonwealth; provided that such replacement vehicle is acquired out of the state at the time the previously registered vehicle became damaged or inoperative, beyond reasonable repair, or was stolen.

7.40: continued

(e) Effective for model year 2010 and subsequent model years, no manufacturer shall deliver for sale to Massachusetts a new passenger car, light-duty truck, or medium-duty passenger vehicle subject to 310 CMR 7.40 that does not have an Environmental Performance Label securely affixed to a window of the vehicle in accordance with Title 13 CCR § 1965.

(f) For model year 2001 through 2009, Smog Index Labels for passenger cars and light-duty trucks shall conform to the "California Motor Vehicle Emission Control and Smog Index Label Specifications".

No motor vehicle dealer in Massachusetts shall remove or cause removal of an Environmental Performance Label or a Smog Index Label affixed to any motor vehicle subject to 310 CMR 7.40 prior to the sale or lease of the vehicle.

(g) Anti-tampering Provisions.

1. No person shall disconnect, modify, or alter any emission-related part except for purposes of repair or replacement.

2. No person shall operate or leave standing upon any highway any motor vehicle subject to 310 CMR 7.40 and required to be equipped with an emission control device meeting the standards of 310 CMR 7.40, or subject to the motor vehicle pollution control device requirements pursuant to the Clean Air Act, 42 U.S.C. 7401 *et seq*., and the standards and requirements promulgated thereunder, unless the motor vehicle is equipped with the required motor vehicle pollution control device which is correctly installed and in operating condition.

(3) Vehicle Testing.

(a) New Vehicle Certification Testing.

1. All new vehicle models subject to 310 CMR 7.40, sold or leased in Massachusetts, must be certified as meeting the motor vehicle emission requirements of Title 13 CCR §§ 1956.8(c), (g) or (h), 1960.1, 1961, 1961.1, 1962, 1968.1, 1976, 1978 and 2065, as determined by testing conducted in accordance with the testing procedures incorporated in Title 13 CCR §§ 1956.8(b), 1960.1(k), 1961(d), 1962(e), 1976(b) and (c), 1978(b) and 2065.

2. For the purposes of compliance with 310 CMR 7.40(3)(a)1., New Vehicle Certification Testing determinations and findings made by the California ARB shall be applicable.

(b) Assembly Line Testing.

1. All manufacturers of new vehicles subject to 310 CMR 7.40, certified for sale in California and sold or leased in Massachusetts, shall conduct Quality Audit Testing until model year 2000 in accordance with Title 13 CCR §§ 2061, 2062, 2106 and 2107 and in accordance with the testing procedures incorporated in Title 13 CCR §§ 1960.1(k) and 1961(d).

2. All manufacturers of new vehicles subject to 310 CMR 7.40, certified for sale in California and sold or leased in Massachusetts, shall conduct Inspection Testing in accordance with Title 13 CCR § 2106 and in accordance with the testing procedures incorporated in Title 13 CCR § 1961(d).

3. For the purposes of compliance with 310 CMR 7.40(3)(b)1., Inspection Testing and Quality Audit Testing determinations and findings made by the California ARB shall be applicable.

(c) New Vehicle Compliance Testing.

1. New vehicle models subject to 310 CMR 7.40, prior to their being offered for sale or lease in Massachusetts, must meet the motor vehicle emission requirements of Title 13 CCR §§ 1956.8(c), (g) or (h), 1960.1, 1961, 1961.1, 1962, 1968.1, 1976 and 1978, as determined by New Vehicle Compliance Testing, conducted in accordance with Title 13 CCR §§ 2101 through 2110, 2150 and 2151 and in accordance with the testing procedures incorporated in Title 13 CCR §§ 1956.8(b), 1960.1(k), 1961(d), 1961.1, 1962(e), 1976(b) and (c) and 1978(b).

2. For the purpose of compliance with 310 CMR 7.40(3)(c)1., New Vehicle Compliance Testing determinations and findings made by the California ARB shall be applicable.

(d) In-use Vehicle Enforcement Testing.

1. For the purposes of detection and repair of vehicles in Massachusetts failing to meet the applicable motor vehicle emission requirements of Title 13 CCR §§ 1956.8(c), (g) or (h), 1960.1, 1961, 1961.1, 1962, 1968.1, 1976, 1978 and 2065, the Department may conduct, after consultation with the California ARB, In-use Vehicle Enforcement Testing in accordance with the protocol and testing procedures in Title 13 CCR §§ 2136 through 2140 and in accordance with the testing procedures incorporated in Title 13 CCR §§ 1956.8(b), 1960.1(k), 1961(d), 1962(e), 1976(b) and (c), 1978(b) and 2065.

7.40: continued

2. For the purposes of compliance with 310 CMR 7.40(3)(d)1., In-use Vehicle Enforcement Testing determinations and findings made by the California ARB shall be applicable.

(e) In-use Surveillance Testing.

1. For the purposes of testing and monitoring the overall effectiveness in Massachusetts of the program set forth in 310 CMR 7.40 in controlling emissions, the Department may conduct In-use Surveillance Testing after consultation with the California ARB.

2. For the purposes of compliance with 310 CMR 7.40(3)(e)1., In-use Surveillance Testing determinations and findings made by the California ARB shall be applicable.

(4) Warranty.

(a) Vehicle Manufacturer Obligations.

1. Each manufacturer of new vehicles subject to 310 CMR 7.40 which are sold, leased, offered for sale or lease, or registered in Massachusetts shall warrant that each such vehicle shall comply over its period of warranty coverage with all requirements of Title 13 CCR §§ 2035 through 2041.

2. For the purposes of mediation of unresolved emission warranty disputes in Massachusetts, "Executive Officer" in Title 13 CCR § 2040 shall mean "Commissioner" as defined at 310 CMR 7.00.

(b) Vehicle Owner Obligations.

1. The owner of any vehicle warranted pursuant to Title 13 CCR §§ 2035 through 2041 shall ensure all scheduled maintenance specified in the written instructions furnished to the owner is performed in a timely manner. Such maintenance may be performed by the owner, at a service establishment of the owner's choosing, or by a person or persons of the owner's choosing.

2. Except as specified in 310 CMR 7.40(4)(b)2.a. and b., failure of the vehicle or engine owner to ensure the performance of such scheduled maintenance or to keep maintenance records shall not, per se, be grounds for disallowing a warranty claim.

a. The repair or replacement of any "warranted part" otherwise eligible for warranty coverage under 310 CMR 7.40(4)(b)1. and 2., shall be excluded from such warranty coverage if the vehicle or engine manufacturer demonstrates that the vehicle or engine has been abused, neglected, or improperly maintained, and that such abuse, neglect, or improper maintenance was the direct cause of the need for the repair or replacement of the part; and

b. The repair of a "warranted part" otherwise eligible for warranty coverage under 310 CMR 7.40(4)(b)1. and 2., shall be excluded from such warranty coverage if such repair consists solely of adjustments to the idle air/fuel mixture ratio, curb or high idle speed, ignition timing, valve lash, injection timing for diesel-powered vehicles, or any combination thereof.

(5) Reporting Requirements.

(a) For the purposes of determining compliance with the requirements of 310 CMR 7.40, commencing with the 1995 model year and continuing through model year 1998, each manufacturer shall submit annually, to the Department, within 60 days subsequent to the end of each model year, a report documenting total deliveries for sale of vehicles in each engine family or test group over that model year, in Massachusetts.

(b) Fleet Average Non-methane Organic Gas (NMOG) Value. Effective for 1999 and subsequent model years, each manufacturer shall calculate compliance with the Fleet Average NMOG value using the number of passenger cars and light-duty trucks delivered for sale to Massachusetts in accordance with Title 13 CCR §§ 1960.1, and 1961. Each manufacturer shall calculate and report, in accordance with the procedures established in Title 13 CCR §§ 1960.1 and 1961: the number of vehicles by engine family or test group certified to the standards in Title 13 1960.1, 1961 and 1962; the number of NMOG credits and debits in g/mi NMOG earned for the model year; the devaluation of NMOG credits earned in previous model years; the transfer of NMOG credits to another manufacturer; and the percent phase-in of vehicles certified to the standards established in Title 13 CCR §§ 1961. Each manufacturer shall submit said report to the Department no later than March 1st after the completed model year.

7.40: continued

(c) Vehicle Equivalent NMOG Credits for Medium-duty Vehicles. Effective for 2003 and subsequent model years, each manufacturer shall calculate compliance with the medium-duty phase-in requirements using the number of medium-duty vehicles delivered for sale to Massachusetts in accordance with Title 13 CCR §§ 1960.1 and 1961. Each manufacturer shall calculate and report, in accordance with the procedures established in Title 13 CCR § 1961: the number of vehicles or engines by engine family or test group; the number of vehicle equivalent credits (VECs) or vehicle equivalent debits (VEDs) earned for the model year; the devaluation of VECs earned in previous model years; the transfer of VECs to another manufacturer; and the percent phase-in of vehicles certified to the standards established in Title 13 CCR §§ 1956.8(c), (g) or (h), 1960.1, 1961 and 1962. Each manufacturer shall submit said report to the Department no later than March 1st after the completed model year.

(d) Warranty Reporting. Effective for 1995 and subsequent model year passenger cars and light-duty trucks and effective for 2003 and subsequent model year medium-duty vehicles and 2005 and subsequent model year heavy-duty vehicles and engines, each manufacturer shall submit to the Department Emission Warranty Information Reports, Field Information Reports and Emission Information Reports in accordance with Title 13 CCR §§ 2144, 2145 and 2146 for warranty claims based on vehicles registered in Massachusetts, in accordance with the procedures and timelines in Title 13 CCR §§ 2141 through 2149.

(e) Recall Reporting. Effective for 1995 and subsequent model year passenger cars and light-duty trucks and 2003 and subsequent model year medium-duty vehicles and 2005 and subsequent model year heavy-duty vehicles and engines, each manufacturer shall submit to the Department Recall Plans and Recall Campaign Progress Reports for vehicles registered in Massachusetts in accordance with the procedures and timelines in Title 13 CCR §§ 2109 through 2148.

(f) For the purposes of determining compliance with the requirements of 310 CMR 7.40(2)(a)5., and consistent with the procedures contained in Title 13, CCR § 1962(g)(2), commencing with the 2007 model year, each manufacturer shall submit a report annually to the Department by May 1 of the calendar year following the close of the model year, that identifies the necessary delivery and placement data of all vehicles generating ZEV credits or allowances, and all transfers and acquisitions of ZEV credits. A manufacturer may update the report by September 1st to cover activities between April 1st and June 30th.

(g) All manufacturers offering vehicles for sale or lease in Massachusetts shall upon request, submit to the Department test results or reports obtained and prepared in compliance with 310 CMR 7.40(3) and in accordance with the reporting requirements incorporated in Title 13 CCR §§ 1956.8(b), 1960.1(k), 1961(d), 1962(e), 1976(b) and (c) and 1978(b).

(h) For the purposes of determining compliance with 310 CMR 7.40, the Department may require any motor vehicle manufacturer or dealer of vehicles subject to 310 CMR 7.40 to submit any documentation the Department deems necessary to the effective administration and enforcement of 310 CMR 7.40.

(i) Fleet Average Greenhouse Gas Emission Levels. For the purposes of determining compliance with 310 CMR 7.40(2)(a)6., commencing with the 2009 model year, each manufacturer shall report the average greenhouse gas emissions of its fleet delivered for sale in the Commonwealth of Massachusetts, using the same format used to report such information to California Air Resources Board. Such report shall be filed with the Department by March 1st of the calendar year succeeding the end of the model year and shall include the number of greenhouse gas vehicle test groups certified pursuant to 310 CMR 7.40(2)(a)6., delineated by model type, delivered for sale in the Commonwealth of Massachusetts.

(6) Regional Emissions Testing Facility and Document Repository.

(a) For the purposes of emissions testing in compliance with 310 CMR 7.40(3)(c), (d), and (e), and record keeping, Massachusetts may, in conjunction with at least three other Northeast states which have adopted and are implementing the California Low Emission Vehicle Program under the authority of 42 U.S.C § 7507, enter into an agreement to establish a regional emissions testing facility and document repository.

(b) At such time as Massachusetts enters into an agreement pursuant to 310 CMR 7.40(6)(a), for the purposes of compliance and enforcement in Massachusetts, determinations and findings of the California ARB pursuant to 310 CMR 7.40(3)(c), (d), and (e) shall be applicable, in addition to the determinations and findings obtained through any agreement under 310 CMR 7.40(6)(a).

7.40: continued

(c) Should the Department determine that such testing is necessary or desirable, the Department reserves the right to conduct, after consultation with the California ARB, vehicle testing pursuant to 310 CMR 7.40(3)(c), (d), and (e).

(7) Enforcement.

(a) The Department may conduct inspection and surveillance of new and used motor vehicles for the purposes of compliance with the requirements set forth in 310 CMR 7.40(2).

1. Inspections by the Department or its agents, pursuant to 310 CMR 7.40(7)(a) may be conducted on any premises owned, operated, used, leased, or rented by any vehicle dealer. Said inspection may extend to all emission-related parts and operation and may require the on premises operation and testing of an engine or vehicle, and inspection of any related records, including records of emission related part repair performed under warranty.

2. The Department or its agents may perform functional tests, steady-state tests, and other tests as reasonably necessary.

(b) Any order or enforcement action taken by the State of California to correct noncompliance with any section of Title 13 CCR §§ 2109 through 2149, shall be applicable to all said vehicles subject to 310 CMR 7.40, sold or leased, offered for sale or lease, or registered in Massachusetts.

(c) Any voluntary or influenced emission-related recall campaign initiated by any manufacturer pursuant to Title 13 CCR §§ 2109 through 2149 shall extend to all applicable vehicles subject to 310 CMR 7.40, sold or leased, offered for sale or lease, or registered in Massachusetts.

(d) Massachusetts Recall. (Reserved.)

(e) The Department shall enforce the requirements of 310 CMR 7.40 in accordance with Title 13 CCR and applicable federal and Massachusetts law, including but not limited to M.G.L. c. 21A, § 16, and M.G.L. c.111, §§ 142A through 142M.

(f) Penalty for Failure to Meet ZEV Requirements. Any manufacturer that fails to produce and deliver for sale in Massachusetts the required number of ZEVs or submit an appropriate amount of grams/mile ZEV credits and does not make up ZEV deficits within the specified time period shall be subject to penalties under M.G.L. c.111, § 142K applicable to a manufacturer that sells a new motor vehicle that does not meet the applicable emission standards adopted in 310 CMR 7.40. The cause of action shall be deemed to accrue when the ZEV deficits are not balanced by the end of the specified time period. The number of vehicles not meeting the general percentage ZEV requirement shall be calculated according to the following equation, provided that the percentage of a large volume manufacturer's ZEV requirement for a given model year that may be satisfied with partial ZEV allowance vehicles or ZEV credits from such vehicles may not exceed the percentages permitted under section C.2.1 of California Exhaust Emission Standards and Test Procedures for 2005 and Subsequent Model Zero- Emission Vehicles, and 2001 and Subsequent Model Hybrid Electric Vehicles, in the Passenger Car, Light-duty Truck and Medium-duty Vehicle Classes:

(No. of ZEVs required to be produced and delivered for sale in Massachusetts for the model year) - (No. of ZEVs produced and delivered for sale in Massachusetts for the model year) – (No. of ZEV allowances from partial ZEV allowance vehicles produced and delivered for sale in Massachusetts for the model year) – [(Amount of ZEV credits submitted for the model year)/(the fleet average requirement for PCs and LDT1s for the model year)].

(8) Manufacturer Response To An Administrative Order.

(a) Upon receipt of an Administrative Order issued by the Department pursuant to 310 CMR 7.40, the manufacturer may request an adjudicatory hearing within ten days pursuant to the procedures set forth in 310 CMR 1.00 *et seq*., to contest the determination of necessity for the ordered corrective action.

(b) If a manufacturer requests an adjudicatory hearing pursuant to 310 CMR 7.40(8), and if the determination of necessity is confirmed at the hearing, the manufacturer shall initiate the corrective action which has been approved by the California ARB pursuant to the requirements of Title 13 CCR §§ 2109 through 2135 and 2141 through 2149 for vehicles subject to 310 CMR 7.40, within 30 days of receipt of the decision resulting from the hearing.

7.40: continued

(c) Failure by a manufacturer to comply with an enforcement action ordered by the Department pursuant to 310 CMR 7.40 shall constitute violation of an order issued under the authority of M.G.L. c. 111, § 142B.

(9) Emission Control System "Aftermarket" Parts.

(a) Applicability. 310 CMR 7.40(9) shall apply to all aftermarket parts which are sold, offered for sale, or advertised for sale or use on 1995 and subsequent model-year vehicles which are subject to Massachusetts or federal emission standards.

(b) Prohibition.

1. No person engaged in a business which involves the selling of motor vehicle pollution control systems, or parts thereof, shall offer for sale, sell, or install, an air contaminant emission control system, or part thereof, unless it meets the regulations and standards set forth in 310 CMR 7.40(9).

2. No person shall install, sell, offer for sale, or advertise any device, apparatus, or mechanism intended for use with, or as a part of, any required motor vehicle pollution control system which alters or modifies the original design or performance of any such motor vehicle pollution control system. 310 CMR 7.40 shall not apply to an alteration, modification, or modifying device, apparatus or mechanism found by the Department to either:

a. Not reduce the effectiveness of any motor vehicle pollution control system; or

b. Result in emissions from any such modified or altered vehicle which are at levels which comply with existing state or federal standards for that model year of vehicle being modified or converted.

(c) Replacement Parts.

1. a. Any replacement part, including consolidated parts, offered for sale or sold in California and subject to Title 13 CCR §§ 2221, 2224, shall be presumed to be in compliance with 310 CMR 7.40(9) unless California makes a finding to the contrary pursuant to Title13 CCR §§ 2221, 2224.

b. Any replacement part, including consolidated parts, not offered for sale or sold in California, shall be presumed to be in compliance with 310 CMR 7.40(9)(c) unless the Commissioner makes a finding to the contrary in accordance with Title 13 CCR § 2224(a).

2. The manufacturer of any replacement part subject to the provisions of 310 CMR 7.40(9) shall maintain sufficient records, such as performance specifications, test data, or other information, to substantiate that such a replacement part is in compliance with 310 CMR 7.40(9). Such records shall be open for reasonable inspection by the Commissioner or his/her representative. All such records shall be maintained for four years from the year of manufacture of the replacement part.

(d) Add-on and Modified Parts.

1. As used in 310 CMR 7.40, the terms "advertise" and "advertisement" include, but are not limited to, any notice, announcement, information, publication, catalog, listing for sale, or other statement concerning a product or service communicated to the public for the purpose of furthering the sale of the product or service.

7.40: continued

2. a. No person or company doing business solely in Massachusetts or advertising only in Massachusetts shall advertise any device, apparatus, or mechanism which alters or modifies the original design or performance of any required motor vehicle pollution control system unless such part, apparatus, or mechanism has been exempted from the provisions of 310 CMR 7.40(9), and the limitations of the exemption, if any, are contained within the advertisement in type size to give reasonable notice of such limitations.

b. (i) No person shall advertise, offer for sale, or install a part as a motor vehicle pollution control system or as an approved or certified device, when in fact such part is not a motor vehicle pollution control system or is not approved or certified by the Department or by California.

(ii) No person shall advertise, offer for sale, sell or install an add-on or modified part as a replacement part.

c. (i) Add-on and modified parts exempted in accordance with Title 13 CCR § 2222 are deemed exempt for purposes of 310 CMR 7.40(9)(d).

(ii) The Commissioner may exempt add-on and modified parts, including consolidated parts, that are not subject to Title 13 CCR § 2222. The Commissioner shall make this determination in accordance with Title 13 CCR § 2222.

(iii) Each person engaged in the business of retail sale or installation of an add-on or modified part which has not been exempted from 310 CMR 7.40(9)(d) shall maintain records of such activity which indicate date of sale, purchaser name address, vehicle model and work performed if applicable. Such records shall be open for inspection by the Commissioner or his/her representative. All such records shall be maintained for four years from the date of sale or installation.

(e) Surveillance.

1. Replacement Parts. The Commissioner may require the manufacturer of any replacement part subject to the provisions of 310 CMR 7.40(9)(c) to submit any records relating to such part which are maintained pursuant to 310 CMR 7.40(9)(c)2. The Commissioner may require the manufacturer of any replacement part subject to the provisions of 310 CMR 7.40(9)(c) to submit a reasonable number of parts typical of the manufacturer's production for testing and evaluation. If after a review of all records submitted by the manufacturer and of the results of any tests conducted by the Department staff, the Commissioner finds that such part is not in fact a replacement part, the Commissioner may invoke 310 CMR 7.40(9)(f). Replacement parts evaluated pursuant to 310 CMR 7.40 shall be compared with the specifications contained in the applicable vehicle manufacturer's application for certification.

2. Add-on Parts and Modified Parts. The Commissioner may require the manufacturer of any add-on or modified part subject to the provisions of 310 CMR 7.40(9)(d) to submit a reasonable number of parts typical of the manufacturer's production for testing and evaluation. If after review of the results of any test or evaluations conducted by the Department's staff and of any information submitted by the manufacturer, the Commissioner finds that an add-on part or a modified part does not conform to Title 13 CCR § 2222, the Commissioner may invoke 310 CMR 7.40(9)(f).

(f) Corrective Action.

1. When 310 CMR 7.40(9)(f) is invoked pursuant to 310 CMR 7.40(9)(e) or other subsection of 310 CMR 7.40(9), the Commissioner may require the manufacturer to submit a plan for correcting any deficiencies found by the Department. The manufacturer shall submit the plan within 30 calendar days after notification. The Commissioner may require any of the actions contained in the plan, and/or may declare a part of the plan to be not in compliance with 310 CMR 7.40(9)(b)2., unless he or she finds the plan adequate to correct the deficiencies found by the Department. The manufacturer may be required to include in the plan such corrective actions as the cessation of sale of non-complying parts and corrective advertising to correct misleading information regarding the emission control capabilities of the device and to ensure compliance with Massachusetts laws. Nothing in 310 CMR 7.40 shall prevent the Commissioner from also seeking fines for violations of 310 CMR 7.40(9), or other regulations or laws, as applicable.

7.40: continued

2. The manufacturer, within ten calendar days of its receipt of the Commissioner's demand for corrective action, may request an adjudicatory hearing, pursuant to M.G.L. c. 30A, on the necessity for and scope of any corrective action required by the Commissioner.

(g) Repair Station. Any person holding a vendor's certificate of authority who sells or installs a motor vehicle pollution control system, or part thereof, in violation of 310 CMR 7.40(9)(b)2. shall thereafter be required to install a motor vehicle pollution control system, or part thereof, which is in compliance with the provisions of 310 CMR 7.40(9), upon demand of the purchaser or registered owner of the vehicle concerned, or at the election of the purchaser or registered owner to reimburse the purchaser or registered owner for the expense of replacement and installation of a motor vehicle pollution control system, or part thereof, which is in compliance.

(10) Zero Emission Vehicle Review. The Department shall conduct, by the end of calendar year 1995, a technology review of Zero Emission Vehicles, and issue a report based on said review.

(11) Fees. Fees commensurate with the Department's costs of implementing 310 CMR 7.40 shall be assessed by Massachusetts on motor vehicle manufacturers in accordance with St. 1990, c. 410, § 3, and on any persons in accordance with M.G.L. c. 21A, § 18.

(12) Repealed.

(13) Zero-emission Vehicle Standards for New 2007 and Subsequent Model Year Passenger Cars, Light-duty Trucks, and Medium-duty Vehicles.

(a) Massachusetts hereby incorporates by reference Title 13 CCR § 1962 Final Regulation Order for Amendments to the California Zero Emission Vehicle Regulation (1962) and California Exhaust Emission Standards and Test Procedures for 2005 and Subsequent Model Zero-emission Vehicles, and 2001 and Subsequent Model Hybrid Electric Vehicles, in the Passenger Car, Light-duty Truck and Medium-duty Vehicle Classes (Test Procedures), except that the following terms are substituted as set forth in 7.40(13)(a)1. through 3.

1. The term “California” as it appears in Title 13 CCR §1962 (b)(1)(A), (b)(1)(B), (b)(1)(D), (b)(2)(A), (b)(2)(B), (b)(2)(D), (b)(4), (c)(1), (c)(7), (d)(2) first sentence only, (d)(3), (d)(4), (d)(5)(B), (f), (g)(1), (g)(2)(A), (g)(2)(B), (g)(4), and (g)(7)(A), (i)(A), (j) and in Test Procedures sections B., C.2.1(a), C.2.1(b), C.2.1(d), C.2.2(a), C.2.2(b)(1)(A) through (D) and (I), C.2.2(b)(2), C.2.2(d), C.2.4, C.3.1, C.3.7(a), C.3.7(b), C.4.1, C.4.2(a), C.4.2(b)(1), C.4.3, C.4.4(b), C.6., C.7.2(a), C.7.2(b), C.7.4, C.7.7(a) shall be replaced by the term “Massachusetts.”

2. The date of 2005 as it appears in Title 13 CCR §§ 1962(b)(1)(A), (b)(1)(B), (b)(2)(A), (b)(2)(B), (b)(2)(C), (b)(2)(d), (b)(3), (b)(6), (b)(7), and in Test Procedures sections C.2.1(a), C.2.1(b), C.2.2(a) first sentence only, C.2.2(b), C.2.3(c), C.2.3 shall be replaced by the date 2007.

3. The term “Executive Officer” as it appears in Title 13 CCR §§1962 (b)(2)(C), (g)(4), (g)(5)(A), (g)(5)(B), (g)(5)(D), (g)(6), and (g)(7)(A) and in Test Procedures sections C.2.2(c), C.7.4, C.7.5(a), C.7.5(b), C.7.5(d), C.7.6, C.7.7(a) shall be replaced by the term “Massachusetts Department of Environmental Protection.”

(14) Reserved.

(15) Zero Emission Vehicle Alternative Compliance Plan.

(a) Each manufacturer that is subject to 310 CMR 7.40(2)(a)5. may, as an alternative, volunteer to comply with the requirements of 310 CMR 7.40(15).

1. If a manufacturer chooses to comply with 310 CMR 7.40(15), it shall notify the Massachusetts Department of Environmental Protection in writing that it intends to comply with the Alternative Compliance Plan requirements and shall submit a plan for such compliance, with a request for an approval by the Department that the plan complies with 310 CMR 7.40(15) by January 17, 2006; and

7.40: continued

2. Beginning in model year 2007, each manufacturer shall market and shall make available for purchase in Massachusetts all models of vehicles delivered for sale, sold or marketed in California, except for type III ZEVs placed in service pursuant to Title 13 CCR §1962(b)(2)(B); and

3. Each manufacturer shall satisfy the general percentage ZEV requirement of Title 13 CCR § 1962, by using one or any combination of the elements in 310 CMR 7.40(15). The core credit value for vehicles shall be taken from the California ARB Executive Order as determined by the California ARB during the certification process.

(b) Application of the Phase-in Multiplier. The total credit value for a particular vehicle under the ACP shall be determined by multiplying the core credit value established by CARB by the phase-in multiplier listed in 310 CMR 7.40: *Table (15)(b)1*. To qualify for the multiplier, the vehicle shall meet the baseline qualifications for a PZEV, AT PZEV, or ZEV. The Massachusetts multiplier shall not be applied to type III ZEVs placed in service pursuant to the California Alternative Requirements for Large Volume Manufacturers as identified in Title 13 CCR § 1962(b)(2)(B).

*Table(15)(b)1*. Phase-in Multiplier

| Model Year | Requirement | PZEV Credit Multiplier | AT PZEV Credit Multiplier | ZEV Credit Multiplier |
|---|---|---|---|---|
| 2002 | Voluntary Early Introduction | 1.5 | 1.5 | 3 |
| 2003 | Voluntary Early Introduction | 1.5 | 1.5 | 3 |
| 2004 | Voluntary Early Introduction | 1.5 | 2.25 | 3 |
| 2005 | Voluntary Early Introduction | 1.3 | 1.7 | 2 |
| 2006 | Mandatory Compliance | 1.15 | 1.3 | 1.5 |
| 2007 | Mandatory Compliance | 1.15 | 1.3 | 1.5 |
| 2008 | Mandatory Compliance | 1.15 | 1.3 | 1.5 |
| 2009 | Equivalency with California program | 1 | 1 | 1 |

(c) Percentage Requirements. Large volume manufacturers (LVM), as defined by the California ARB in Title 13 CCR § 1900, shall meet the phase-in percentages of ZEVs, AT PZEVs and PZEVs contained in 310 CMR 7.40: *Table(15)(c)1*., except that if such manufacturer opts into California's alternative requirements for large volume manufacturers as provided in Title 13 CCR § 1962(b)(2)(B), model year 2007 and 2008 minimum ZEV percentage requirements may be met in the manner identified in Title 13 CCR § 1962(b)(2)(B)2. Intermediate volume manufacturers, as defined by the California ARB in Title 13 CCR § 1900, can meet the entire ZEV requirement with 100% PZEV credit. Small and independent low volume manufacturers, as defined by the California ARB in Title 13 CCR § 1900, are not required to meet the ZEV percentage requirements but are able to generate and trade credits.

*Table(15)(c)1*. Percentage Requirements for PZEVs, ATPZEVs, ZEVs

| Model Year | Minimum Percent ZEV Credit | Minimum Percent AT PZEV Credit | Maximum Percent PZEV Credit |
|---|---|---|---|
| 2006 | 0 | 0 | 10 |
| 2007 | 1% of manufacturer's sales must be ZEV, AT PZEV or any combination thereof | | 9 |
| 2008 | 1 | 2 | 7 |

(d) ZEV Credits.

1. ZEV, AT PZEV and PZEV credit calculation, credit life, credit banking and credit deficits shall be calculated using the methods in Title 13 CCR § 1962. Credits may be bought, sold or traded among manufacturers, and manufacturers not subject to the ZEV requirements may generate credits, which may be sold or traded to manufacturers subject to the ZEV requirements. A manufacturer that generates twice as many credits from model year 2006 or earlier PZEVs as required for model year 2006, has through model year 2009 to comply with the model year 2007 AT PZEV/ZEV requirement.

7.40: continued

2. A manufacturer that qualifies to carry forward excess model year 2006 PZEV credits in accordance with 310 CMR 7.40(15)(d)2., and then generates twice as many PZEV credits as necessary by model year 2007, has through model year 2010 to comply with the model year 2008 AT PZEV/ZEV requirement.

3. A manufacturer who produces and delivers PZEV vehicles for sale in Massachusetts in model years 2003, 2004, 2005 or 2006, may use excess credits generated from the placement of such vehicles as AT PZEV credits in the 2007 and 2008 model years. Excess PZEV credits are those credits generated prior to the application of any credit multipliers from 310 CMR 7.40: *Table(15)(b)1*. which exceed the number of credits equal to 6% (10% for model year 2006) of the average annual sales volume of 1997, 1998 and 1999 PC and LDT1 vehicles delivered for sale in Massachusetts by the manufacturer.

(e) Additional ZEV Credits.

1. Infrastructure and Transportation System Projects. Manufacturers can obtain credits through special projects providing alternate-fuel vehicle refueling, fuel cell vehicles, personal electric vehicle use or Transportation System projects that result in the placement of advanced technology vehicles in innovative transportation systems in Massachusetts. The Department shall determine the credit for these projects by evaluating project cost and the number and usage of advanced technology vehicles placed as a result of the project.

2. The maximum credit allowed under the Infrastructure and Transportation System Projects shall not exceed 25% of the total percentage ZEV requirement. Credits generated under this program are not subject to the phase-in multiplier and the program sunset after model year 2008.

(f) Reporting.

1. Each manufacturer shall submit a projected compliance report by the commencement of the model year. This report shall include projected vehicle sales organized by engine family or test group, marketing plans, dealerships targeted for advanced technology vehicle sales and support, Infrastructure and Transportation System projects and credits proposed to be earned, and manufacturer projected compliance rates including credits or debits projected.

2. Compliance reports shall be submitted with annual sales reports by March 31st (with the potential to amend, based on late sales) following the completed model year. This report shall include: vehicle sales organized by engine family, if applicable; relevant data regarding any Infrastructure and Transportation System Project; the manufacturer's calculations of compliance rates including credits or debits; and a plan for curing any debit.

(16) Severability. Each subsection of 310 CMR 7.40 shall be deemed severable, and in the event that any subsection of 310 CMR 7.40 is held invalid, the remainder shall continue in full force and effect.

## 7.45: The Massachusetts Green Fleet Program

(1) U Applicability.

(a) Under the authority of M.G.L. c. 111, §§ 142A through M, the Department of Environmental Protection (the Department) hereby adopts the Massachusetts Green Fleet program, applicable to the purchase and lease of new vehicles by the Commonwealth of Massachusetts for use in the state motor vehicle fleet.

(b) New vehicles exempt from the requirements of 310 CMR 7.45 include: emergency, test and non-road vehicles.

(2) Program Requirements.

(a) The Executive Office of Administration and Finance, Operational Services Division (OSD) shall purchase or lease, to the extent available and practical, new alternative fuel vehicles for use by all state executive offices, agencies and departments in compliance with the schedule below:

1. By no later than July 1, 1997 at least 10% of all new non-exempt vehicles purchased or leased shall be alternative fuel vehicles.

7.45: continued

2. by no later than July 1, 1998 at least 15% of all new non-exempt vehicles purchased or leased shall be alternative fuel vehicles. At least 5% of the total new non-exempt vehicles purchased or leased shall be zero emission vehicles (ZEVs).

3. By no later than July 1, 1999 at least 25% of all new non-exempt vehicles purchased or leased shall be alternative fuel vehicles. At least 5% of the total non-exempt vehicles purchased or leased shall be ZEVs.

4. By no later than July 1, 2000 at least 50% of all new non-exempt vehicles purchased or leased shall be alternative fuel vehicles. At least 10% of the total non-exempt vehicles purchased or leased shall be ZEVs.

5. By no later than July 1, 2001 and subsequent years, at least 75% of all new non-exempt vehicles purchased or leased shall be alternative fuel vehicles. At least 10% of the total non-exempt vehicles purchased or leased shall be ZEVs.

(b) New alternative fuel vehicles purchased or leased in compliance with the requirements of 310 CMR 7.45(2)(a) shall meet the following applicable motor vehicle emission standards:

1. Light-duty vehicles less than or equal to 6000 lbs. gross vehicle weight (GVW), shall be certified, consistent with the requirements of 310 CMR 7.40, to one of the following category of motor vehicle emission standards:

a. inherently low emission vehicle (ILEV);

b. ultra low emission vehicle (ULEV); or

c. zero emission vehicle (ZEV).

2. Medium and heavy-duty vehicles greater than 6000 lbs. GVW shall meet applicable motor vehicle emission standards no less stringent than the federal motor vehicle emission standards for an identical new vehicle operated on gasoline or diesel fuel.

(3) Compliance.

(a) Compliance with the requirements of 310 CMR 7.45(2)(a) shall be achieved through the purchase or lease of:

1. new, original equipment alternative fueled vehicles; or

2. new gasoline or diesel fueled vehicles which have been converted to an alternative fuel vehicle, if a California Air Resources Board certified alternative fuel system is installed and serviced by a manufacturer approved mechanic.

(b) Compliance with the minimum purchase requirements of 310 CMR 7.45(2)(a) shall be calculated based on all new vehicles purchased or leased by the Commonwealth of Massachusetts.

(c) State executive offices, agencies or departments who, prior to the effective date of 310 CMR 7.45, required the purchase or lease of alternative fueled vehicles, on a schedule earlier than, or in excess of, the requirements of 310 CMR 7.45(2)(a), and which comply with the requirements of 310 CMR 7.45(2)(b) and 310 CMR 7.45(3)(a), shall be applicable towards compliance with the requirements of 310 CMR 7.45(2)(a).

(d) To further the goal of effective introduction of alternative fuel vehicles statewide, exempt vehicles and vehicles purchased or leased by a municipality or state authority that voluntarily satisfy the requirements of 310 CMR 7.45 (2)(b) and 310 CMR 7.45(3)(a) shall be accounted for, in addition to, the annual requirements of 310 CMR 7.45(2)(a).

(4) Testing Requirements. New vehicles purchased in compliance with the requirements of 310 CMR 7.45(2)(b), shall receive and pass a safety and applicable air pollutant emission test prior to registration and regularly thereafter to ensure proper vehicle maintenance and air quality benefit.

(5) Reporting Requirements.

(a) Within 90 days of the annual compliance date required under 310 CMR 7.45(2)(a), OSD shall submit to the Department, a compliance report for the purpose of ensuring compliance with the requirements of 310 CMR 7.45. Said compliance report shall include:

1. the number and type of all new light, medium and heavy-duty alternative fueled vehicles purchased or leased in the previous fiscal year in compliance with 310 CMR 7.45(2)(a); and

2. the share new alternative fueled vehicles purchased in compliance with 310 CMR 7.45 represent, as a percentage, of all new vehicles purchased by the Commonwealth of Massachusetts.

7.45: continued

(6) Enforcement. The Department shall enforce the requirements of 310 CMR 7.45 per M.G.L. c. 21A and M.G.L c. 111, §§ 142A through M.

7.50: U Variances

(1) The Department upon its own initiative or upon application to it by any person, after due notice and a public hearing, may vary application of any regulation as it relates to any person as the Department may deem necessary.

(2) Variances may be granted when in the opinion of the Department efforts have been made in good faith by such person to comply with 310 CMR 7.00 prior to the petition for a variance; and:

(a) when enforcement of 310 CMR 7.00 is considered to be impractical due to lack of currently available technology or available conforming fuel, or

(b) when compliance with 310 CMR 7.00 is considered to be impossible due to unavoidable delays in obtaining control equipment, or

(c) when compliance with 310 CMR 7.00 is interfered with due to acts of nature, or

(d) when the benefits expected to be derived from requiring such person to comply with 310 CMR 7.00 would be substantially outweighed by the cost to such person and the loss to the public resulting from compliance, and that granting such a variance would have no significant deleterious effect on public health.

(3) Variances where granted, shall:

(a) be in writing,

(b) not extend beyond May 31, 1975, or such later date as may be prescribed by Federal law,

(c) be subject to the approval of the administrator of the Environmental Protection Agency.

The applicant shall assume all costs such as, but not limited to, the publishing of legal notices incidental to the application for and granting of a variance.

7.51: U Hearings Relative to Orders and Approvals

(1) The Department will grant a hearing, upon application in writing, for the purpose of reconsideration to any person to whom an ORDER has been issued, provided that such application is made within ten days of the receipt of the ORDER.

(2) Upon receipt of a proposal for the construction, substantial reconstruction or alteration of any facility regulated by the Department of Public Utilities, insofar as the facility may have an impact on air quality, the Department shall hold a public hearing prior to consideration for approval or disapproval of said facility.

7.52: U Enforcement Provisions.

Any police department, fire department, board of health officials, or building inspector or his designee acting within his jurisdictional area is hereby authorized by the Department to enforce, as provided for in M.G.L. c. 111, § 142B, any regulation in which specific reference to 310 CMR 7.52 is cited.

7.54: U Large Combustion Emission Units

(1) Applicability. As set forth in 310 CMR 7.02(3) and (5)(c)11., a Comprehensive Plan Application is required from any person prior to substantially reconstructing one or more large combustion emission units resulting in a major modification. The requirements of 310 CMR 7.54 shall not apply to a pollutant if the facility is located in an area designated as non-attainment under the Clean Air Act, § 107 (42 U.S.C. 7407), for that pollutant.

(2) Definitions. The definitions in 310 CMR 7.00 apply to 310 CMR 7.54. However, the following terms have the following meanings when they appear in 310 CMR 7.54. If a term is defined both in 310 CMR 7.00 and in 310 CMR 7.54(2), the definition in 310 CMR 7.54(2) applies for purposes of 310 CMR 7.54.

7.54: continued

Actual Emissions means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with 310 CMR 7.54: Actual Emissions(a) through (c).

(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal operation. The Department shall allow the use of a different time period upon a determination that it is more representative of normal operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(b) For any emissions unit (other than an electric utility steam generating unit specified in 310 CMR 7.54: Actual Emissions(c)), which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(c) For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit), actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit, provided the facility owner or operator maintains and submits to the Department on an annual basis for a period of five years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed ten years, may be required by the Department if it determines such a period to be more representative of normal facility post-change operations.

Allowable Emissions means the emissions rate of a facility calculated using the maximum rated capacity of the LCEU(s) (unless the LCEU is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent emission standard, including one with a future compliance date.

Begin Actual Construction means, in general, initiation of physical on-site construction activities on an LCEU, which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipe work and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

Commence as applied to construction of an LCEU means that the owner or operator has all necessary plan approvals required pursuant to 310 CMR 7.02 and either has:

(a) Begun, or caused to begin, a continuous program of actual on-site construction of the LCEU, to be completed within a reasonable time; or

(b) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the LCEU to be completed within a reasonable time.

Complete means, in reference to an application for a plan approval, that the application contains all of the information necessary for processing the application.

Construction means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.

Electric Utility Steam Generating Unit means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

7.54: continued

Indirect Heat Exchanger means combustion equipment in which the flame or the products of combustion are separated from any contact with the principal material in the process by metallic or refractory walls. It includes, but is not limited to, steam boilers (including combustion turbines with Heat Recovery Steam Generators), vaporizers, melting pots, heat exchangers, column reboilers, fractioning column feed preheaters, reactor feed preheaters, fuel-fired reactors such as steam hydrocarbon reformer heaters and pyrolysis heaters.

Large Combustion Emission Unit (LCEU) means either:

(a) an indirect heat exchanger with an energy input capacity greater than or equal to 250,000,000 Btu per hour, or

(b) a municipal waste combustor with a capacity greater than 250 tons per day of municipal solid waste.

Major Modification means any physical change or change in the method of operation of large combustion emission unit(s) at a facility that would result in a significant net emissions increase of any pollutant subject to regulation under the Clean Air Act. A physical change or change in the method of operation shall not include:

(a) Routine maintenance, repair and replacement;

(b) Use of an alternative fuel or raw material by an LCEU which:

1. The LCEU was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable condition which was established after January 6, 1975; or

2. The LCEU is approved to use under any plan approval issued under 310 CMR 7.02;

(c) An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable condition which was established after January 6, 1975; or

(d) Any change in ownership at a facility; or

(e) The addition, replacement or use of a pollution control project at an existing LCEU, unless the Department determines that such addition, replacement, or use renders the unit less environmentally beneficial; or

(f) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with all applicable requirements.

Net Emissions Increase means the amount by which the sum of the following exceeds zero:

(a) Any increase in actual emissions from a particular physical change or change in method of operation of LCEU(s) at the facility; and

(b) Any other increases and decreases in actual emissions from LCEUs at the facility that are contemporaneous with the particular change and are otherwise creditable.

(c) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:

1. The date five years before construction of the particular change commences; and

2. The date that the increase from the particular change occurs.

(d) An increase or decrease in actual emissions is creditable only if:

1. the Department has not relied on it in issuing a plan approval required pursuant to 310 CMR 7.54, or a PSD (Prevention of Significant Deterioration) permit pursuant to 40 CFR 52.21 (Note: Prior to March 3, 2003 the Department issued PSD permits in Massachusetts), and

2. the plan approval or PSD permit is in effect when the increase in actual emissions from the particular change occurs.

(e) With respect to particulate matter, only PM-10 emissions can be used to evaluate the net emissions increase for PM-10.

(f) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(g) A decrease in actual emissions is creditable only to the extent that:

1. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

2. It is federally enforceable at and after the time that actual construction of the particular change begins; and

3. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

7.54: continued

(h) An increase that results from a physical change at a facility occurs when the LCEU on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

Pollution Control Project means any activity or project undertaken on an LCEU for purposes of reducing emissions from such unit. Such activities or projects are limited to:

(a) The installation of conventional or innovative pollution control technology, including but not limited to:

1. conventional or advanced flue gas desulfurization, sorbent injection for sulfur dioxide, nitrogen oxides or mercury controls; or
2. electrostatic precipitators or fabric filters; or
3. selective catalytic reduction or non-selective catalytic reduction for control of oxides of nitrogen.

(b) An activity or project to accommodate switching to a fuel which is less polluting than the fuel in use prior to the activity or project, including, but not limited to natural gas or coal re-burning, or the co-firing of natural gas and other fuels for the purpose of controlling emissions.

Potential to Emit means the maximum capacity of a facility or emission unit to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or emission unit to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Fugitive emissions, to the extent they are quantifiable, are included in determining potential to emit. Secondary emissions do not count in determining the potential to emit of a facility.

Representative Actual Annual Emissions means the average rate, in tons per year, at which the LCEU is projected to emit a pollutant for the two-year period after a physical change or change in the method of operation of a unit, (or a different consecutive two-year period within ten years after that change, where the Department determines that such period is more representative of normal source operations), considering the effect any such change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the Department shall:

(a) Consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the State or Federal regulatory authorities, and compliance plans under Title IV of the Clean Air Act (42 U.S.C. 7651 through 7651(o); and

(b) Exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

Significant means, in reference to a net emissions increase, or the potential of a facility to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant and Emissions Rate:

(a) Carbon monoxide: 100 tons per year (tpy);
(b) Nitrogen oxides: 40 tpy;
(c) Sulfur dioxide: 40 tpy;
(d) Particulate matter:
1. 25 tpy of particulate matter emissions;
2. 15 tpy of PM10 emissions.
(e) Ozone: 40 tpy of volatile organic compounds;
(f) Lead: 0.6 tpy;

7.54: continued

(g) Fluorides: 3 tpy;
(h) Sulfuric acid mist: 7 tpy;
(i) Hydrogen sulfide ($H_2$ S): 10 tpy;
(j) Total reduced sulfur (including $H_2$ S): 10 tpy;
(k) Reduced sulfur compounds (including $H_2$ S): 10 tpy;
(l) Municipal waste combustor organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans): $3.2 \times 10^{-6}$ megagrams per year ($3.5 \times 10^{-6}$ tons per year);
(m) Municipal waste combustor metals (measured as particulate matter): 14 megagrams per year (15 tons per year);
(n) Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride): 36 megagrams per year (40 tons per year).

7.60: U Severability

Each section of 310 CMR 7.00 shall be construed as separate to the end that if any regulation or sentence, clause, or phrases thereof shall be held invalid for any reason, the remainder of 310 CMR 7.00 and all other regulations shall continue in full force.

7.70: Massachusetts $CO_2$ Budget Trading Program

(1) $CO_2$ Budget Trading Program General Provisions.
(a) Purpose. 310 CMR 7.70 establishes the Massachusetts $CO_2$ Budget Trading Program, which is designed to stabilize and then reduce anthropogenic emissions of $CO_2$, a greenhouse gas, from $CO_2$ budget sources in an economically efficient manner.
(b) Definitions.

Account Number. The identification number given by the Department or its agent to each $CO_2$ Allowance Tracking System account.

Acid Rain Emissions Limitation. As defined in 40 CFR 72.2, a limitation on emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program under title IV of the Clean Air Act.

Administrator. Administrator means the Administrator of the United States Environmental Protection Agency or the Administrator's authorized representative.

Allocate or Allocation. The determination by the Department of the number of $CO_2$ allowances to be recorded in the Greenhouse Gas Credit Exchange Set-aside account, the Voluntary Renewable Energy Account, or the Massachusetts Auction Account.

Allocation Year. A calendar year for which the Department allocates or awards $CO_2$ allowances pursuant to 310 CMR 7.70(5) and (10). The allocation year is the first year a $CO_2$ allowance or a $CO_2$ offset allowance can be used to demonstrate compliance with 310 CMR 7.70. The allocation year of each $CO_2$ allowance is reflected in the unique identification number given to the allowance pursuant to 310 CMR 7.70(6)(d)6.

Automated Data Acquisition and Handling System or DAHS. That component of the continuous emissions monitoring system, or other emissions monitoring system approved for use under 310 CMR 7.70(8), designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by 310 CMR 7.70(8).

Award. The determination by the Department of the number of $CO_2$ allowances to be recorded in the compliance account of a $CO_2$ budget unit for Early Reduction $CO_2$ Allowances pursuant to 310 CMR 7.70(5)(c)2., or the determination by the Department of the number of $CO_2$ offset allowances to be recorded in the general account of a project sponsor pursuant to 310 CMR 7.70(10)(g). Award is a type of allocation.

7.70: continued

Billing Meter. The measurement device used to measure electric or thermal output for commercial billing under a contract where the facility selling the electric or thermal output has a different owner(s) from the owner(s) of the party purchasing the electric or thermal output.

Boiler. An enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

$CO_2$ Allowance. A limited authorization by the Department or a participating state under the $CO_2$ Budget Trading Program to emit up to one ton of $CO_2$, subject to all applicable limitations contained in 310 CMR 7.70 or equivalent regulations in participating states.

$CO_2$ Allowance Deduction or Deduct $CO_2$ Allowances. The permanent withdrawal of $CO_2$ allowances by the Department or its agent from a $CO_2$ Allowance Tracking System compliance account to account for the number of tons of $CO_2$ emitted from a $CO_2$ budget source for a control period, determined in accordance with 310 CMR 7.70(8), or for the forfeit or retirement of $CO_2$ allowances as provided by 310 CMR 7.70.

$CO_2$ Allowance Price. The price for $CO_2$ allowances in the $CO_2$ Budget Trading Program for a particular time period as determined by the Department or its agent, calculated based on a volume-weighted average of transaction prices reported to the Department or its agent, and taking into account prices as reported publicly through reputable sources.

$CO_2$ Allowances Held or Hold $CO_2$ Allowances. The $CO_2$ allowances recorded by the Department or its agent, or submitted to the Department or its agent for recordation, in accordance with 310 CMR 7.70(6) and (7), in a $CO_2$ Allowance Tracking System account.

$CO_2$ Allowance Tracking System. The system by which the Department or its agent records allocations, deductions, and transfers of $CO_2$ allowances under the $CO_2$ Budget Trading Program. The tracking system may also be used to track $CO_2$ emissions offset projects, $CO_2$ allowance prices and emissions from affected sources.

$CO_2$ Allowance Tracking System Account. An account in the $CO_2$ Allowance Tracking System established by the Department or its agent for purposes of recording the allocation, holding, transferring, or deducting of $CO_2$ allowances.

$CO_2$ Allowance Transfer Deadline. Midnight of the March 1st occurring after the end of the relevant control period or, if that March 1st is not a business day, midnight of the first business day thereafter and is the deadline by which $CO_2$ allowances must be submitted for recordation in a $CO_2$ budget source's compliance account in order for the source to meet the $CO_2$ requirements under 310 CMR 7.70(1)(e)3. for the control period immediately preceding such deadline.

$CO_2$ Authorized Account Representative. For a $CO_2$ budget source and each $CO_2$ budget unit at the source, the natural person who is authorized by the owners and operators of the source and all $CO_2$ budget units at the source, in accordance with 310 CMR 7.70(2), to represent and legally bind each owner and operator in matters pertaining to the $CO_2$ Budget Trading Program or, for a general account, the natural person who is authorized, under 310 CMR 7.70(6), to transfer or otherwise dispose of $CO_2$ allowances held in the general account.

$CO_2$ Budget Emissions Control Plan. The legally binding permit issued by the Department pursuant to 310 CMR 7.70(1)(e)1. and 310 CMR 7.70(3) to a $CO_2$ budget source or $CO_2$ budget unit which specifies the $CO_2$ Budget Trading Program requirements applicable to the $CO_2$ budget source, to each $CO_2$ budget unit at the $CO_2$ budget source, and to the owners and operators and the $CO_2$ authorized account representative of the $CO_2$ budget source and each $CO_2$ budget unit.

$CO_2$ Budget Emissions Limitation. For a $CO_2$ budget source, the tonnage equivalent, in $CO_2$ emissions in a control period, of the $CO_2$ allowances available for compliance deduction for the source for a control period.

7.70: continued

$CO_2$ Budget Source. A source that includes one or more $CO_2$ budget units.

$CO_2$ Budget Trading Program. A multi-state $CO_2$ air pollution control and emissions reduction program established by regulation in several states, including Massachusetts pursuant to 310 CMR 7.70, for the purpose of reducing emissions of $CO_2$ from $CO_2$ budget sources.

$CO_2$ Budget Unit. A unit that is subject to the $CO_2$ Budget Trading Program requirements under 310 CMR 7.70(1)(d).

$CO_2$ Equivalent. The quantity of a given greenhouse gas multiplied by its global warming potential (GWP).

$CO_2$ Offset Allowance. A $CO_2$ allowance that is awarded to the sponsor of a $CO_2$ emissions offset project pursuant to 310 CMR 7.70(10)(g) and is subject to the relevant compliance deduction limitations of 310 CMR 7.70(6)(e)1.c.

Combined Cycle System. A system comprised of one or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.

Combustion Turbine. An enclosed fossil or other fuel-fired device that is comprised of a compressor (if applicable), a combustor, and a turbine, and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine.

Commence Commercial Operation. With regard to a unit that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation. For a unit that is a $CO_2$ budget unit under 310 CMR 7.70(1)(d) on the date the unit commences commercial operation, such date shall remain the unit's date of commencement of commercial operation even if the unit is subsequently modified, reconstructed, or repowered. For a unit that is not a $CO_2$ budget unit under 310 CMR 7.70(1)(d) on the date the unit commences commercial operation, the date the unit becomes a $CO_2$ budget unit under 310 CMR 7.70(1)(d) shall be the unit's date of commencement of commercial operation.

Commence Operation. To begin any mechanical, chemical, or electronic process, including, with regard to a unit, startup of a unit's combustion chamber. For a unit that is a $CO_2$ budget unit under 310 CMR 7.70(1)(d) on the date of commencement of operation, such date shall remain the unit's date of commencement of operation even if the unit is subsequently modified, reconstructed, or repowered. For a unit that is not a $CO_2$ budget unit under 310 CMR 7.70(1)(d) on the date of commencement of operation, the date the unit becomes a $CO_2$ budget unit under 310 CMR 7.70(1)(d) shall be the unit's date of commencement of operation

Compliance Account. A $CO_2$ Allowance Tracking System account, established by the Department or its agent for a $CO_2$ budget source under 310 CMR 7.70(6), in which are held $CO_2$ allowances available for use by the source for a control period for the purpose of meeting the $CO_2$ requirements of 310 CMR 7.70(1)(e)3.

Continuous Emissions Monitoring System or CEMS. The equipment required under 310 CMR 7.70(8) to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated DAHS), a permanent record of stack gas volumetric flow rate, stack gas moisture content, and oxygen or carbon dioxide concentration (as applicable), in a manner consistent with 40 CFR Part 75 and 310 CMR 7.70(8).

7.70: continued

Control Period. The control period is a three-calendar-year time period, unless extended to four years upon occurrence of a stage two trigger event. The first control period is from January 1, 2009 to December 31, 2011, inclusive, provided that if a stage two trigger event occurs during the first control period, then the first control period shall be extended one-year to December 31, 2012, inclusive. Each subsequent sequential three-calendar-year period is a separate control period that is subject to one one-year extension upon occurrence of a stage two trigger event during the control period. In no event may a control period be longer than four calendar years.

Eligible Biomass. Eligible biomass includes sustainably harvested woody and herbaceous fuel sources that are available on a renewable or recurring basis (excluding old-growth timber), including dedicated energy crops and trees, agricultural food and feed crop residues, aquatic plants, unadulterated wood and wood residues, animal wastes, other clean organic wastes not mixed with other solid wastes, and biogas derived from such fuel sources. Liquid biofuels do not qualify as eligible biomass. Sustainably harvested shall be determined by the Department.

Excess Emissions. Any tonnage of $CO_2$ emitted by a $CO_2$ budget source during a control period that exceeds the $CO_2$ budget emissions limitation for the source.

Fossil Fuel. Natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

Fossil Fuel-fired.

(a) With regard to a unit that commenced operation prior to January 1, 2005, the combustion of fossil fuel, alone or in combination with any other fuel, where the fossil fuel combusted comprises, or is projected to comprise, more than 50% of the annual heat input on a Btu basis during any year.

(b) With regard to a unit that commences operation on or after January 1, 2005, the combustion of fossil fuel, alone or in combination with any other fuel, where the fossil fuel combusted comprises, or is projected to comprise, more than 5% of the annual heat input on a Btu basis during any year.

General Account. A $CO_2$ Allowance Tracking System account, established under 310 CMR 7.70(6), that is not a compliance account.

Global Warming Potential (GWP). A measure of the radiative efficiency (heat-absorbing ability) of a particular gas relative to that of carbon dioxide ($CO_2$) after taking into account the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of $CO_2$.

Gross Generation. The electrical output (in MWe) at the terminals of the generator.

Life-of-the-unit Contractual Arrangement. A unit participation power sales agreement under which a customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and/or associated energy from any specified unit pursuant to a contract:

(a) For the life of the unit;

(b) For a cumulative term of no less than 25 years, including contracts that permit an election for early termination; or,

(c) For a period equal to or greater than either 20 years, or 70% of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

Market Settling Period. The first 14 months of any control period.

7.70: continued

Massachusetts $CO_2$ Budget Trading Program Base Budget. The annual amount of $CO_2$ tons available in Massachusetts for allocation in a given allocation year, in accordance with the $CO_2$ Budget Trading Program. $CO_2$ offset allowances awarded pursuant to 310 CMR 7.70(10) and Early Reduction $CO_2$ Allowances awarded pursuant to 310 CMR 7.70(5)(c)2. are separate from and additional to $CO_2$ allowances allocated from the Massachusetts $CO_2$ Budget Trading Program Base Budget.

Massachusetts Division of Energy Resources (DOER). The Massachusetts agency established pursuant to M.G.L. c. 25A, §§ 1 through 13.

Massachusetts Auction Account. An account administered by the Massachusetts Division of Energy Resources for purposes of auctioning $CO_2$ allowances.

Maximum Design Heat Input. The ability of a unit to combust a stated maximum amount of fuel per hour on a steady state basis, as determined by the physical design and physical characteristics of the unit.

Maximum Potential Hourly Heat Input. An hourly heat input used for reporting purposes when a unit lacks certified monitors to report heat input. If the unit intends to use Appendix D of 40 CFR Part 75 to report heat input, this value should be calculated, in accordance with 40 CFR Part 75, using the maximum fuel flow rate and the maximum gross calorific value. If the unit intends to use a flow monitor and a diluent gas monitor, this value should be reported, in accordance with 40 CFR Part 75, using the maximum potential flowrate and either the maximum carbon dioxide concentration (in percent $CO_2$) or the minimum oxygen concentration (in percent $O_2$).

Monitoring System. Any monitoring system that meets the requirements of 310 CMR 7.70(8), including a continuous emissions monitoring system, an excepted monitoring system, or an alternative monitoring system.

Nameplate Capacity. The maximum electrical output (in MWe) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings as measured in accordance with the United States Department of Energy standards.

Non-$CO_2$ Budget Unit. A unit that does not meet the applicability criteria of 310 CMR 7.70(1)(d).

Operator. Any person who operates, controls, or supervises a $CO_2$ budget unit or a $CO_2$ budget source and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.

Owner. Any of the following persons:

(a) Any holder of any portion of the legal or equitable title in a $CO_2$ budget unit; or

(b) Any holder of a leasehold interest in a $CO_2$ budget unit, other than a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the $CO_2$ budget unit; or

(c) Any purchaser of power from a $CO_2$ budget unit under a life-of-the-unit contractual arrangement in which the purchaser controls the dispatch of the unit; or

(d) With respect to any general account, any person who has an ownership interest with respect to the $CO_2$ allowances held in the general account and who is subject to the binding agreement for the $CO_2$ authorized account representative to represent that person's ownership interest with respect to the $CO_2$ allowances.

Participating State. A state that is a member of the $CO_2$ Budget Trading Program and has promulgated a regulation consistent with 310 CMR 7.70.

7.70: continued

Receive or Receipt Of. When referring to the Department or its agent, to come into possession of a document, information, or correspondence (whether sent in writing or by authorized electronic transmission), as indicated in an official correspondence log, or by a notation made on the document, information, or correspondence, by the Department or its agent in the regular course of business.

Recordation, Record, or Recorded. With regard to $CO_2$ allowances, the movement of $CO_2$ allowances by the Department or its agent from one $CO_2$ Allowance Tracking System account to another.

Serial Number. When referring to $CO_2$ allowances, the unique identification number assigned to each $CO_2$ allowance by the Department or its agent under 310 CMR 7.70(6)(d)6.

Source. Any governmental, institutional, commercial, or industrial structure, installation, plant, building, or facility that emits or has the potential to emit any air pollutant. A "source," including a "source" with multiple units, shall be considered a single "facility."

Stage One Threshold Price. The monetary amount, established as of the first day of each calendar year, derived annually from use of the following formula:

S1TP(2005+n) = S1TP(2005) x [1+(CPI(2005+n) - CPI(2005))/CPI(2005)]

where:

"S1TP" is the stage one threshold price;

"S1TP(2005)" is $7;

"n" is the number of years since 2005; and,

"CPI" means, for purposes of the $CO_2$ Budget Trading Program, the U.S. Department of Labor, Bureau of Labor Statistics unadjusted Consumer Price Index for All Urban Consumers for the U.S. city average, for All Items on the latest reference base, or if such index is no longer published, such other index as the Department determines is appropriate. The CPI for any calendar year is the 12 month average of the CPI published by the United States Department of Labor, as of the close of the 12 month period ending on August 31st of each calendar year.

Stage One Trigger Event. The occurrence of any 12 month period that completely transpires following the market settling period and is characterized by an average $CO_2$ allowance price that is equal to or greater than the stage one threshold price.

Stage Two Threshold Price. The monetary amount, established as of the first day of each calendar year, derived annually from use of the following formula:

S2TP(2005+n) = [ S2TP(2005+(n-1)) x [[{CPI(2005+(n-1))-CPI(2005+(n-2))}/ CPI(2005+(n-2))]+0.02] + S2TP(2005+(n-1))

where:

"S2TP" is the stage two threshold price;

"S2TP(2005)" is $10;

"n" is the number of years since 2005; and

"CPI" means, for purposes of the $CO_2$ Budget Trading Program, the U.S. Department of Labor, Bureau of Labor Statistics unadjusted Consumer Price Index for All Urban Consumers for the U.S. city average, for All Items on the latest reference base, or if such index is no longer published, such other index as the Department determines is appropriate. The CPI for any calendar year is the 12 month average of the CPI published by the United States Department of Labor, as of the close of the 12 month period ending on August 31st of each calendar year.

Stage Two Trigger Event. The occurrence of any 12 month period that completely transpires following the market settling period and is characterized by an average $CO_2$ allowance price that is equal to or greater than the stage two threshold price.

State. A U.S. State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa and includes the Commonwealth of the Northern Mariana Islands.

7.70: continued

Submit or Serve. To send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

(a) In person;

(b) By United States Postal Service; or,

(c) By other means of dispatch or transmission and delivery.

Compliance with any "submission," "service," or "mailing" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

Ton or Tonnage. Any "short ton", or 2,000 pounds. For the purpose of determining compliance with the $CO_2$ requirements of 310 CMR 7.70(1)(e)3., total tons for a control period shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with 310 CMR 7.70(8), with any remaining fraction of a ton equal to or greater than 0.50 ton deemed to equal one ton and any fraction of a ton less than 0.50 ton deemed to equal zero tons. A short ton is equal to 0.9072 metric tons.

12 Month Period. A period of 12 consecutive months determined on a rolling basis where a new twelve month period begins on the first day of each calendar month.

Unit. A fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system.

Unit Operating Day. A calendar day in which a unit combusts any fuel.

(c) Measurements, Abbreviations and Acronyms. Measurements, abbreviations, and acronyms used in 310 CMR 7.70 are defined as follows:

1. $CO_2$ – carbon dioxide.
2. g – grams.
3. hr – hour.
4. lb – pounds.
5. mol – mole. 1 mole = $6.022 \times 10^{23}$ molecules.
6. MWe – megawatt electrical.
7. scf – standard cubic feet.

(d) Applicability. Any unit that, at any time on or after January 1, 2005, serves an electricity generator with a nameplate capacity equal to or greater than 25 MWe shall be a $CO_2$ budget unit, and any source that includes one or more such units shall be a $CO_2$ budget source, subject to the requirements of 310 CMR 7.70.

(e) Standard Requirements.

1. $CO_2$ budget emission control plan requirements.
   a. The $CO_2$ authorized account representative of each $CO_2$ budget source shall:
      i. Submit to the Department a complete $CO_2$ budget emission control plan under 310 CMR 7.70(3)(c) in accordance with the deadlines specified in 310 CMR 7.70(3)(b); and,
      ii. Submit in a timely manner any supplemental information that the Department determines is necessary in order to review and approve or deny the $CO_2$ budget emission control plan.
   b. The owners and operators of each $CO_2$ budget source and each $CO_2$ budget unit for the source shall have an approved $CO_2$ budget emission control plan and operate the $CO_2$ budget source and the $CO_2$ budget unit at the source in compliance with such approved $CO_2$ budget emission control plan.
2. Monitoring Requirements.
   a. The owners and operators and, to the extent applicable, the $CO_2$ authorized account representative of each $CO_2$ budget source and each $CO_2$ budget unit at the source shall comply with the monitoring requirements of 310 CMR 7.70(8).
   b. The emissions measurements recorded and reported in accordance with 310 CMR 7.70(8) shall be used to determine compliance by the unit with the $CO_2$ requirements of 310 CMR 7.70(1)(e)3.

7.70: continued

3. $CO_2$ Requirements.

a. The owners and operators of each $CO_2$ budget source and each $CO_2$ budget unit at the source shall hold $CO_2$ allowances available for compliance deductions under 310 CMR 7.70(6)(e), as of the $CO_2$ allowance transfer deadline, in the source's compliance account in an amount not less than the total $CO_2$ emissions for the control period from all $CO_2$ budget units at the source, as determined in accordance with 310 CMR 7.70(6) and (8).

b. Each ton of $CO_2$ emitted in excess of the $CO_2$ budget emissions limitation shall constitute a separate violation of 310 CMR 7.70 and applicable state law.

c. A $CO_2$ budget unit shall be subject to the requirements under 310 CMR 7.70(1)(e)3.a. on January 1, 2009 or the date on which the unit commences operation, whichever comes later.

d. $CO_2$ allowances shall be held in, deducted from, or transferred among $CO_2$ Allowance Tracking System accounts in accordance with 310 CMR 7.70(5), (6), and (7), and 310 CMR 7.70(10)(g).

e. A $CO_2$ allowance shall not be deducted in order to comply with the requirements under 310 CMR 7.70(1)(e)3.a. for a control period that ends prior to the year for which the $CO_2$ allowance was allocated. A $CO_2$ offset allowance shall not be deducted in order to comply with the requirements under 310 CMR 7.70(1)(e)3.a. beyond the applicable percent limitations set out in 310 CMR 7.70(6)(e)1.c.

f. A $CO_2$ allowance under the $CO_2$ Budget Trading Program is a limited authorization by the Department or a participating state to emit one ton of $CO_2$ in accordance with the $CO_2$ Budget Trading Program. No provision of the $CO_2$ Budget Trading Program, the application for a $CO_2$ budget emissions control plan, or the approved $CO_2$ budget emissions control plan, or any provision of law shall be construed to limit the authority of the State to terminate or limit such authorization.

g. A $CO_2$ allowance under the $CO_2$ Budget Trading Program does not constitute a property right.

4. Excess Emissions Requirements. The owners and operators of a $CO_2$ budget source that has excess emissions in any control period shall:

a. Forfeit the $CO_2$ allowances required for deduction under 310 CMR 7.70(6)(e)4.a., provided $CO_2$ offset allowances may not be used to cover any part of such excess emissions; and,

b. Pay any fine, penalty, or assessment or comply with any other remedy imposed under 310 CMR 7.70(6)(e)4.b.

5. Recordkeeping and Reporting Requirements.

a. Unless otherwise provided, the owners and operators of the $CO_2$ budget source and each $CO_2$ budget unit at the source shall keep on site at the source each of the following documents for a period of ten years from the date the document is created. This period may be extended for cause, at any time prior to the end of ten years, in writing by the Department.

i. The account certificate of representation for the $CO_2$ authorized account representative for the source and each $CO_2$ budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 310 CMR 7.70(2)(d), provided that the certificate and documents shall be retained on site at the source beyond such ten-year period until such documents are superseded because of the submission of a new account certificate of representation changing the $CO_2$ authorized account representative.

ii. All emissions monitoring information, in accordance with 310 CMR 7.70(8) and 40 CFR 75.57.

iii. Copies of all reports, compliance certifications, and other submissions and all records made or required under the $CO_2$ Budget Trading Program.

7.70: continued

iv. Copies of all documents used to complete an application for a $CO_2$ budget emissions control plan and any other submission under the $CO_2$ Budget Trading Program or to demonstrate compliance with the requirements of the $CO_2$ Budget Trading Program.

b. The $CO_2$ authorized account representative of a $CO_2$ budget source and each $CO_2$ budget unit at the source shall submit the reports and compliance certifications required under the $CO_2$ Budget Trading Program, including those under 310 CMR 7.70(4).

6. Liability.

a. No revision to a $CO_2$ budget emissions control plan shall excuse any violation of the requirements of the $CO_2$ Budget Trading Program that occurs prior to the date that the revision takes effect.

b. Any provision of the $CO_2$ Budget Trading Program that applies to a $CO_2$ budget source (including a provision applicable to the $CO_2$ authorized account representative of a $CO_2$ budget source) shall also apply to the owners and operators of such source and of the $CO_2$ budget units at the source.

c. Any provision of the $CO_2$ Budget Trading Program that applies to a $CO_2$ budget unit (including a provision applicable to the $CO_2$ authorized account representative of a $CO_2$ budget unit) shall also apply to the owners and operators of such unit.

7. Effect on Other Authorities.

a. No provision of the $CO_2$ Budget Trading Program, a $CO_2$ budget emissions control plan application, or an approved $CO_2$ budget emissions control plan, shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the $CO_2$ authorized account representative of a $CO_2$ budget source or $CO_2$ budget unit from compliance with any other provisions of applicable State and federal law and regulations.

(f) Computation of Time.

1. Unless otherwise stated, any time period scheduled under the $CO_2$ Budget Trading Program to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

2. Unless otherwise stated, any time period scheduled under the $CO_2$ Budget Trading Program to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.

3. Unless otherwise stated, if the final day of any time period under the $CO_2$ Budget Trading Program falls on a weekend or a Massachusetts or Federal holiday, the time period shall be extended to the next business day.

(g) Severability. If any provision of 310 CMR 7.70, or its application to any particular person or circumstances, is held invalid, the remainder of 310 CMR 7.70, and the application thereof to other persons or circumstances, shall not be affected thereby.

(2) $CO_2$ Authorized Account Representative for $CO_2$ Budget Sources.

(a) Authorization and Responsibilities of the $CO_2$ Authorized Account Representative.

1. Except as provided under 310 CMR 7.70(2)(b), each $CO_2$ budget source, including all $CO_2$ budget units at the source, shall have one and only one $CO_2$ authorized account representative, with regard to all matters under the $CO_2$ Budget Trading Program concerning the source or any $CO_2$ budget unit at the source.

2. The $CO_2$ authorized account representative of the $CO_2$ budget source shall be selected by an agreement binding on the owners and operators of the source and all $CO_2$ budget units at the source.

3. Upon receipt by the Department or its agent of a complete account certificate of representation under 310 CMR 7.70(2)(d), the $CO_2$ authorized account representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the $CO_2$ budget source represented and each $CO_2$ budget unit at the source in all matters pertaining to the $CO_2$ Budget Trading Program, notwithstanding any agreement between the $CO_2$ authorized account representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the $CO_2$ authorized account representative by the Department or a court regarding the source or unit.

7.70: continued

4. No $CO_2$ budget emissions control plan shall be issued, and no $CO_2$ Allowance Tracking System account shall be established for a $CO_2$ budget source, until the Department or its agent has received a complete account certificate of representation under 310 CMR 7.70(2)(d) for a $CO_2$ authorized account representative of the source and the $CO_2$ budget units at the source.

5. Each submission under the $CO_2$ Budget Trading Program shall be submitted, signed, and certified by the $CO_2$ authorized account representative for each $CO_2$ budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the $CO_2$ authorized account representative: "I am authorized to make this submission on behalf of the owners and operators of the $CO_2$ budget sources or $CO_2$ budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

6. The Department or its agent shall accept or act on a submission made on behalf of owners or operators of a $CO_2$ budget source or a $CO_2$ budget unit only if the submission has been made, signed, and certified in accordance with 310 CMR 7.70(2)(a)5.

(b) Alternate $CO_2$ Authorized Account Representative.

1. An account certificate of representation may designate one and only one alternate $CO_2$ authorized account representative who may act on behalf of the $CO_2$ authorized account representative. The agreement by which the alternate $CO_2$ authorized account representative is selected shall include a procedure for authorizing the alternate $CO_2$ authorized account representative to act in *lieu* of the $CO_2$ authorized account representative.

2. Upon receipt by the Department or its agent of a complete account certificate of representation under 310 CMR 7.70(2)(d), any representation, action, inaction, or submission by the alternate $CO_2$ authorized account representative shall be deemed to be a representation, action, inaction, or submission by the $CO_2$ authorized account representative.

3. Except in 310 CMR 7.70(2)(b) and 310 CMR 7.70(2)(a)1., (2)(c), (2)(d), and (6)(b), whenever the term "$CO_2$ authorized account representative" is used in 310 CMR 7.70, the term shall be construed to include the alternate $CO_2$ authorized account representative.

(c) Changing the $CO_2$ Authorized Account Representative and the Alternate $CO_2$ Authorized Account Representative; Changes in the Owners and Operators.

1. Changing the $CO_2$ Authorized Account Representative. The $CO_2$ authorized account representative may be changed at any time upon receipt by the Department or its agent of a superseding complete account certificate of representation under 310 CMR 7.70(2)(d). Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative prior to the time and date when the Department or its agent receives the superseding account certificate of representation shall be binding on the new $CO_2$ authorized account representative and the owners and operators of the $CO_2$ budget source and the $CO_2$ budget units at the source.

2. Changing the Alternate $CO_2$ Authorized Account Representative. The alternate $CO_2$ authorized account representative may be changed at any time upon receipt by the Department or its agent of a superseding complete account certificate of representation under 310 CMR 7.70(2)(d). Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative prior to the time and date when the Department or its agent receives the superseding account certificate of representation shall be binding on the new alternate $CO_2$ authorized account representative and the owners and operators of the $CO_2$ budget source and the $CO_2$ budget units at the source.

7.70: continued

3. Changes in the Owners and Operators.

a. In the event a new owner or operator of a $CO_2$ budget source or a $CO_2$ budget unit is not included in the list of owners and operators submitted in the account certificate of representation, such new owner or operator shall be deemed to be subject to and bound by the account certificate of representation, the representations, actions, inactions, and submissions of the $CO_2$ authorized account representative and any alternate $CO_2$ authorized account representative of the source or unit, and the decisions, orders, actions, and inactions of the Department, as if the new owner or operator were included in such list.

b. Within 30 days following any change in the owners and operators of a $CO_2$ budget source or a $CO_2$ budget unit, including the addition of a new owner or operator, the $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative shall submit a revision to the account certificate of representation amending the list of owners and operators to include the change.

(d) Account Certificate of Representation.

1. A complete account certificate of representation for a $CO_2$ authorized account representative or an alternate $CO_2$ authorized account representative shall include the following elements in a format prescribed by the Department or its agent:

a. Identification of the $CO_2$ budget source and each $CO_2$ budget unit at the source for which the account certificate of representation is submitted;

b. The name, address, email address, telephone number, and facsimile transmission number of the $CO_2$ authorized account representative and any alternate $CO_2$ authorized account representative;

c. A list of the owners and operators of the CO2 budget source and of each $CO_2$ budget unit at the source;

d. The following certification statement by the $CO_2$ authorized account representative and any alternate $CO_2$ authorized account representative: "I certify that I was selected as the $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative, as applicable, by an agreement binding on the owners and operators of the $CO_2$ budget source and each $CO_2$ budget unit at the source. I certify that I have all the necessary authority to carry out my duties and responsibilities under the $CO_2$ Budget Trading Program on behalf of the owners and operators of the $CO_2$ budget source and of each $CO_2$ budget unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Department or a court regarding the source or unit."; and,

e. The signature of the $CO_2$ authorized account representative and any alternate $CO_2$ authorized account representative and the dates signed.

2. Unless otherwise required by the Department or its agent, documents of agreement referred to in the account certificate of representation shall not be submitted to the Department or its agent. Neither the Department nor its agent shall be under any obligation to review or evaluate the sufficiency of such documents, whether or not submitted.

(e) Objections Concerning the $CO_2$ Authorized Account Representative.

1. Once a complete account certificate of representation under 310 CMR 7.70(2)(d) has been submitted and received, the Department and its agent shall rely on the account certificate of representation unless and until the Department or its agent receives a superseding complete account certificate of representation under 310 CMR 7.70(2)(d).

2. Except as provided in 310 CMR 7.70(2)(c)1. or 2., no objection or other communication submitted to the Department or its agent concerning the authorization, or any representation, action, inaction, or submission of the $CO_2$ authorized account representative shall affect any representation, action, inaction, or submission of the $CO_2$ authorized account representative or the finality of any decision or order by the Department or its agent under the $CO_2$ Budget Trading Program.

3. Neither the Department nor its agent shall adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any $CO_2$ authorized account representative, including private legal disputes concerning the proceeds of $CO_2$ allowance transfers.

7.70: continued

(f) Delegation by $CO_2$ Authorized Account Representative and Alternate $CO_2$ Authorized Account Representative.

1. A $CO_2$ authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Department or its agent under 310 CMR 7.70.

2. An alternate $CO_2$ authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Department or its agent under 310 CMR 7.70.

3. In order to delegate authority to make an electronic submission to the Department or its agent in accordance with 310 CMR 7.70(2)(f)1. and 2., the $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative, as appropriate, shall submit to the Department or its agent a notice of delegation, in a format prescribed by the Department that includes the following elements:

a. The name, address, email address, telephone number, and facsimile transmission number of such $CO_2$ authorized account representative or alternate CO2 authorized account representative;

b. The name, address, email address, telephone number and facsimile transmission number of each such natural person, herein referred to as the "electronic submission agent";

c. For each such natural person, a list of the type of electronic submissions under 310 CMR 7.70(2)(f)1. and 2. for which authority is delegated to him or her; and,

d. The following certification statements by such $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative:

i. "I agree that any electronic submission to the Department or its agent that is by a natural person identified in this notice of delegation and of a type listed for such electronic submission agent in this notice of delegation and that is made when I am a $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 310 CMR 7.70(2)(f)4. shall be deemed to be an electronic submission by me."

ii. "Until this notice of delegation is superseded by another notice of delegation under 310 CMR 7.70(2)(f)4., I agree to maintain an email account and to notify the Department or its agent immediately of any change in my email address unless all delegation authority by me under 310 CMR 7.70(2)(f) is terminated."

4. A notice of delegation submitted under 310 CMR 7.70(2)(f)3. shall be effective, with regard to the $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative identified in such notice, upon receipt of such notice by the Department or its agent and until receipt by the Department or its agent of a superseding notice of delegation by such $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative as appropriate. The superseding notice of delegation may replace any previously identified electronic submission agent, add a new electronic submission agent, or eliminate entirely any delegation of authority.

5. Any electronic submission covered by the certification in 310 CMR 7.70(2)(f)3.d.i. and made in accordance with a notice of delegation effective under 310 CMR 7.70(2)(f)4. shall be deemed to be an electronic submission by the $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative submitting such notice of delegation.

(3) $CO_2$ Budget Emission Control Plan Requirements.

(a) General $CO_2$ Budget Emission Control Plan Requirements. Each $CO_2$ budget source shall have an approved $CO_2$ budget emission control plan issued by the Department pursuant to 310 CMR 7.70(1)(e)1. that contains all applicable $CO_2$ Budget Trading Program requirements under 310 CMR 7.70(3)(c). $CO_2$ budget sources shall comply with the approved $CO_2$ budget emission control plan.

(b) Submission of $CO_2$ Budget Emission Control Plan. For any $CO_2$ budget source, the $CO_2$ authorized account representative shall submit a complete $CO_2$ budget emission control plan under 310 CMR 7.70(3)(c) covering such $CO_2$ budget source to the Department on or before August 1, 2008 or 12 months before the date on which the $CO_2$ budget source, or a new unit at the source, commences operation, whichever is later.

7.70: continued

(c) $CO_2$ Budget Emission Control Plan Contents. A complete $CO_2$ budget emission control plan shall include the following elements concerning the $CO_2$ budget source in a format prescribed by the Department:

1. Identification of the $CO_2$ budget source, including plant name and the ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the Energy Information Administration of the United States Department of Energy, if applicable;
2. Identification of each $CO_2$ budget unit at the $CO_2$ budget source;
3. A compliance account identification number for each $CO_2$ budget source;
4. For $CO_2$ budget sources subject to 40 CFR Part 72, a statement that the $CO_2$ budget unit has a monitoring plan in place that meets the requirements of 310 CMR 7.70(8). Any modification to a $CO_2$ budget unit's monitoring methodology approved pursuant to the requirements of 40 CFR Part 72, and meeting the requirements of 310 CMR 7.70(8), are hereby incorporated into the approved emission control plan under 310 CMR 7.70;
5. For $CO_2$ budget sources not subject to 40 CFR Part 72, a detailed monitoring plan that meets the requirements of 310 CMR 7.70(8);
6. For $CO_2$ budget sources that have an approved output monitoring plan pursuant to 310 CMR 7.28 or 310 CMR 7.32, a statement that the $CO_2$ budget sources have an output monitoring plan that meets the requirements in 310 CMR 7.70(8);
7. For $CO_2$ budget sources that do not have an approved output monitoring plan pursuant to 310 CMR 7.28 or 310 CMR 7.32, a detailed output monitoring plan that meets the requirements of 310 CMR 7.70(8);
8. The standard requirements under 310 CMR 7.70(1)(e); and,
9. Any other information requested by the Department.

(d) Approval of emission control plans. After reviewing the proposed emissions control plan, the Department shall:

1. Issue a proposed disapproval of the emission control plan, a proposed approval of the emissions control plan, or a proposed approval of the emission control plan with conditions, based on whether the emission control plan as submitted meets the requirements of 310 CMR 7.70;
2. Notify the public of the Department's proposed action by publishing a notice in the *Environmental Monitor*;
3. Make available on its website all related materials;
4. Allow not less than 21 days for public comment;
5. Make all comments available for public inspection; and,
6. Notify the applicant and publish on the Department's website the final approval of the emission control plan, the final approval of the emission control plan with conditions, or a disapproval of the emission control plan.

(e) Emission control plan approvals issued to a $CO_2$ budget source that changes ownership are binding upon the new owner.

(f) Revisions to CO2 Budget Emission Control Plans.

1. At any time, the Department may require a $CO_2$ budget source to submit a revision to its $CO_2$ budget emission control plan.
2. If the $CO_2$ budget source required to submit a detailed monitoring plan pursuant to 310 CMR 7.70(3)(c)5. or 7. proposes a change in the monitoring methodology, then that $CO_2$ budget source shall submit a revised monitoring plan to the Department and obtain approval by the Department prior to making the modification. The Department will modify the emission control plan upon approval of the revised monitoring plan.
3. At any time, a $CO_2$ budget source may propose a change to its $CO_2$ budget emissions control plan.

(g) Operating Permits. If the $CO_2$ budget source is required to have an Operating Permit under 310 CMR 7.00: *Appendix C*, such Operating Permit shall be modified in accordance with the procedures in 310 CMR 7.00: *Appendix C*(8).

(4) Compliance Certification.

(a) Compliance Certification Report.

1. Applicability and Deadline. For each control period in which a $CO_2$ budget source is subject to the $CO_2$ requirements of 310 CMR 7.70(1)(e)3., the $CO_2$ authorized account representative of the source shall submit to the Department by the March 1 following the relevant control period, a compliance certification report.

7.70: continued

2. Contents of Report. The $CO_2$ authorized account representative shall include in the compliance certification report under 310 CMR 7.70(4)(a)1. the following elements, in a format prescribed by the Department:

a. Identification of the source and each $CO_2$ budget unit at the source;

b. At the $CO_2$ authorized account representative's option, the serial numbers of the $CO_2$ allowances that are to be deducted from the source's compliance account under 310 CMR 7.70(6)(e) for the control period, including the serial numbers of any $CO_2$ offset allowances that are to be deducted subject to the limitations of 310 CMR 7.70(6)(e)1.c.; and

c. The compliance certification under 310 CMR 7.70(4)(a)3.

3. Compliance Certification. In the compliance certification report under 310 CMR 7.70(4)(a)1., the $CO_2$ authorized account representative shall certify, based on reasonable inquiry of those persons with primary responsibility for operating the source and the $CO_2$ budget units at the source in compliance with the $CO_2$ Budget Trading Program, whether the source and each $CO_2$ budget unit at the source for which the compliance certification is submitted was operated during the calendar years covered by the report in compliance with the requirements of the $CO_2$ Budget Trading Program, including:

a. Whether the source was operated in compliance with the $CO_2$ requirements of 310 CMR 7.70(1)(e)3.;

b. Whether the monitoring plan applicable to each unit at the source has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute $CO_2$ emissions to the unit, in accordance with 310 CMR 7.70(8);

c. Whether all the $CO_2$ emissions from the units at the source were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with 310 CMR 7.70(8). If conditional data were reported, the owner or operator shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions have been made;

d. Whether the facts that form the basis for certification under 310 CMR 7.70(8) of each monitor at each unit at the source, or for using an excepted monitoring method or alternative monitoring method approved under 310 CMR 7.70(8), if any, have changed; and,

e. If a change is required to be reported under 310 CMR 7.70(4)(a)3.d., specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor recertification.

(b) Department's Action on Compliance Certifications.

1. The Department or its agent may review and conduct independent audits concerning any compliance certification or any other submission under the $CO_2$ Budget Trading Program and make appropriate adjustments to the information in the compliance certifications or other submissions.

2. The Department or its agent may deduct $CO_2$ allowances from or transfer $CO_2$ allowances to a source's compliance account based on the information in the compliance certifications or other submissions, as adjusted under 310 CMR 7.70(4)(b)1.

(5) $CO_2$ Allowance Allocations.

(a) Massachusetts $CO_2$ Budget Trading Program base budget.

1. For the 2009 through 2014 allocation years, the Massachusetts $CO_2$ Budget Trading Program annual base budget is 26,660,204 tons.

2. For the 2015 allocation year, the Massachusetts $CO_2$ Budget Trading Program annual base budget is 25,993,699 tons.

3. For the 2016 allocation year, the Massachusetts $CO_2$ Budget Trading Program annual base budget is 25,327,194 tons.

4. For the 2017 allocation year, the Massachusetts $CO_2$ Budget Trading Program annual base budget is 24,660,689 tons.

5. For the 2018 allocation year and each succeeding allocation year, the Massachusetts $CO_2$ Budget Trading Program annual base budget is 23,994,184 tons.

7.70: continued

(b) Timing Requirements for $CO_2$ Allowance Allocations.

1. On or before January 1, 2009, the Department shall allocate $CO_2$ allowances under 310 CMR 7.70(5)(c)1.a., and c. for the 2009, 2010, 2011, and 2012 allocation years.

2. On or before January 1, 2010 and January 1st of each year thereafter, the Department shall allocate $CO_2$ allowances under 310 CMR 7.70(5)(c)1.c. for the allocation year that commences in the year that is three years after the applicable deadline for allocation under 310 CMR 7.70(5)(b)2.

3. On or before January 1, 2011 and January 1st of each year thereafter, the Department shall allocate $CO_2$ allowances under 310 CMR 7.70(5)(c)1.b. for the allocation year that commences in the year that is three years after the applicable deadline for allocation under 310 CMR 7.70(5)(b)3.

4. On or after December 31, 2013, any remaining $CO_2$ allowances in the Greenhouse Gas Credit Exchange Set-aside shall be allocated to the Massachusetts Auction Account.

(c) $CO_2$ Allowance Allocations.

1. General allocations.

a. Greenhouse Gas Credit Exchange Set-aside.

i. The Department shall establish a Greenhouse Gas Credit Exchange Set-aside.

ii. The Department shall allocate to the Greenhouse Gas Credit Exchange Set-aside a sufficient number of $CO_2$ allowances from the Massachusetts $CO_2$ Budget Trading Program annual base budget, as set forth in 310 CMR 7.70(5)(a), to enable the Department to allocate $CO_2$ allowances pursuant to 310 CMR 7.00: *Appendix B*(7)(h).

b. Voluntary Renewable Energy (VRE) Account.

i. The Department shall establish a retirement account to address the voluntary purchase of Massachusetts RPS-eligible Renewable Energy Certificates by retail customers in Massachusetts. $CO_2$ allowances transferred into this account cannot be removed, unless they are transferred in error.

ii. Beginning in 2010, the Massachusetts Division of Energy Resources will submit to the Department a report, certified by the Massachusetts Division of Energy Resources, documenting:

(i) The number of Massachusetts RPS-eligible Renewable Energy Certificates purchased voluntarily by retail customers in Massachusetts in the preceding year, in MWh;

(ii) The annual average marginal $CO_2$ emission rate for electricity generation, in lbs. $CO_2$/MWh as provided in the most recently available version of the Marginal Emission Rate Analysis published annually by the Independent System Operator of New England;

(iii) The total number of $CO_2$ allowances to be retired for such voluntary purchases in Massachusetts of said Massachusetts RPS-eligible Renewable Energy Certificates; and,

(iv) All calculations used to determine the amount referenced in 310 CMR 7.70(5)(c)1.b.ii.(iii).

iii. After review of the certified report submitted to the Department pursuant to 310 CMR 7.70(5)(c)1.b.ii., the Department will allocate to the VRE Account the number of $CO_2$ allowances reported pursuant to 310 CMR 7.70(5)(c)1.b.ii., or 200,000 $CO_2$ allowances, whichever is fewer.

iv. The Department will periodically review provisions related to the VRE Account in consultation with the Division of Energy Resources.

c. Massachusetts Auction Account.

i. The Department shall establish a Massachusetts Auction Account.

ii. The Department shall allocate all $CO_2$ allowances not allocated under 310 CMR 7.70(5)(c)1.a. or b. to the Massachusetts Auction Account.

d. On or after December 31, 2013, any remaining $CO_2$ allowances in the Greenhouse Gas Credit Exchange Set-aside shall be allocated to the Massachusetts Auction Account.

2. Early Reduction $CO_2$ Allowances. The Department may award Early Reduction $CO_2$ Allowances (ERAs) to a $CO_2$ budget source for reductions in the $CO_2$ budget source's $CO_2$ emissions (inclusive of all emissions from $CO_2$ budget units at the $CO_2$ budget source) that are achieved by the source during the early reduction period (2006, 2007, and 2008), subject to the requirements of 310 CMR 7.70(5)(c)2. Total facility shutdowns shall not be eligible for ERAs.

7.70: continued

a. To be eligible to receive ERAs, the $CO_2$ budget authorized account representative shall submit an application for the award of ERAs on or before May 1, 2009.

b. The Early Reduction $CO_2$ Allowance Application shall include:

i. A list of all $CO_2$ budget units that existed at the source during the baseline period (2003, 2004, and 2005);

ii. A list of all $CO_2$ budget units that existed at the source during the early reduction period (2006, 2007, and 2008);

iii. Completed calculations under 310 CMR 7.70(5)(c)2.c. that include, for the baseline period and the early reduction period, all units that existed at any time during the baseline period and the early reduction period;

iv. All information necessary to calculate the number of ERAs to be awarded to a particular $CO_2$ budget source for the early reduction period pursuant to 310 CMR 7.70(5)(c)2.c.;

v. A demonstration that the data submitted in support of the ERA application is consistent with 310 CMR 7.70(8) for all of the baseline years and the early reduction years, or a petition to the Department for the use of an alternative data source or sources for the calculation of Early Reduction $CO_2$ Allowances;

vi. The following certification statement signed by the $CO_2$ authorized account representative: "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the $CO_2$ allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

c. The number of ERAs to be awarded to a particular $CO_2$ budget source for the early reduction period shall be calculated pursuant to the following methodology:

i. If total heat input to all $CO_2$ budget units at the $CO_2$ budget source during the early reduction period is less than or equal to the total heat input to all the $CO_2$ budget units at the $CO_2$ budget source during the baseline period, then:

(i) ERAs shall be calculated as follows:

$ERAs = ((AEER_{BASELINE} - AEER_{ERP}) \times (EO_{ERP} + (TO_{ERP}/3.413))/2000$

where:

"$AEER_{BASELINE}$" is the average $CO_2$ emissions rate resulting from electric energy output and thermal energy output during the baseline period for all of the $CO_2$ budget units at the $CO_2$ budget source (in pounds of $CO_2/MWh_{th+e}$);

"$AEER_{ERP}$" is the average $CO_2$ emissions rate resulting from electric energy output and thermal energy output during the early reduction period for all of the $CO_2$ budget units at the $CO_2$ budget source (in pounds of $CO_2/ MWh_{th+e}$);

"$EO_{ERP}$" is the total electric energy output during the early reduction period from all $CO_2$ budget units at the $CO_2$ budget source (in $MWh_e$); and,

"$TO_{ERP}$" is the total useful thermal energy output during the early reduction period from all $CO_2$ budget units at the $CO_2$ budget source (in MMBtu).

(ii) For the purposes of 310 CMR 7.70(5)(c)2., thermal energy output shall be converted to units of MWh by the conversion factor one MWh = 3.413 MMBtu.

(iii) For the purposes of 310 CMR 7.70(5)(c)2., output shall be monitored in accordance with 310 CMR 7.70(8).

ii. If total heat input to all $CO_2$ budget units at the $CO_2$ budget source during the early reduction period is greater than or equal to the total heat input to all the $CO_2$ budget units at the $CO_2$ budget source during the baseline period, then:

$ERAs = E_{BASELINE} - E_{ERP}$

where:

"$E_{BASELINE}$" are total $CO_2$ emissions during the baseline period from the all of the $CO_2$ budget units at the $CO_2$ budget source (in tons); and,

"$E_{ERP}$" are total $CO_2$ emissions during the early reduction period from the all of the $CO_2$ budget units at the $CO_2$ budget source (in tons).

7.70: continued

d. Once the Department confirms a $CO_2$ budget source's early reductions of $CO_2$ emissions, it shall award the ERAs to the $CO_2$ budget source's compliance account on or before December 31, 2009.

(6) $CO_2$ Allowance Tracking System.

(a) $CO_2$ Allowance Tracking System Accounts.

1. Compliance Accounts. Consistent with 310 CMR 7.70(6)(b)1., the Department or its agent shall establish one compliance account for each $CO_2$ budget source. Deductions or transfers of $CO_2$ allowances pursuant to 310 CMR 7.70(4)(b), (6)(e), (6)(g), or (7) shall be recorded in the compliance accounts in accordance with 310 CMR 7.70(6).

2. General Accounts. Consistent with 310 CMR 7.70(6)(b)2., the Department or its agent shall establish, upon request, a general account for any person. Transfers of $CO_2$ allowances pursuant to 310 CMR 7.70(7) shall be recorded in the general account in accordance with 310 CMR 7.70(6).

(b) Establishment of Accounts.

1. Compliance Accounts. Upon receipt of a complete account certificate of representation under 310 CMR 7.70(2)(d), the Department or its agent shall establish a compliance account for each $CO_2$ budget source for which the account certificate of representation was submitted.

2. General Accounts.

a. Application for general account. Any person may apply to open a general account for the purpose of holding and transferring $CO_2$ allowances. An application for a general account may designate one and only one $CO_2$ authorized account representative and one and only one alternate $CO_2$ authorized account representative who may act on behalf of the $CO_2$ authorized account representative. The agreement by which the alternate $CO_2$ authorized account representative is selected shall include a procedure for authorizing the alternate $CO_2$ authorized account representative to act in *lieu* of the $CO_2$ authorized account representative. A complete application for a general account shall be submitted to the Department or its agent and shall include the following elements in a format prescribed by the Department or its agent:

i. Name, address, email address, telephone number, and facsimile transmission number of the $CO_2$ authorized account representative and any alternate $CO_2$ authorized account representative;

ii. At the option of the $CO_2$ authorized account representative, organization name and type of organization;

iii. A list of all persons subject to a binding agreement for the $CO_2$ authorized account representative or any alternate $CO_2$ authorized account representative to represent their ownership interest with respect to the $CO_2$ allowances held in the general account;

iv. The following certification statement by the $CO_2$ authorized account representative and any alternate $CO_2$ authorized account representative: "I certify that I was selected as the $CO_2$ authorized account representative or the $CO_2$ alternate authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to $CO_2$ allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the $CO_2$ Budget Trading Program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any order or decision issued to me by the Department or its agent or a court regarding the general account.";

v. The signature of the $CO_2$ authorized account representative and any alternate $CO_2$ authorized account representative and the dates signed; and,

vi. Unless otherwise required by the Department or its agent, documents of agreement referred to in the application for a general account shall not be submitted to the Department or its agent. Neither the Department nor its agent shall be under any obligation to review or evaluate the sufficiency of such documents, whether or not submitted.

7.70: continued

b. Authorization of $CO_2$ Authorized Account Representative.

i. Upon receipt by the Department or its agent of a complete application for a general account under 310 CMR 7.70(6)(b)2.a.:

(i) The Department or its agent shall establish a general account for the person or persons for whom the application is submitted.

(ii) The $CO_2$ authorized account representative and any alternate $CO_2$ authorized account representative for the general account shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to $CO_2$ allowances held in the general account in all matters pertaining to the $CO_2$ Budget Trading Program, notwithstanding any agreement between the $CO_2$ authorized account representative or any alternate $CO_2$ authorized account representative and such person. Any such person shall be bound by any order or decision issued to the $CO_2$ authorized account representative or any alternate $CO_2$ authorized account representative by the Department or its agent or a court regarding the general account.

(iii) Any representation, action, inaction, or submission by any alternate $CO_2$ authorized account representative shall be deemed to be a representation, action, inaction, or submission by the $CO_2$ authorized account representative.

ii. Each submission concerning the general account shall be submitted, signed, and certified by the $CO_2$ authorized account representative or any alternate $CO_2$ authorized account representative for the persons having an ownership interest with respect to $CO_2$ allowances held in the general account. Each such submission shall include the following certification statement by the $CO_2$ authorized account representative or any alternate $CO_2$ authorized account representative: "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the $CO_2$ allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

iii. The Department or its agent shall accept or act on a submission concerning the general account only if the submission has been made, signed, and certified in accordance with 310 CMR 7.70(6)(b)2.b.ii.

c. Changing $CO_2$ Authorized Account Representative and Alternate $CO_2$ Authorized Account Representative; Changes in Persons with Ownership Interest.

i. The $CO_2$ authorized account representative for a general account may be changed at any time upon receipt by the Department or its agent of a superseding complete application for a general account under 310 CMR 7.70(6)(b)2.a. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous $CO_2$ authorized account representative, or the previous alternate $CO_2$ authorized account representative, prior to the time and date when the Department or its agent receives the superseding application for a general account shall be binding on the new $CO_2$ authorized account representative and the persons with an ownership interest with respect to the $CO_2$ allowances in the general account.

ii. The alternate $CO_2$ authorized account representative for a general account may be changed at any time upon receipt by the Department or its agent of a superseding complete application for a general account under 310 CMR 7.70(6)(b)2.a. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous $CO_2$ authorized account representative, or the previous alternate $CO_2$ authorized account representative, prior to the time and date when the Department or its agent receives the superseding application for a general account shall be binding on the new alternate $CO_2$ authorized account representative and the persons with an ownership interest with respect to the $CO_2$ allowances in the general account.

7.70: continued

iii. In the event a new person having an ownership interest with respect to $CO_2$ allowances in the general account is not included in the list of such persons in the application for a general account, such new person shall be deemed to be subject to and bound by the application for a general account, the representations, actions, inactions, and submissions of the $CO_2$ authorized account representative and any alternate $CO_2$ authorized account representative, and the decisions, orders, actions, and inactions of the Department or its agent, as if the new person were included in such list.

iv. Within 30 days following any change in the persons having an ownership interest with respect to $CO_2$ allowances in the general account, including the addition of persons, the $CO_2$ authorized account representative or any alternate $CO_2$ authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the $CO_2$ allowances in the general account to include the change.

d. Objections Concerning $CO_2$ Authorized Account Representative.

i. Once a complete application for a general account under 310 CMR 7.70(6)(b)2.a. has been submitted and received, the Department or its agent shall rely on the application unless and until a superseding complete application for a general account under 310 CMR 7.70(6)(b)2.a. is received by the Department or its agent.

ii. Except as provided in 310 CMR 7.70(6)(b)2.c.i. and ii., no objection or other communication submitted to the Department or its agent concerning the authorization, or any representation, action, inaction, or submission of the $CO_2$ authorized account representative or any alternate $CO_2$ authorized account representative for a general account shall affect any representation, action, inaction, or submission of the $CO_2$ authorized account representative or any alternate $CO_2$ authorized account representative or the finality of any decision or order by the Department or its agent under the $CO_2$ Budget Trading Program.

iii. Neither the Department nor its agent shall adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the $CO_2$ authorized account representative or any alternate $CO_2$ authorized account representative for a general account, including private legal disputes concerning the proceeds of $CO_2$ allowance transfers.

e. Delegation by $CO_2$ Authorized Account Representative and Alternate $CO_2$ Authorized Account Representative.

i. A $CO_2$ authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Department or its agent provided for under 310 CMR 7.70(6) and (7).

ii. An alternate $CO_2$ authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Department or its agent provided for under 310 CMR 7.70(6) and (7).

iii. In order to delegate authority to make an electronic submission to the Department or its agent in accordance with 310 CMR 7.70(6)(b)2.e.i and ii., the $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative, as appropriate, must submit to the Department or its agent a notice of delegation, in a format prescribed by the Department that includes the following elements:

(i) The name, address, email address, telephone number, and facsimile transmission number of such $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative;

(ii) The name, address, email address, telephone number and facsimile transmission number of each such natural person, herein referred to as "electronic submission agent";

(iii) For each such natural person, a list of the type of electronic submissions under 310 CMR 7.70(6)(b)2.e.i. or ii. for which authority is delegated to him or her; and

7.70: continued

(iv) The following certification statements by such $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative:

-1. "I agree that any electronic submission to the Department or its agent that is by a natural person identified in this notice of delegation and of a type listed for such electronic submission agent in this notice of delegation and that is made when I am a $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 310 CMR 7.70(6)(b)2.e.iv. shall be deemed to be an electronic submission by me."

-2. "Until this notice of delegation is superseded by another notice of delegation under 310 CMR 7.70(6)(b)2.e.iv., I agree to maintain an email account and to notify the Department or its agent immediately of any change in my email address unless all delegation authority by me under 310 CMR 7.70(6)(b)2.e. is terminated."

iv. A notice of delegation submitted under 310 CMR 7.70(6)(b)2.e.iii. shall be effective, with regard to the $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative identified in such notice, upon receipt of such notice by the Department or its agent and until receipt by the Department or its agent of a superseding notice of delegation by such $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative as appropriate. The superseding notice of delegation may replace any previously identified electronic submission agent, add a new electronic submission agent, or eliminate entirely any delegation of authority.

v. Any electronic submission covered by the certification in 310 CMR 7.70(6)(b)2.e.iii.(iv)-1. and made in accordance with a notice of delegation effective under 310 CMR 7.70(6)(b)2.e.iv. shall be deemed to be an electronic submission by the $CO_2$ authorized account representative or alternate $CO_2$ authorized account representative submitting such notice of delegation.

3. Account Identification. The Department or its agent shall assign a unique identifying number to each account established under 310 CMR 7.70(6)(b)1. or 2.

(c) $CO_2$ Allowance Tracking System Responsibilities of $CO_2$ Authorized Account Representative. Following the establishment of a $CO_2$ Allowance Tracking System account, all submissions to the Department or its agent pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of $CO_2$ allowances in the account, shall be made only by the $CO_2$ authorized account representative for the account.

(d) Recordation of $CO_2$ Allowance Allocations.

1. On or before January 1, 2009, the Department or its agent shall record in the Massachusetts Auction Account and the GHG Credit Exchange Set-aside the $CO_2$ allowances for the allocation years of 2009, 2010, 2011, and 2012.

2. On or before January 1, 2010 and each January 1st thereafter, the Department or its agent shall record $CO_2$ allowances in the Massachusetts Auction Account for the allocation year three years in the future.

3. On or before January 1, 2011 and January 1st of each year thereafter, the Department or its agent shall record $CO_2$ allowances allocated pursuant to 310 CMR 7.70(5)(c)1.b. in the Voluntary Renewable Energy (VRE) Account for the allocation year three years in the future.

4. On or before December 31, 2009, the Department shall record any ERAs awarded pursuant to 310 CMR 7.70(5)(c)2. in the $CO_2$ budget source's compliance account.

5. On or after December 31, 2013, any remaining $CO_2$ allowances in the Greenhouse Gas Credit Exchange Set-aside shall be transferred to the Massachusetts Auction Account.

6. Serial Numbers for Allocated $CO_2$ Allowances. When allocating $CO_2$ allowances to, and recording them in, an account, the Department or its agent shall assign each $CO_2$ allowance a unique identification number that includes digits identifying the year for which the $CO_2$ allowance is allocated.

(e) Compliance.

1. Allowances Available for Compliance Deduction. $CO_2$ allowances that meet the following criteria are available to be deducted in order for a $CO_2$ budget source to comply with the $CO_2$ requirements of 310 CMR 7.70(1)(e)3. for a control period.

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a. The $CO_2$ allowances, other than $CO_2$ offset allowances, are of allocation years that fall within a prior control period or the same control period for which the allowances will be deducted.

b. The $CO_2$ allowances are held in the $CO_2$ budget source's compliance account as of the $CO_2$ allowance transfer deadline for that control period or are transferred into the compliance account by a $CO_2$ allowance transfer correctly submitted for recordation under 310 CMR 7.70(7)(a) by the $CO_2$ allowance transfer deadline for that control period.

c. For $CO_2$ offset allowances, the number of $CO_2$ offset allowances that are available to be deducted in order for a $CO_2$ budget source to comply with the $CO_2$ requirements of 310 CMR 7.70(1)(e)3. for a control period may not exceed the number of tons representing the following percentages of the $CO_2$ budget source's $CO_2$ emissions for that control period, as determined in accordance with 310 CMR 7.70(6) and (8):

i. Unless the provisions of 310 CMR 7.70(6)(e)1.c.ii. or iii. apply, 3.3%;

ii. If the Department determines that there has been a stage one trigger event, 5%;

iii. If the Department determines that there has been a stage two trigger event, 10%.

d. The $CO_2$ allowances are not necessary for deductions for excess emissions for a prior control period under 310 CMR 7.70(6)(e)4.

2. Deductions for Compliance. Following the recordation, in accordance with 310 CMR 7.70(7)(b), of $CO_2$ allowance transfers submitted for recordation in the $CO_2$ budget source's compliance account by the $CO_2$ allowance transfer deadline for a control period, the Department or its agent shall deduct $CO_2$ allowances available under 310 CMR 7.70(6)(e)1. to cover the source's $CO_2$ emissions (as determined in accordance with 310 CMR 7.70(8)) for the control period, as follows:

a. Until the amount of $CO_2$ allowances deducted equals the number of tons of total $CO_2$ emissions, less any $CO_2$ emissions attributable to the burning of eligible biomass, determined in accordance with 310 CMR 7.70(8), from all $CO_2$ budget units at the $CO_2$ budget source for the control period; or

b. If there are insufficient $CO_2$ allowances to complete the deductions in 310 CMR 7.70(6)(e)2.a., until no more $CO_2$ allowances available under 310 CMR 7.70(6)(e)1. remain in the compliance account.

c. After making the deductions for compliance, the Department or its agent shall notify the $CO_2$ authorized account representative if it believes that the $CO_2$ budget source exceeded its $CO_2$ budget emissions limitation.

3. Identification of Available $CO_2$ Allowances by Serial Number; Default Compliance Deductions.

a. The $CO_2$ authorized account representative for a source's compliance account may request that specific $CO_2$ allowances, identified by serial number, in the compliance account be deducted for emissions or excess emissions for a control period in accordance with 310 CMR 7.70(6)(e)2. or 4. Such identification shall be made in the compliance certification report submitted in accordance with 310 CMR 7.70(4)(a).

b. The Department or its agent shall deduct $CO_2$ allowances for a control period from the $CO_2$ budget source's compliance account, in the absence of an identification or in the case of a partial identification of available $CO_2$ allowances by serial number under 310 CMR 7.70(6)(e)3.a., in the following descending order:

i. Any $CO_2$ allowances, other than $CO_2$ offset allowances, that are available for deduction under 310 CMR 7.70(6)(e)1. and were allocated to the units at the source, in the order of recordation; and then

ii. Any $CO_2$ allowances, other than $CO_2$ offset allowances, that are available for deduction under 310 CMR 7.70(6)(e)1. and were allocated other than to units at the source and transferred and recorded in the compliance account pursuant to 310 CMR 7.70(7), in the order of recordation; and then

iii. Subject to the relevant compliance deduction limitations under 310 CMR 7.70(6)(e)1.c., any $CO_2$ offset allowances transferred and recorded in the compliance account pursuant to 310 CMR 7.70(7), in the order of recordation.

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4. Deductions for Excess Emissions.

a. After completing the procedures in 310 CMR 7.70(6)(e)2., the Department or its agent shall deduct from the $CO_2$ budget source's compliance account a number of $CO_2$ allowances, from allocation years that occur after the control period in which the source has excess emissions, equal to three times the number of the source's excess emissions. In the event that a source has insufficient $CO_2$ allowances to cover three times the number of the source's excess emissions, the source shall be required within 14 calendar days of receipt of notice by the Department or its agent to transfer sufficient allowances into its compliance account. No $CO_2$ offset allowances may be deducted to account for the source's excess emissions.

b. Any $CO_2$ allowance deduction required under 310 CMR 7.70(6)(e)4.a. shall not affect the liability of the owners and operators of the $CO_2$ budget source or the $CO_2$ units at the source for any fine, penalty, or assessment, or their obligation to comply with any other remedy, for the same violation, as ordered under applicable State law. In assessing fines, penalties or other obligations, each ton of excess emissions is a separate violation.

c. The propriety of the Department's determination that a $CO_2$ budget source had excess emissions and the concomitant deduction of $CO_2$ allowances from that $CO_2$ budget source's account may be later challenged in the context of the initial administrative enforcement, or any civil or criminal judicial action, arising from or encompassing that excess emissions violation. The commencement or pendency of any administrative enforcement, or civil or criminal judicial action arising from or encompassing that excess emissions violation, shall not act to prevent the Department or its agent from initially deducting the $CO_2$ allowances resulting from the Department's original determination that the relevant $CO_2$ budget source has had excess emissions. Should the Department's determination of the existence or extent of the $CO_2$ budget source's excess emissions be revised either by a settlement or final conclusion of any administrative or judicial action, the Department shall act as follows.

i. In any instance where the Department's determination of the extent of excess emissions was too low, the Department shall take further action under 310 CMR 7.70(6)(e)4.a. and b. to address the expanded violation.

ii. In any instance where the Department's determination of the extent of excess emissions was too high, the Department shall distribute to the relevant $CO_2$ budget source a number of $CO_2$ allowances equaling the number of $CO_2$ allowances deducted which are attributable to the difference between the original and final quantity of excess emissions. Should such $CO_2$ budget source's compliance account no longer exist, the $CO_2$ allowances shall be provided to a general account selected by the owner or operator of the $CO_2$ budget source.

5. The Department or its agent shall record in the appropriate compliance account all deductions from such an account pursuant to 310 CMR 7.70(6)(e)2.and 4.

6. Action by the Department on Submissions.

a. The Department may review and conduct independent audits concerning any submission under the $CO_2$ Budget Trading Program and make appropriate adjustments of the information in the submissions.

b. The Department may deduct $CO_2$ allowances from or transfer $CO_2$ allowances to a source's compliance account based on information in the submissions, as adjusted under 310 CMR 7.70(6)(e)6.a.

(f) Banking. Each $CO_2$ allowance that is held in a compliance account or a general account shall remain in such account unless and until the $CO_2$ allowance is deducted or transferred under 310 CMR 7.70(4)(b), (6)(e), (6)(g), or (7).

(g) Account Error.

1. The Department or its agent may, at its sole discretion and on its own motion, correct any error in any $CO_2$ Allowance Tracking System account. Within ten business days of making such correction, the Department or its agent shall notify the $CO_2$ authorized account representative for the account.

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2. At any time the $CO_2$ authorized account representative may notify the Department if it believes that a mistake has been made.

(h) Closing of general accounts.

1. A $CO_2$ authorized account representative of a general account may instruct the Department or its agent to close the account by submitting a statement requesting deletion of the account from the $CO_2$ Allowance Tracking System and by correctly submitting for recordation under 310 CMR 7.70(7)(a) a $CO_2$ allowance transfer of all $CO_2$ allowances in the account to one or more other $CO_2$ Allowance Tracking System accounts.

2. If a general account shows no activity for a period of six years or more and does not contain any $CO_2$ allowances, the Department or its agent may notify the $CO_2$ authorized account representative for the account that the account shall be closed in the $CO_2$ Allowance Tracking System 20 business days after the notice is sent. The account shall be closed after the 20-day period unless before the end of the 20-day period the Department or its agent receives a correctly submitted transfer of $CO_2$ allowances into the account under 310 CMR 7.70(7)(a) or a statement submitted by the $CO_2$ authorized account representative demonstrating to the satisfaction of the Department or its agent good cause as to why the account should not be closed.

(7) $CO_2$ Allowance Transfers.

(a) Submission of $CO_2$ Allowance Transfers. The $CO_2$ authorized account representative who is the transferor shall submit the transfer to the Department or its agent. To be considered correctly submitted, the $CO_2$ allowance transfer shall include the following elements in a format specified by the Department or its agent:

1. The numbers identifying both the transferor and transferee accounts;
2. A specification by serial number of each $CO_2$ allowance to be transferred;
3. The printed name and signature of the $CO_2$ authorized account representative of the transferor account and the date signed;
4. The date of the completion of the last sale or purchase transaction for the allowance, if any; and
5. The purchase or sale price of the allowance that is the subject of a sale or purchase transaction under 310 CMR 7.70(7)(a)4.

(b) Recordation.

1. Within five business days of receiving a $CO_2$ allowance transfer, except as provided in 310 CMR 7.70(7)(b)2., the Department or its agent shall record a $CO_2$ allowance transfer by moving each $CO_2$ allowance from the transferor account to the transferee account as specified by the request, provided that:
   a. The transfer is correctly submitted under 310 CMR 7.70(7)(a); and
   b. The transferor account includes each $CO_2$ allowance identified by serial number in the transfer.
2. A $CO_2$ allowance transfer into or out of a compliance account that is submitted for recordation following the $CO_2$ allowance transfer deadline and that includes any $CO_2$ allowances that are of allocation years that fall within a control period prior to or the same as the control period to which the $CO_2$ allowance transfer deadline applies shall not be recorded until after completion of the process pursuant to 310 CMR 7.70(6)(e)2.
3. Where a $CO_2$ allowance transfer submitted for recordation fails to meet the requirements of 310 CMR 7.70(7)(b)1., the Department or its agent shall not record such transfer.

(c) Notification.

1. Notification of Recordation. Within five business days of recordation of a $CO_2$ allowance transfer under 310 CMR 7.70(7)(b), the Department or its agent shall notify each party to the transfer. Notice shall be given to the $CO_2$ authorized account representatives of both the transferor and transferee accounts.
2. Notification of Non-recordation. Within ten business days of receipt of a $CO_2$ allowance transfer that fails to meet the requirements of 310 CMR 7.70(7)(b)1., the Department or its agent shall notify the $CO_2$ authorized account representatives of both accounts subject to the transfer of:

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a. A decision not to record the transfer; and
b. The reasons for such non-recordation.

3. Nothing in 310 CMR 7.70(7) shall preclude the submission of a $CO_2$ allowance transfer for recordation following notification of non-recordation.

(8) Monitoring and Reporting.

(a) General Requirements. The owners and operators, and to the extent applicable, the $CO_2$ authorized account representative of a $CO_2$ budget unit, shall comply with the monitoring, recordkeeping and reporting requirements as provided in 310 CMR 7.70(8) and all applicable sections of 40 CFR Part 75. Where referenced in 310 CMR 7.70(8), the monitoring requirements of 40 CFR Part 75 shall be adhered to in a manner consistent with the purpose of monitoring and reporting $CO_2$ mass emissions pursuant to 310 CMR 7.70. For purposes of complying with such requirements, the definitions in 310 CMR 7.70(1)(b) and in 40 CFR 72.2 shall apply, and the terms ''affected unit,'' ''designated representative,'' and ''continuous emissions monitoring system'' (or ''CEMS'') in 40 CFR Part 75 shall be replaced by the terms ''$CO_2$ budget unit,'' ''$CO_2$ authorized account representative,'' and ''continuous emissions monitoring system'' (or ''CEMS''), respectively, as defined in 310 CMR 7.70(1)(b). For units not subject to an acid rain emissions limitation, the term "Administrator" in 40 CFR Part 75 shall be replaced with "the Department or its agent." Owners or operators of a $CO_2$ budget unit who monitor a non-$CO_2$ budget unit pursuant to the common, multiple, or bypass stack procedures in 40 CFR 75.72(b)(2)(ii), or 40 CFR 75.16 (b)(2)(ii)(B) as pursuant to 40 CFR 75.13, for purposes of complying with 310 CMR 7.70, shall monitor and report $CO_2$ mass emissions from such non-$CO_2$ budget unit according to the procedures for $CO_2$ budget units established in 310 CMR 7.70(8)(a) through (g).

1. Requirements for Installation, Certification, and Data Accounting. The owner or operator of each $CO_2$ budget unit shall meet the following requirements:

a. Install all monitoring systems necessary to monitor $CO_2$ mass emissions in accordance with 40 CFR Part 75, except for equation G-1. Equation G-1 in Appendix G shall not be used to determine $CO_2$ emissions under 310 CMR 7.70(8). This may require systems to monitor $CO_2$ concentration, stack gas flow rate, $O_2$ concentration, heat input, and fuel flow rate;

b. Successfully complete all certification tests required under 310 CMR 7.70(8)(b) and meet all other requirements of 310 CMR 7.70(8) and 40 CFR Part 75 applicable to the monitoring systems under 310 CMR 7.70(8)(a)1.a.; and,

c. Record, report and quality-assure the data from the monitoring systems under 310 CMR 7.70(8)(a)1.a.

2. Compliance Dates. The owner or operator of a $CO_2$ budget unit shall meet the monitoring system certification and other requirements of 310 CMR 7.70(8)(a)1.a. through 1.c. on or before the following dates. The owner or operator of a $CO_2$ budget unit shall record, report and quality-assure the data from the monitoring systems under 310 CMR 7.70(8)(a)1.a. on and after the following dates.

a. The owner or operator of a $CO_2$ budget unit, except for a $CO_2$ budget unit under 310 CMR 7.70(8)(a)2.b., that commences commercial operation before July 1, 2008, must comply with the requirements of 310 CMR 7.70(8) by January 1, 2009.

b. The owner or operator of a $CO_2$ budget unit that commences commercial operation on or after July 1, 2008 must comply with the requirements of 310 CMR 7.70(8) by the later of the following dates:

i. January 1, 2009; or,

ii. The earlier of:

(i) 90 unit operating days after the date on which the unit commences commercial operation; or,

(ii) 180 calendar days after the date on which the unit commences commercial operation.

c. For the owner or operator of a $CO_2$ budget unit for which construction of a new stack or flue installation is completed after the applicable deadline under 310 CMR 7.70(8)(a)2.a. or 2.b. by the earlier of:

i. 90 unit operating days after the date on which emissions first exit to the atmosphere through the new stack or flue; or,

ii. 180 calendar days after the date on which emissions first exit to the atmosphere through the new stack or flue.

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3. Reporting Data.

a. Except as provided in 310 CMR 7.70(8)(a)3.b., the owner or operator of a $CO_2$ budget unit that does not meet the applicable compliance date set forth in 310 CMR 7.70(8)(a)2.a., 2.b., and 2.c. for any monitoring system under 310 CMR 7.70(8)(a)1.a. shall, for each such monitoring system, determine, record, and report maximum potential (or as appropriate minimum potential) values for $CO_2$ concentration, $CO_2$ emissions rate, stack gas moisture content, fuel flow rate and any other parameter required to determine $CO_2$ mass emissions in accordance with 40 CFR 75.31(b)(2) or (c)(3), or section 2.4 of Appendix D of 40 CFR Part 75, as applicable.

b. The owner or operator of a $CO_2$ budget unit that does not meet the applicable compliance date set forth in 310 CMR 7.70(8)(a)2.c. for any monitoring system under 310 CMR 7.70(8)(a)1.a. shall, for each such monitoring system, determine, record, and report substitute data using the applicable missing data procedures in Subpart D or Appendix D of 40 CFR Part 75, in *lieu* of the maximum potential (or as appropriate minimum potential) values for a parameter if the owner or operator demonstrates that there is continuity between the data streams for that parameter

c. Low Mass Emissions (LME) Units.

i. $CO_2$ budget units subject to an acid rain emissions limitation or 310 CMR 7.32 that qualify for the optional $SO_2$, $NO_x$, and $CO_2$ (for acid rain) or $NO_x$ (for 310 CMR 7.32) emissions calculations for low mass emissions (LME) units under 40 CFR 75.19 and report emissions for such programs using the calculations under 40 CFR 75.19, shall also use the $CO_2$ emissions calculations for LME units under 40 CFR 75.19 for purposes of compliance with 310 CMR 7.70.

ii. $CO_2$ budget units subject to an acid rain emissions limitation or 310 CMR 7.32 that do not qualify for the optional $SO_2$, $NO_x$, and $CO_2$ (for acid rain) or $NO_x$ (for 310 CMR 7.32) emissions calculations for LME units under 40 CFR 75.19, shall not use the $CO_2$ emissions calculations for LME units under 40 CFR 75.19 for purposes of compliance with 310 CMR 7.70.

iii. $CO_2$ budget units not subject to an acid rain emissions limitation or 310 CMR 7.32 shall qualify for the optional $CO_2$ emissions calculation for LME units under 40 CFR 75.19, provided that they emit less than 100 tons of $NO_x$ annually and no more than 25 tons of $SO_2$ annually.

4. Prohibitions.

a. No owner or operator of a $CO_2$ budget unit shall use any alternative monitoring system, alternative reference method, or any other alternative for the required continuous emissions monitoring system without having obtained prior written approval in accordance with 310 CMR 7.70(8)(f).

b. No owner or operator of a $CO_2$ budget unit shall operate the unit so as to discharge, or allow to be discharged, $CO_2$ emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of 310 CMR 7.70(8) and 40 CFR Part 75.

c. No owner or operator of a $CO_2$ budget unit shall disrupt the continuous emissions monitoring system, any portion thereof, or any other approved emissions monitoring method, and thereby avoid monitoring and recording $CO_2$ mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of 310 CMR 7.70(8) and 40 CFR Part 75.

d. No owner or operator of a $CO_2$ budget unit shall retire or permanently discontinue use of the continuous emissions monitoring system, any component thereof, or any other approved emissions monitoring system under 310 CMR 7.70(8), except under any one of the following circumstances:

i. The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of 310 CMR 7.70(8) and 40 CFR Part 75, by the Department for use at that unit that provides emissions data for the same pollutant or parameter as the retired or discontinued monitoring system; or,

ii. The $CO_2$ authorized account representative submits notification of the date of certification testing of a replacement monitoring system in accordance with 310 CMR 7.70(8)(b)4.c.i.

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(b) Initial Certification and Recertification Procedures.

1. The owner or operator of a $CO_2$ budget unit shall be exempt from the initial certification requirements of 310 CMR 7.70(8)(b) for a monitoring system under 310 CMR 7.70(8)(a)1.a. if the following conditions are met:

a. The monitoring system has been previously certified in accordance with 40 CFR Part 75; and,

b. The applicable quality assurance and quality-control requirements of 40 CFR 75.21 and appendix B and appendix D of 40 CFR Part 75 are fully met for the certified monitoring system described in 310 CMR 7.70(8)(b)1.a.

2. The recertification provisions of 310 CMR 7.70(8)(b) shall apply to a monitoring system under 310 CMR 7.70(8)(a)1.a. exempt from initial certification requirements under 310 CMR 7.70(8)(b)1.

3. Notwithstanding 310 CMR 7.70(8)(b)1., if the Administrator has previously approved a petition under 40 CFR 75.72(b)(2)(ii), or 40 CFR 75.16(b)(2)(ii)(B) as pursuant to 40 CFR 75.13 for apportioning the $CO_2$ emissions rate measured in a common stack or a petition under 40 CFR 75.66 for an alternative requirement in 40 CFR Part 75, the $CO_2$ authorized account representative shall submit the petition to the Department under 310 CMR 7.70(8)(f)1. to determine whether the approval applies under this program.

4. Except as provided in 310 CMR 7.70(8)(b)1., the owner or operator of a $CO_2$ budget unit shall comply with the following initial certification and recertification procedures for a continuous emissions monitoring system and an excepted monitoring system under Appendix D of 40 CFR Part 75 and under 310 CMR 7.70(8)(a)1.a. The owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology in 40 CFR 75.19 or that qualifies to use an alternative monitoring system under Subpart E of 40 CFR Part 75 shall comply with the procedures in 310 CMR 7.70(8)(b)5. or 6., respectively.

a. Requirements for Initial Certification. The owner or operator shall ensure that each continuous emissions monitoring system required under 310 CMR 7.70(8)(a)1.a. (which includes the automated data acquisition and handling system) successfully completes all of the initial certification testing required under 40 CFR 75.20 by the applicable deadlines specified in 310 CMR 7.70(8)(a)2. In addition, whenever the owner or operator installs a monitoring system in order to meet the requirements of 310 CMR 7.70(8) in a location where no such monitoring system was previously installed, initial certification in accordance with 40 CFR 75.20 is required.

b. Requirements for Recertification.

(i) Whenever the owner or operator makes a replacement, modification, or change in a certified continuous emissions monitoring system under 310 CMR 7.70(8)(a)1.a. that the Administrator or the Department determines significantly affects the ability of the system to accurately measure or record $CO_2$ mass emissions or to meet the quality-assurance and quality-control requirements of 40 CFR 75.21 or Appendix B to 40 CFR Part 75, the owner or operator shall recertify the monitoring system according to 40 CFR 75.20(b).

(ii) For systems using stack measurements such as stack flow, stack moisture content, or $CO_2$ or $O_2$ monitors, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that the Administrator or the Department determines to significantly change the flow or concentration profile, the owner or operator shall recertify the continuous emissions monitoring system according to 40 CFR 75.20(b). Examples of changes which require recertification include: replacement of the analyzer, change in location or orientation of the sampling probe or site, or changing of flow rate monitor polynomial coefficients.

c. Approval Process for Initial Certifications and Recertification. 310 CMR 7.70(8)(b)4.c.i through iv. apply to both initial certification and recertification of a monitoring system under 310 CMR 7.70(8)(a)1.a. For recertifications, replace the words "certification" and "initial certification" with the word "recertification," replace the word "certified" with "recertified," and proceed in the manner prescribed in 40 CFR 75.20(b)(5) and (g)(7) in *lieu* of 310 CMR 7.70(8)(b)4.c.v.

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i. Notification of Certification. The $CO_2$ authorized account representative shall submit to the Department or its agent, the appropriate EPA Regional Office, and the Administrator a written notice of the dates of certification in accordance with 310 CMR 7.70(8)(d).

ii. Certification Application. The $CO_2$ authorized account representative shall submit to the Department or its agent a certification application for each monitoring system. A complete certification application shall include the information specified in 40 CFR 75.63.

iii. Provisional Certification Data. The provisional certification date for a monitor shall be determined in accordance with 40 CFR 75.20(a)(3). A provisionally certified monitor may be used under the $CO_2$ Budget Trading Program for a period not to exceed 120 days after receipt by the Department of the complete certification application for the monitoring system or component thereof under 310 CMR 7.70(8)(b)4.c.ii. Data measured and recorded by the provisionally certified monitoring system or component thereof, in accordance with the requirements of 40 CFR Part 75, shall be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the Department does not invalidate the provisional certification by issuing a notice of disapproval within 120 days of receipt of the complete certification application by the Department.

iv. Certification Application Approval Process. The Department shall issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application under 310 CMR 7.70(8)(b)4.c.ii. In the event the Department does not issue such a notice within such 120-day period, each monitoring system that meets the applicable performance requirements of 40 CFR Part 75 and is included in the certification application shall be deemed certified for use under the $CO_2$ Budget Trading Program.

(i) Approval Notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR Part 75, then the Department shall issue a written notice of approval of the certification application within 120 days of receipt.

(ii) Incomplete Application Notice. If the certification application is not complete, then the Department shall issue a written notice of incompleteness that sets a reasonable date by which the $CO_2$ authorized account representative must submit the additional information required to complete the certification application. If the $CO_2$ authorized account representative does not comply with the notice of incompleteness by the specified date, then the Department may issue a notice of disapproval under 310 CMR 7.70(8)(b)4.c.iv.(iii). The 120 day review period shall not begin before receipt of a complete certification application

(iii) Disapproval Notice. If the certification application shows that any monitoring system or component thereof does not meet the performance requirements of 40 CFR Part 75, or if the certification application is incomplete and the requirement for disapproval under 310 CMR 7.70(8)(b)4.c.iv.(ii) is met, then the Department shall issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the Department and the data measured and recorded by each uncertified monitoring system or component thereof shall not be considered valid quality assured data beginning with the date and hour of provisional certification. The owner or operator shall follow the procedures for loss of certification in 310 CMR 7.70(8)(b)4.c.v. for each monitoring system, or component thereof, which is disapproved for initial certification.

(iv) Audit Decertification. The Department may issue a notice of disapproval of the certification status of a monitor in accordance with 310 CMR 7.70(8)©)2.

7.70: continued

v. Procedures for Loss of Certification. If the Department issues a notice of disapproval of a certification application under 310 CMR 7.70(8)(b)4.c.iv.(iii) or a notice of disapproval of certification status under 310 CMR 7.70(8)(b)4.c.iv.(iv), then:

(i) The owner or operator shall substitute the following values for each disapproved monitoring system, for each hour of unit operation during the period of invalid data beginning with the date and hour of provisional certification and continuing until the time, date, and hour specified under 40 CFR 75.20(a)(5)(i) or 40 CFR 75.20(g)(7):

-1. For units monitoring, or intending to monitor, for $CO_2$ mass emissions using heat input or for units using the low mass emissions excepted methodology under 40 CFR 75.19, the maximum potential hourly heat input of the unit; or,

-2. For units monitoring, or intending to monitor, for $CO_2$ mass emissions using a $CO_2$ pollutant concentration monitor and a flow monitor, the maximum potential concentration of $CO_2$ and the maximum potential flow rate of the unit under section 2.1 of appendix A of 40 CFR Part 75.

(ii) The $CO_2$ authorized account representative shall submit a notification of certification retest dates and a new certification application in accordance with 310 CMR 7.70(8)(b)4.c.i. and ii.; and

(iii) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Department's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

5. Initial Certification and Recertification Procedures for Low Mass Emissions Units Using the Excepted Methodologies Under 310 CMR 7.70(8)(a)3.c. The owner or operator of a unit qualified to use the low mass emissions excepted methodology under 310 CMR 7.70(8)(a)3.c. shall meet the applicable certification and recertification requirements of 40 CFR 75.19(a)(2), 40 CFR 75.20(h) and 310 CMR 7.70(8)(b). If the owner or operator of such a unit elects to certify a fuel flow meter system for heat input determinations, the owner or operator shall also meet the certification and recertification requirements in 40 CFR 75.20(g).

6. Certification/Recertification Procedures for Alternative Monitoring Systems. The $CO_2$ authorized account representative for each unit for which the owner or operator intends to use an alternative monitoring system approved by the Administrator and, if applicable, the Department under Subpart E of 40 CFR Part 75 shall comply with the applicable notification and application procedures of 40 CFR 75.20(f).

(c) Out-of-control Periods.

1. Whenever any monitoring system fails to meet the quality assurance and quality control requirements or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable procedures in Subpart D or appendix D of 40 CFR Part 75.

2. Audit Decertification. Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement under 310 CMR 7.70(8)(b) or the applicable provisions of 40 CFR Part 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the Department or Administrator shall issue a notice of disapproval of the certification status of such monitoring system. For the purposes of this 310 CMR 7.70(8)(c)2., an audit shall be either a field audit or an audit of any information submitted to the Department or the Administrator. By issuing the notice of disapproval, the Department or Administrator revokes prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the initial certification or recertification procedures in 310 CMR 7.70(8)(b) for each disapproved monitoring system.

7.70: continued

(d) Notifications. The $CO_2$ authorized account representative for a $CO_2$ budget unit shall submit written notice to the Department and the Administrator in accordance with 40 CFR 75.61.

(e) Recordkeeping and Reporting.

1. General Provisions. The $CO_2$ authorized account representative shall comply with all recordkeeping and reporting requirements in 310 CMR 7.70(8)(e), the applicable record keeping and reporting requirements under 40 CFR 75.73 and with the requirements of 310 CMR 7.70(2)(a)5.

2. Monitoring Plans. The owner or operator of a $CO_2$ budget unit required to submit a monitoring plan shall submit such monitoring plan in the manner prescribed in 40 CFR 75.62.

3. Certification Applications. The $CO_2$ authorized account representative shall submit an application to the Department within 45 days after completing all $CO_2$ monitoring system initial certification or recertification tests required under 310 CMR 7.70(8)(b) including the information required under 40 CFR 75.63 and 40 CFR 75.53(e) and (f).

4. Quarterly Reports. The $CO_2$ authorized account representative shall submit quarterly reports, as follows:

a. The $CO_2$ authorized account representative shall report the $CO_2$ mass emissions data for the $CO_2$ budget unit, in an electronic format prescribed by the Administrator, unless otherwise prescribed by the Department, for each calendar quarter beginning with:

i. For a unit that commences commercial operation before July 1, 2008, the calendar quarter covering January 1, 2009 through March 31, 2009; or

ii. For a unit commencing commercial operation on or after July 1, 2008, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under 310 CMR 7.70(8)(a)2. or, unless that quarter is the third or fourth quarter of 2008, in which case reporting shall commence in the quarter covering January 1, 2009 through March 31, 2009.

b. The $CO_2$ authorized account representative shall submit each quarterly report to the Department's agent within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in Subpart H of 40 CFR Part 75 and 40 CFR 75.64. Quarterly reports shall be submitted for each $CO_2$ budget unit (or group of units using a common stack), and shall include all of the data and information required in Subpart G of 40 CFR Part 75, except for opacity, $NO_x$ and $SO_2$ provisions.

c. Compliance Certification. The $CO_2$ authorized account representative shall submit to the Department or its agent a compliance certification in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

i. The monitoring data submitted were recorded in accordance with the applicable requirements of 310 CMR 7.70(8) and 40 CFR Part 75, including the quality assurance procedures and specifications;

ii. For a unit with add-on $CO_2$ emissions controls and for all hours where data are substituted in accordance with 40 CFR 75.34(a)(1) , the add-on emissions controls were operating within the range of parameters listed in the quality assurance/quality control program under appendix B of 40 CFR Part 75 and the substitute values do not systematically underestimate $CO_2$ emissions; and,

iii. The $CO_2$ concentration values substituted for missing data under Subpart D of 40 CFR Part 75 do not systematically underestimate $CO_2$ emissions.

(f) Petitions.

1. Except as provided in 310 CMR 7.70(8)(f)3., the $CO_2$ authorized account representative of a $CO_2$ budget unit that is subject to an Acid Rain emissions limitation may submit a petition to the Administrator under 40 CFR 75.66 and to the Department requesting approval to apply an alternative to any requirement of 310 CMR 7.70(8). Application of an alternative to any requirement of 40 CFR Part 75 is in accordance with 310 CMR 7.70(8) only to the extent that the petition is approved in writing by the Administrator, and subsequently approved in writing by the Department.

7.70: continued

2. Petitions for a $CO_2$ budget unit that is not subject to an Acid Rain emissions limitation.

a. The $CO_2$ authorized account representative of a $CO_2$ budget unit that is not subject to an Acid Rain emissions limitation may submit a petition to the Administrator under 40 CFR 75.66 and to the Department requesting approval to apply an alternative to any requirement of 40 CFR Part 75. Application of an alternative to any requirement of 40 CFR Part 75 is in accordance with 310 CMR 7.70(8) only to the extent that the petition is approved in writing by the Administrator, and subsequently approved in writing by the Department.

b. In the event that the Administrator declines to review a petition under 310 CMR 7.70(8)(f)2.a., the $CO_2$ authorized account representative of a $CO_2$ budget unit that is not subject to an Acid Rain emissions limitation may submit a petition to the Department requesting approval to apply an alternative to any requirement of 310 CMR 7.70(8). That petition shall contain all of the relevant information specified in 40 CFR 75.66. Application of an alternative to any requirement of 310 CMR 7.70(8) is in accordance with 310 CMR 7.70(8) only to the extent that the petition is approved in writing by the Department.

3. The $CO_2$ authorized account representative of a $CO_2$ budget unit that is subject to an Acid Rain emissions limitation may submit a petition to the Administrator under 40 CFR 75.66 and to the Department requesting approval to apply an alternative to a requirement concerning any additional CEMS required under the common stack provisions of 40 CFR 75.72 or a $CO_2$ concentration CEMS used under 40 CFR 75.71(a)(2). Application of an alternative to any such requirement is in accordance with 310 CMR 7.70(8) only to the extent the petition is approved in writing by the Administrator, and subsequently approved in writing by the Department.

(g) $CO_2$ Budget Units That Co-fire Eligible Biomass.

1. The $CO_2$ authorized account representative of a $CO_2$ budget unit that co-fires eligible biomass as a compliance mechanism under 310 CMR 7.70 shall report the following information to the Department or its agent for each calendar quarter:

a. Chemical analysis of eligible biomass fired, including carbon content and heating value;

b. Moisture content of eligible biomass for each shipment received for firing at the $CO_2$ budget unit;

c. Total eligible biomass fuel input (in units of mass or volume, as appropriate) to the $CO_2$ budget unit;

d. Total eligible biomass heat input on an as-fired basis to the $CO_2$ budget unit (MMBtu);

e. Heat input rate of eligible biomass to the $CO_2$ budget unit (MMBtu/hr);

f. Fuel feed rate of eligible biomass to the $CO_2$ budget unit (in units of mass or volume per hour, as appropriate);

g. Total operating hours for which eligible biomass was fired;

h. $CO_2$ tons emitted from the $CO_2$ budget unit due to firing of eligible biomass;

i. Description and documentation of fuel sampling frequency and methodology; and,

j. Description and documentation of monitoring technology employed.

2. An owner or operator of a $CO_2$ budget unit shall calculate and submit to the Department or its agent on a quarterly basis the as-fired biomass $CO_2$ emissions factor ($B_{EF}$) for the $CO_2$ budget unit for each distinct type of eligible biomass fired during the reporting quarter, represented as $CO_2$ lbs./MMBtu of biomass heat input. The as-fired $CO_2$ emissions factor shall be the lower of the following:

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a. As measured and recorded by the continuous emissions monitor during all periods when firing eligible biomass alone; or

b. For solid fuel, as determined as follows:

$B_{EF}$ ($CO_2$ lbs./MMBtu) = ((C x $F_{IN}$)/HI) (44 g/mol $CO_2$/12 g/mol C)

where:

C = Carbon content of biomass (fraction by dry weight) for distinct fuel type;

$F_{IN}$ = Total biomass fuel input (lbs.) for distinct fuel type; and,

HI = Heat input, as-fired, (MMBtu) for distinct fuel type, as determined as follows:

$$HI = \sum_{i=1}^{n} (HHV_{DRY} (1 - MCW_{AS\text{-}FIRED\text{-}i})) \times F_{IN\text{-}i}$$

where:

$HHV_{DRY}$ = MMBtu/lb. (higher heating value) dry basis for distinct fuel type fired;

$MCW_{AS\text{-}FIRED\text{-}i}$ = Moisture content wet basis (fraction) for each shipment i fired; and,

$F_{IN\text{-}i}$ = Biomass fuel input (lbs.) for each shipment i fired.

c. For gaseous fuel, as determined as follows:

$B_{EF}$ ($CO_2$ lbs./MMBtu) = ((C x D)/HHV) (44 g/mol $CO_2$/12 g/mol)

where:

C = Carbon content of biogas (fraction by weight) for distinct fuel type;

D = Density of biogas (lbs./scf) for distinct fuel type; and,

HHV = MMBtu/scf (higher heating value) for distinct fuel type.

3. $CO_2$ emissions due to firing of eligible biomass shall be determined as follows:

$$CO_2 \text{ tons} = \sum_{i=1}^{n} (B_{HI\text{-}i} \times B_{EF\text{-}i} \times B_{OF\text{-}i})/2000 \text{ lbs. per short ton}$$

where:

$CO_2$ tons = $CO_2$ emissions due to firing of eligible biomass for the reporting quarter;

$B_{HI\text{-}I}$ = Eligible biomass heat input on an as-fired basis (MMBtu) for the reporting quarter for each distinct type i of eligible biomass fired;

$B_{EF\text{-}I}$ = Eligible biomass emissions factor for the reporting quarter (lbs. $CO_2$/MMBtu) for each distinct type i of eligible biomass fired; and,

$B_{OF\text{-}I}$ = Eligible biomass oxidation factor for each distinct type i of eligible biomass fired, derived for solid fuels based on the ash content of the eligible biomass fired and the carbon content of this ash, as determined pursuant to 310 CMR 7.70(8)(g)1.a.; for gaseous biomass fuels, a default oxidation factor of 0.995 may be used.

4. Fuel sampling methods and fuel sampling technology shall be consistent with the New York State Renewable Portfolio Standard Biomass Guidebook, May 2006.

(h) Additional Requirements to Provide Output Data.

1. $CO_2$ budget source shall submit to the Department or its agent net electrical output.

2. $CO_2$ budget sources selling steam should use billing meters to determine net steam output. A $CO_2$ budget source whose steam output is not measured by billing meters or whose steam output is combined with output from a non-$CO_2$ budget unit prior to measurement by the billing meter shall propose to the Department an alternative method for quantification of net steam output. If data for steam output is not available, the $CO_2$ budget source may report heat input providing useful steam output as a surrogate for steam output.

3. Monitoring. The owner or operator of each $CO_2$ budget unit required to submit an output monitoring plan pursuant to 310 CMR 7.70(3)(c) shall propose a method for quantification of net energy output in such output monitoring plan, including:

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a. A diagram that includes the following features where applicable:

i. All $CO_2$ budget units and all generators served by each $CO_2$ budget unit and the relationship between $CO_2$ budget units and generators. If a generator served by a $CO_2$ budget unit is also served by a non-$CO_2$ budget unit, the non-$CO_2$ budget unit and its relationship to each generator should be indicated on the diagram as well. The diagram should indicate where the net electric output is measured and should include all electrical inputs and outputs to and from the $CO_2$ budget source. If net electric output is determined using a billing meter, the diagram should show each billing meter used to determine net sales of electricity and should show that all electricity measured at the point of sale is generated by the $CO_2$ budget units.

ii. If the $CO_2$ budget unit monitors net thermal output, the diagram should include all steam or hot water coming into the net steam system, including steam from $CO_2$ budget units and non-$CO_2$ budget units, and all exit points of steam or hot water from the net steam system. In addition, each input and output stream shall have an estimated temperature, pressure and phase indicator, and an enthalpy in Btu/lb. The diagram of the net steam system should identify all useful loads, house loads, parasitic loads, any other steam loads and all boiler feedwater returns. The diagram shall represent all energy losses in the system as either usable or unusable losses. The diagram shall also indicate all flow meters, temperature or pressure sensors or other equipment used to calculate gross thermal output. If a sales agreement is used to determine net thermal output, the diagram should show the monitoring equipment used to determine the sales of steam.

b. A description of each output monitoring system. The description of the output monitoring system shall include a written description of the output system and the equations used to calculate output. For net thermal output systems, descriptions and justifications of each useful load shall be included.

c. A detailed description of all quality assurance/quality control activities that will be performed to maintain the output system in accordance with 310 CMR 7.70(8)(h)5.

d. Documentation supporting any output value(s) to be used as a missing data value should there be periods of invalid output data. The missing data output value shall be either zero or an output value that is likely to be lower than a measured value and that is approved as part of the monitoring plan required under 310 CMR 7.70(8)(h)3.

4. Initial Certification. A certification statement shall be submitted by the $CO_2$ authorized account representative stating that either the output monitoring system consists entirely of billing meters or that the output monitoring system meets one of the accuracy requirements for non-billing meters at 310 CMR 7.70(8)(h)4.b. The certification shall be submitted in accordance with the compliance deadlines established in 310 CMR 7.70(3)(b).

a. Billing Meters. The billing meter shall record the electric or thermal output. Any electric or thermal output values that the facility reports shall be the same as the values used in billing for the output. Any output measurement equipment used as a billing meter in commercial transactions requires no additional certification or testing.

b. Non-billing Meters. For non-billing meters and systems that include a mixture of billing meters and non-billing meters, the output monitoring system shall meet either of the accuracy criteria in 310 CMR 7.70(8)(h)4i. and ii..

i. System Approach to Accuracy. The system approach to accuracy shall include a determination of how the system accuracy of within less than or equal to 10% of the reference value is achieved using the individual components in the system and should include data loggers and any wattmeters used to calculate the final net electric output data and/or any flowmeters for steam or condensate, temperature measurement devices, absolute pressure measurement devices, and differential pressure devices used for measuring thermal energy.

7.70: continued

ii. Component Approach to Accuracy. If testing a piece of output measurement equipment shows that the output readings are not accurate to within less than or equal to 3.0% of the full scale value, then the equipment shall be repaired or replaced to meet that requirement. Data shall remain invalid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test.

5. Ongoing QA/QC. The following ongoing quality assurance/quality control activities must be performed in order to maintain the output system:

a. Billing Meters. In the case where billing meters are used to determine output, no QA/QC activities beyond what are already performed are required.

b. Non-billing Meters. Certain types of equipment such as potential transformers, current transformers, nozzle and venture type meters, and the primary element of an orifice plate only require an initial certification of calibration and do not require periodic recalibration unless the equipment is physically changed. However, the pressure and temperature transmitters accompanying an orifice plate shall require periodic retesting. For such pressure and temperature transmitters, and other types of equipment, either recalibrate or re-verify the meter accuracy at least once every two years (*i.e.*, every eight calendar quarters), unless a consensus standard allows for less frequent calibrations or accuracy tests. The output monitoring system shall either meet an accuracy of within 10% of the reference value, or each component monitor for the output system shall meet an accuracy of within 3.0% of the full scale value, whichever is less stringent. If testing a piece of output measurement equipment shows that the output readings are not accurate to within 3.0% of the full scale value, then the equipment should be repaired or replaced to meet that requirement.

c. Out-of-control Periods. If testing a piece of output measurement equipment shows that the output readings are not accurate to the certification value, data remain invalid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test. All invalid data shall be replaced by either zero or an output value that is likely to be lower than a measured value and that is approved as part of the monitoring plan required under 310 CMR 7.70(8)(h)3.

6. Recordkeeping and Reporting.

a. General Provisions. The CO2 authorized account representative shall comply with all recordkeeping and reporting requirements in 310 CMR 7.70(8)(h) and with the requirements of 310 CMR 7.70(1)(e)5. and (2)(a)5.

b. Recordkeeping. Facilities shall retain data used to monitor, determine, or calculate net generation for ten years from the date reported.

c. Annual Reports. The $CO_2$ authorized account representative shall submit annual output reports in a spreadsheet, as follows. The data shall be sent both electronically and in hardcopy by March 1st for the immediately preceding calendar year to the Department or its agent. The annual report shall include the annual total unit level MWh, the annual total useful steam output and a certification statement from the $CO_2$ authorized account representative stating the following, "I am authorized to make this submission on behalf of the owners and operators of the $CO_2$ budget sources or $CO_2$ budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(9) RESERVED

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(10) $CO_2$ Emissions Offset Projects.

(a) Purpose. The Department shall provide for the award of $CO_2$ offset allowances to project sponsors of $CO_2$ emissions offset projects or $CO_2$ emissions credit retirements that have reduced or avoided atmospheric loading of $CO_2$ or $CO_2$ equivalent, or sequestered carbon as demonstrated in accordance with the applicable provisions of 310 CMR 7.70(10). The requirements of 310 CMR 7.70(10) seek to ensure that $CO_2$ offset allowances awarded represent $CO_2$ equivalent emission reductions or carbon sequestration that are real, additional, verifiable, enforceable, and permanent within the framework of a standards-based approach. Subject to the relevant compliance deduction limitations of 310 CMR 7.70(6)(e)1.c., $CO_2$ offset allowances may be used by any $CO_2$ budget source for compliance purposes.

(b) Definitions.

Allocation Period. The maximum number of years for which the Department may award $CO_2$ offset allowances to a project for a given consistency determination pursuant to 310 CMR 7.70(10).

Anaerobic Digester. A device that promotes the decomposition of organic material to simple organics and gaseous biogas products, usually accomplished by means of controlling temperature and volume, and including a methane recovery system.

Anaerobic Digestion. The degradation of organic material including manure brought about through the action of microorganisms in the absence of elemental oxygen.

Anaerobic Storage. Storage of organic material in an oxygen-free environment, or under oxygen-free conditions, including but not limited to, holding tanks, ponds, and lagoons.

ANSI. American National Standards Institute.

ASHRAE. American Society of Heating, Refrigerating and Air-Conditioner Engineers.

Attribute. A characteristic associated with electricity generated using a particular renewable fuel, such as its generation date, facility geographic location, unit vintage, emissions output, fuel, state program eligibility, or other characteristic that can be identified, accounted for, and tracked.

Attribute Credit. An attribute credit represents the attributes related to one megawatt-hour of electricity generation.

Biogas. Gas resulting from the decomposition of organic matter under anaerobic conditions. The principal constituents are methane and carbon dioxide.

Boiler (commercial). A self contained, low-pressure appliance for supplying steam or hot water to a commercial building.

Boiler (residential). A self contained, low-pressure appliance for supplying steam or hot water to a residential building.

Building Envelope. The elements of a building that separate conditioned space from unconditioned space, or that enclose semi-heated space, through which thermal energy may be transferred to or from the exterior, unconditioned space, or conditioned space. Includes all elements that separate the interior of a building from the outdoor environment, including walls, windows, foundation, basement slab, ceiling, roof, and insulation.

$CO_2e$. $CO_2e$ means carbon dioxide equivalent.

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Commercial Building. A building to which the provisions of ANSI/ASHRAE/IESNA Standard 90.1 apply, which includes buildings except low-rise residential buildings. Low-rise residential buildings include single family homes, multifamily structures of three stories or fewer above grade, and manufactured homes (modular and mobile).

Conflict of Interest. A situation that may arise with respect to an individual in relation to any specific project sponsor, $CO_2$ emissions offset project or category of offset projects, such that the individual's other activities or relationships with other persons or organizations render or may render the individual incapable of providing an impartial certification opinion, or otherwise compromise the individual's objectivity in performing certification functions.

Condensing Mode. The design and operation of furnaces or boilers in a mode that leads to the production of condensate in flue gases.

Cooperating Regulatory Agency. A regulatory agency in a state or United States jurisdiction that is not a participating state that has entered into a memorandum of understanding with the appropriate regulatory agencies of all participating states to carry out certain obligations relative to $CO_2$ emissions offset projects in that state or United States jurisdiction, including but not limited to the obligation to perform audits of offset project sites, and report violations of 310 CMR 7.70(10).

Energy Conservation Measure (ECM) or Energy Efficiency Measure (EEM). A set of activities designed to increase the energy efficiency of a building or improve the management of energy demand.

Energy Performance. A measure of the relative energy efficiency of a building, building equipment, or building components, as measured by the amount of energy required to provide building services. For building equipment and components, a relative measure of the impact of equipment or components on building energy usage.

Energy Services. Provision of useful services to building occupants, such as heating and hot water, cooling, and lighting.

Forested Condition. Land shall be deemed to be in a forested condition if it is:

1. At least 1.0 acre in size and 120.0 feet wide measured stem-to-stem from the outermost edge. Forested strips must be 120.0 feet wide for a continuous length of at least 363.0 feet in order to meet the acre threshold; and,
2. Meets at least one of the two following stocking criteria:
   a. The land is at least 10% stocked by trees of any size or has been at least 10% stocked in the past, and the land is not subject to non-forest use(s) that prevent normal tree regeneration and succession such as regular mowing, intensive grazing, or recreation activities; or
   b. In several western woodland species where stocking cannot be determined, the land has at least 5% crown cover by trees of any size, or has had at least 5% cover in the past, and the land is not subject to non-forest use that prevents normal regeneration and succession such as regular mowing, chaining, or recreation activities.

Furnace (residential). A self-contained, indirect-fired appliance that supplies heated air to a residential building through ducts to conditioned spaces and that has a heat input rate of less than 225,000 Btu/hr. May apply to a furnace that meets the above heat input rate criteria and is installed in a commercial building.

HVAC System. The system or systems that provide, either collectively or individually, heating, ventilation, or air conditioning to a building, including the equipment, distribution network, and terminals.

IESNA. Illuminating Engineering Society of North America.

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Independent Verifier. An individual that has been approved by the Department or its agent to conduct verification activities.

Market Penetration Rate. A measure of the diffusion of a technology, product, or practice in a defined market, as represented by the percentage of annual sales for a product or practice, or as a percentage of the existing installed stock for a product or category of products, or as the percentage of existing installed stock that utilizes a practice. The Department may determine an appropriate market definition and market penetration metric for a category of technology, product or practice, and may issue guidance specifying the technologies, products or practices that meet a specified market penetration rate.

Non-census Water. Streams, sloughs, estuaries, and canals more than 120 feet and less than c of a mile wide. Lakes, reservoirs, and ponds one to 40 acres in size.

Non-forested Condition. Land that does not meet the definition of ”forested condition.” Non-forested land includes areas used for crops, improved pasture, residential areas, city parks, improved roads of any width and adjoining rights-of-way, power line clearings of any width, and non-census water. If intermingled in forest areas, unimproved roads and non-forest strips must be more than 120.0 feet wide, and clearings more than one acre in size, to qualify as non-forest land.

Offset Project. An offset project includes all equipment, materials, items, or actions directly related to the reduction of $CO_2$ equivalent emissions or the sequestration of carbon specified in a consistency application submitted pursuant to 310 CMR 7.70(10)(d). Equipment, materials, items, or actions unrelated to an offset project reduction of $CO_2$ equivalent emissions or the sequestration of carbon, but occurring at a location where an offset project occurs, shall not be considered part of an offset project, unless specified at 310 CMR 7.70(10)(e).

Onsite Combustion. The combustion of fossil fuel at a building to provide building services, such as heating, hot water, or electricity.

Passive Solar. A combination of building design features and building components that utilize solar energy to reduce or eliminate the need for mechanical heating and cooling and daytime artificial lighting.

Permanently Retired. A greenhouse gas allowance or credit has been “permanently retired” if it has been placed in a retirement account controlled by the jurisdiction that generated the allowance or credit, or has been placed in an allowance retirement account controlled by the Department, or is otherwise determined by the Department to have been rendered unusable.

Project Commencement. For an offset project involving physical construction, other work at an offset project site, or installation of equipment or materials, the date of the beginning of such activity. For an offset project that involves the implementation of a management activity or protocol, the date on which such activity is first implemented or such protocol first utilized.

Project Sponsor. The $CO_2$ authorized account representative for the general account of an eligible $CO_2$ emissions offset project or $CO_2$ emissions credit retirement.

Regional-type Anaerobic Digester. An anaerobic digester using feedstock from more than one agricultural operation, or importing feedstock from more than one agricultural operation. Also commonly referred to as a “community digester” or “centralized digester.”

Renewable Portfolio Standard. A statutory or regulatory requirement that a load-serving entity provide a certain portion of the electricity it supplies to its customers from renewable energy sources, or any other statutory or regulatory requirement that a certain portion of electricity supplied to the electricity grid be generated from renewable energy sources.

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Residential Building. A low-rise residential building to which the provisions of ANSI/ASHRAE/IESNA Standard 90.1 do not apply. Includes single family homes, multifamily structures of three stories or fewer above grade, and manufactured homes (modular and mobile).

RESNET. Residential Energy Services Network.

$SF_6$-containing Operating Equipment. Any equipment used for the transmission and distribution of electricity that contains $SF_6$.

System Benefit Fund. Any fund collected directly from retail electricity or natural gas ratepayers.

Total Solids. Total solids are the total of all solids in a sample. They include the total suspended solids, total dissolved solids, and volatile suspended solids.

Transmission and/or Distribution Entity. The assets and equipment used to transmit and distribute electricity from an electric generator to the electrical load of a customer. Includes all related assets and equipment located within the service territory of the entity, defined as the service territory of a load-serving entity specified by the applicable state regulatory agency.

Verification. The verification by an independent verifier that certain parts of a $CO_2$ emissions offset project consistency application and/or measurement, monitoring or verification report conforms to the requirements of 310 CMR 7.70(10).

Volatile Solids. The fraction of total solids that is comprised primarily of organic matter.

Whole-building Energy Performance. The overall energy performance of a building, taking into account the integrated impact on energy usage of all building components and systems.

Whole-building Retrofit. Any building project that involves the replacement of more than one building system, or set of building components, and also requires a building permit.

Zero Net Energy Building. A building designed to produce as much energy, using renewable energy sources, as the building is projected to use, as measured on an annual basis.

(c) General Requirements.

1. Eligible $CO_2$ Emissions Offset Projects. To qualify for the award of $CO_2$ offset allowances, offset projects shall satisfy all the applicable requirements of 310 CMR 7.70(10).

a. Offset Project Types. The following types of offset projects are eligible for the award of $CO_2$ offset allowances:

i. landfill methane capture and destruction;

ii. reduction in emissions of sulfur hexafluoride ($SF_6$);

iii. sequestration of carbon due to afforestation;

iv. reduction or avoidance of $CO_2$ emissions from natural gas, oil, or propane end-use combustion due to end-use energy efficiency; and,

v. avoided methane emissions from agricultural manure management operations.

b. Offset Project Locations.

i. To qualify for the award of $CO_2$ offset allowances under 310 CMR 7.70(10), eligible offset projects may be located in any of the following locations:

(i) In Massachusetts; and,

(ii) In any state or other United States jurisdiction in which a cooperating regulatory agency has entered into a memorandum of understanding with the appropriate regulatory agencies of all participating states to carry out certain obligations relative to $CO_2$ emissions offset projects in that state or U.S. jurisdiction, including but not limited to the obligation to perform audits of offset project sites, and report violations of 310 CMR 7.70(10).

7.70: continued

ii. Projects located (in whole or in part) in one or more participating states are not eligible for $CO_2$ offset allowances under 310 CMR 7.70(10) unless more of the $CO_2$ equivalent emissions reduction or carbon sequestration due to the offset project is projected to occur in Massachusetts than in any other participating state.

2. Eligible $CO_2$ Emissions Credit Retirements. To qualify for the award of $CO_2$ offset allowances, a $CO_2$ emissions credit retirement shall satisfy all the applicable requirements of 310 CMR 7.70(10).

a. $CO_2$ emissions credit retirements include the permanent retirement of greenhouse gas allowances or credits issued pursuant to any governmental mandatory carbon constraining program outside the United States that places a specific tonnage limit on greenhouse gas emissions, provided the allowances or credits are acceptable and valid for use in that program at the time of the filing of the consistency application under 310 CMR 7.70(10)(d), or certified greenhouse gas emissions reduction credits issued pursuant to the United Nations Framework Convention on Climate Change (UNFCCC) or protocols adopted through the UNFCCC process.

b. The Department may award $CO_2$ offset allowances for $CO_2$ emissions credit retirements only after the occurrence of a stage two trigger event.

3. Project Sponsor. Any person may act as the sponsor of an eligible $CO_2$ emissions offset project or $CO_2$ emissions credit retirement, provided that person meets the requirements at 310 CMR 7.70(10)(d).

4. General Additionality Requirements. Except as provided with respect to specific offset project standards in 310 CMR 7.70(10)(e), the following general requirements shall apply:

a. $CO_2$ offset allowances shall not be awarded to an offset project or $CO_2$ emissions credit retirement that is required pursuant to any local, state or federal law, regulation, ordinance, by-law, or administrative or judicial order. If an offset project receives a consistency determination under 310 CMR 7.70(10)(d) and is later required by local, state or federal law, regulation, or administrative or judicial order, then the offset project shall remain eligible for the award of $CO_2$ offset allowances until the end of its current allocation period but its eligibility shall not be extended for an additional allocation period;

b. $CO_2$ offset allowances shall not be awarded to an offset project that includes an electric generation component, unless the project sponsor transfers to the Department or its agent legal rights to any and all attribute credits (other than the $CO_2$ offset allowances that would be awarded under 310 CMR 7.70(10)(g)) generated from the operation of the offset project that may be used for compliance with a renewable portfolio standard or other regulatory requirement;

c. $CO_2$ offset allowances shall not be awarded to an offset project that receives funding or other incentives from any system benefit fund, or funds or other incentives provided through the auction of $CO_2$ allowances from the Massachusetts Auction Account pursuant to 310 CMR 7.70 (5)(c)1.;

d. $CO_2$ offset allowances shall not be awarded to an offset project or $CO_2$ emissions credit retirement that is awarded credits or allowances under any other mandatory or voluntary greenhouse gas program except as provided in 310 CMR 7.70(10)(c)4.e.; and

e. $CO_2$ offset allowances may be awarded to an offset project for which GHG Credits were created pursuant to 310 CMR 7.00: *Appendix B*(7) provided the offset project meets all of the requirements of 310 CMR 7.70(10). However, $CO_2$ offset allowances shall not be awarded to an offset project for greenhouse gas emissions reduced, avoided, or sequestered for which GHG Credits were created pursuant to 310 CMR 7.00: *Appendix B*(7) unless:

i. The GHG Credits have not been used to demonstrate compliance with 310 CMR 7.29; and,

ii. The applicant has requested that the Department retire or invalidate the GHG Credits contingent upon the Department's awarding of $CO_2$ offset allowances for those reduced, avoided, or sequestered greenhouse gas emissions.

7.70: continued

5. Maximum Allocation Periods for $CO_2$ Emissions Offset Projects.

a. Maximum Allocation Periods. Except as provided in 310 CMR 7.70(10)(c)5.b., the Department may award $CO_2$ offset allowances under 310 CMR 7.70(10)(g) for an initial ten-year allocation period. At the end of the initial ten-year allocation period, the Department may award $CO_2$ offset allowances for a second ten-year allocation period, provided the offset sponsor has submitted a consistency application pursuant to 310 CMR 7.70(10)(d) prior to the expiration of the initial allocation period, and the Department has issued a consistency determination pursuant to 310 CMR 7.70(10)(d)5.b.

b. Maximum Afforestation Allocation Period. The Department may award $CO_2$ offset allowances under 310 CMR 7.70(10)(g) for any afforestation offset project for an initial 20-year allocation period. At the end of the initial 20-year allocation period, the Department may award $CO_2$ offset allowances for a second 20-year allocation period, provided the offset sponsor has submitted a consistency application for the afforestation offset project pursuant to 310 CMR 7.70(10)(d) prior to the expiration of the initial allocation period, and the Department has issued a consistency determination pursuant to 310 CMR 7.70(10)(d)5.b. At the end of the second 20-year allocation period, the Department may award $CO_2$ offset allowances for a third 20-year allocation period, provided the offset sponsor has submitted a consistency application for the afforestation offset project pursuant to 310 CMR 7.70(10)(d) prior to the expiration of the second allocation period, and the Department has issued a consistency determination pursuant to 310 CMR 7.70(10)(d)5.b. In no event may an afforestation offset project be awarded $CO_2$ offset allowances for more than a total of 60 allocation years.

6. Timing of Offset Projects. The Department may award $CO_2$ offset allowances under 310 CMR 7.70(10)(g) only for offset projects that are initially commenced on or after December 20, 2005.

7. Offset Project Audit. Project sponsors shall provide the Department or its agent access to the physical location of the offset project to inspect for compliance with 310 CMR 7.70(10). For offset projects located in any state or other U.S. jurisdiction that is not a participating state, project sponsors shall also provide the cooperating regulatory agency with access to the physical location of the offset project to inspect for compliance with 310 CMR 7.70(10).

8. Ineligibility Due to Noncompliance. If at any time the Department determines that a project sponsor has not complied with the requirements of 310 CMR 7.70(10), then the Department may revoke and retire any and all $CO_2$ offset allowances in the project sponsor's account. If at any time the Department determines that an offset project does not comply with the requirements of 310 CMR 7.70(10), then the Department may revoke any approvals it has issued relative to an offset project.

(d) Application Process.

1. Establishment of General Account. The sponsor of an offset project or $CO_2$ emissions credit retirement must establish a general account under 310 CMR 7.70(6)(b)2. All submissions to the Department required for the award of $CO_2$ offset allowances under 310 CMR 7.70(10) must be from the $CO_2$ authorized account representative for the general account of the sponsor of the relevant offset project or $CO_2$ emissions credit retirement, herein referred to as "project sponsor."

2. Consistency Application Deadlines.

a. For offset projects commenced prior to January 1, 2009, the project sponsor must submit the consistency application on or before June 30, 2009.

b. For offset projects commenced on or after January 1, 2009, the consistency application must be submitted by the date that is six months after the offset project is commenced.

c. Any consistency application that fails to meet the deadlines of 310 CMR 7.70(10)(d)2. shall result in the denial of the consistency application and the continued ineligibility of the subject offset project.

7.70: continued

3. Consistency Application Contents.

a. For an offset project, the consistency application must include the following information.

i. The project's sponsor's name, address, email address, telephone number, facsimile transmission number, and account number.

ii. The offset project description as required by the relevant provisions of 310 CMR 7.70(10)(e).

iii. A demonstration that the offset project meets all applicable requirements set forth in 310 CMR 7.70(10).

iv. The emissions baseline determination as required by the relevant provisions of 310 CMR 7.70(10)(e).

v. An explanation of how the projected reduction or avoidance of atmospheric loading of $CO_2$ or $CO_2$ equivalent or the sequestration of carbon is to be quantified, monitored, and verified as required by the relevant provisions of 310 CMR 7.70(10)(e).

vi. A completed consistency application agreement that reads as follows: "The undersigned project sponsor recognizes and accepts that the application for, and the receipt of, $CO_2$ offset allowances under the $CO_2$ Budget Trading Program is predicated on the project sponsor following all the requirements of 310 CMR 7.70(10). The undersigned project sponsor holds the legal rights to the offset project, or has been granted the right to act on behalf of a party that holds the legal rights to the offset project. I understand that eligibility for the award of $CO_2$ offset allowances under 310 CMR 7.70(10) is contingent on meeting the requirements of 310 CMR 7.70(10). I authorize the Department or its agent to audit this offset project for purposes of verifying that the offset project, including the monitoring and verification plan, has been implemented as described in this application. I understand that this right to audit shall include the right to enter the physical location of the offset project. I submit to the legal jurisdiction of Massachusetts."

vii. A list of all offset projects under the sponsor's ownership or control (or under the ownership or control of any entity which controls, is controlled by, or has common control with the sponsor) for which a consistency application or a monitoring and verification application has been submitted under 310 CMR 7.70(10), or similar provisions in the rules of other participating states. If any consistency application or monitoring and verification application has been denied or revoked by the Department or any participating state, then such status shall be documented and explained. If any $CO_2$ offset allowance has been revoked or retired by the Department or any participating state as a result of a determination that a project sponsor has not complied with the requirements of 310 CMR 7.70(10), or similar provisions in the rules of other participating states, then such action shall be documented and explained. The Department reserves the right to reject a consistency application or a monitoring and verification application on the basis of previous fraud, deceit, deception, misrepresentation, submittal of false or misleading information to the Department or other participating states regarding $CO_2$ emissions offset projects, or a finding under 310 CMR 7.70(10)(c)8. of failure to comply with the requirements of 310 CMR 7.70(10), or similar provisions in the rules of other participating states.

viii. A verification report and certification statement signed by an independent verifier accredited pursuant to 310 CMR 7.70(10)(f) that expresses that the independent verifier has reviewed the entire application and evaluated the following in relation to the applicable requirements at 310 CMR 7.70(10)(c) and (e), and any applicable guidance issued by the Department.

viii. A verification report and certification statement signed by an independent verifier accredited pursuant to 310 CMR 7.70(10)(f) that expresses that the independent verifier has reviewed the entire application and evaluated the following in relation to the applicable requirements at 310 CMR 7.70(10)(c) and (e), and any applicable guidance issued by the Department.

7.70: continued

(i) The adequacy and validity of information supplied by the project sponsor to demonstrate that the offset project meets the applicable eligibility requirements of 310 CMR 7.70(10)(c) and (e).

(ii) The adequacy and validity of information supplied by the project sponsor to demonstrate baseline emissions pursuant to the applicable requirements at 310 CMR 7.70(10)(e).

(iii) The adequacy of the monitoring and verification plan submitted pursuant to the applicable requirements at 310 CMR 7.70(10)(e).

(iv) Such other evaluations and statements as may be required by the Department.

ix. Disclosure of any voluntary or mandatory programs, other than the $CO_2$ Budget Trading Program, to which greenhouse gas emissions data related to the offset project has been, or will be reported.

x. For offset projects located in a state or United States jurisdiction that is not a participating state, a demonstration that the project sponsor has complied with all requirements of the cooperating regulatory agency in the state or United States jurisdiction where the offset project is located.

xi. The offset project sponsor shall make the following certification: "I certify that I have personally examined the foregoing information, and am familiar with the information contained in this application and any attachments thereto and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information contained in this application, is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

b. For a $CO_2$ emissions credit retirement, the consistency application must include sufficient information to demonstrate that the $CO_2$ emissions credit is eligible pursuant to 310 CMR 7.70(10)(c)2., was lawfully held by the project sponsor, and has been permanently and irrevocably retired.

c. Consistency applications shall be submitted in a format approved by the Department.

4. Prohibition Against Filing Consistency Applications in More than One Participating State.

a. Consistency applications may not be submitted to the Department if a consistency application has already been submitted for the same project, or any portion of the same project, in another participating state, unless the consistency application was rejected by another participating state solely because more of the $CO_2$ equivalent emissions reduction or carbon sequestration due to the offset project is projected to occur in Massachusetts than in any other participating state

b. Consistency applications may not be submitted to the Department if a consistency application has already been submitted for the same $CO_2$ emissions credit retirement in another participating state.

5. Department Action on Consistency Applications.

a. Completeness Determination. Within 30 days following receipt of the consistency application filed pursuant to 310 CMR 7.70(10)(d)2., the Department shall notify the project sponsor whether the consistency application is complete. A complete consistency application is one that is in an approved form and is determined by the Department to be complete for the purpose of commencing review of the consistency application. In no event shall a completeness determination prevent the Department from requesting additional information in order to enable the Department to make a consistency determination under 310 CMR 7.70(10)(d)5.b.

b. Consistency Determination. Within 150 days of making the completeness determination under 310 CMR 7.70(10)(d)5.a., the Department shall issue a determination as to whether the offset project is consistent with the requirements of 310 CMR 7.70(10)(c) and (d) and the requirements of the applicable offset project standard of 310 CMR 7.70(10)(e). For any offset project found to lack consistency with these requirements, the Department shall inform the project sponsor of the offset project's deficiencies.

7.70: continued

(e) $CO_2$ Emissions Offset Project Standards.

1. Landfill Methane Capture and Destruction. To qualify for the award of $CO_2$ offset allowances under 310 CMR 7.70(10), offset projects that capture and destroy methane from landfills shall meet the requirements of 310 CMR 7.70(10)(e)1., and all other applicable requirements of 310 CMR 7.70(10).

a. Eligibility. Eligible offset projects shall occur at landfills that are not subject to the New Source Performance Standards (NSPS) for municipal solid waste landfills, 40 CFR Part 60, Subpart Cc and Subpart WWW.

b. Offset Project Description. The offset project sponsor shall provide a detailed narrative of the offset project actions to be taken, including documentation that the offset project meets the eligibility requirements of 310 CMR 7.70(10)(e)1.a. The project narrative shall include the following information.

i. Owner and operator of the offset project;

ii. Location and specifications of the landfill where the offset project will occur, including waste in place;

iii. Owner and operator of the landfill where the offset project will occur; and,

iv. Specifications of the equipment to be installed and a technical schematic of the offset project.

c. Emissions Baseline Determination. The emissions baseline shall represent the potential fugitive landfill emissions of $CH_4$ (in tons of $CO_2e$), as represented by the $CH_4$ collected and metered for thermal destruction as part of the offset project, and calculated in accordance with 310 CMR 7.70(10)(e)1.c.

Emissions (tons $CO_2e$) = (V x M x (1 – OX) x GWP)/2000

where:

V = Volume of $CH_4$ collected ($ft^3$ );
M = Mass of $CH_4$ per cubic foot (0.04246 lbs/$ft^3$ default value at 1 atmosphere and 20 ° C);
OX = Oxidation factor (0.10), representing estimated portion of collected $CH_4$ that would have eventually oxidized to $CO_2$ if not collected; and
GWP = $CO_2e$ global warming potential of $CH_4$ (23).

d. Calculating Emissions Reductions. Emissions reductions shall be determined based on potential fugitive $CH_4$ emissions that would have occurred at the landfill if metered $CH_4$ collected from the landfill for thermal destruction as part of the offset project was not collected and destroyed. $CO_2e$ emissions reductions shall be calculated as follows:

Emissions Reductions (tons $CO_2e$) = (V x M x (1 – OX) x $C_{ef}$ x GWP)/2000

where:

V = Volume of $CH_4$ collected ($ft^3$);
M = Mass of $CH_4$ per cubic foot (0.04246 lbs/$ft^3$ default value at 1 atmosphere and 20 ° C);
OX = Oxidation factor (0.10), representing estimated portion of collected $CH_4$ that would have eventually oxidized to $CO_2$ if not collected;
$C_{ef}$ = Combustion efficiency of methane control technology (0.98); and,
GWP = $CO_2e$ global warming potential of $CH_4$ (23).

7.70: continued

e. Monitoring and Verification Requirements. Offset projects shall employ a landfill gas collection system that provides continuous metering and data computation of landfill gas volumetric flow rate and $CH_4$ concentration. Annual monitoring and verification reports shall include monthly volumetric flow rate and $CH_4$ concentration data, including documentation that the $CH_4$ was actually supplied to the combustion source. Monitoring and verification is also subject to the following requirements.

i. The project sponsor shall submit a monitoring and verification plan as part of the consistency application that includes a quality assurance and quality control program associated with equipment used to determine landfill gas volumetric flow rate and $CH_4$ composition. The monitoring and verification plan shall also include provisions for ensuring that measuring and monitoring equipment is maintained, operated, and calibrated based on manufacturer recommendations, as well as provisions for the retention of maintenance records for audit purposes. The monitoring and verification plan shall be certified by an independent verifier accredited pursuant to 310 CMR 7.70(10)(f).

ii. The project sponsor shall annually verify landfill gas $CH_4$ composition through landfill gas sampling and independent laboratory analysis using applicable U.S. Environmental Protection Agency laboratory test methods.

2. Reduction in Emissions of Sulfur Hexafluoride ($SF_6$). To qualify for the award of $CO_2$ offset allowances under 310 CMR 7.70(10), offset projects that prevent emissions of sulfur hexafluoride to the atmosphere from equipment in the electricity transmission and distribution sector, through capture and storage, recycling, or destruction, shall meet the requirements of 310 CMR 7.70(10)(e)2. and all other applicable requirements of 310 CMR 7.70(10).

a. Eligibility.

i. Eligible offset projects shall consist of incremental actions beyond those taken during the baseline year to achieve a reduction in $SF_6$ emissions relative to the baseline year. Eligible actions may include an expansion of existing actions. The identified actions to be taken shall be consistent with the guidance provided in International Electrotechnical Commission (IEC) 1634, "High-voltage switchgear and control gear—Use and handling of sulfur hexafluoride ($SF_6$) in high-voltage switchgear and control gear," (CEI/IEC 1634, 1995-04), and Electric Power Research Institute (EPRI), "Practical Guide to $SF_6$ Handling Practices," (TR-113933, 2002).

ii. Except as provided in 310 CMR 7.70(10)(e)2.a.iii., eligible offset projects shall have an $SF_6$ entity-wide emissions rate for the baseline year that is less than the applicable emissions rate in Table 1. The entity-wide $SF_6$ emissions rate shall be calculated as follows:

$SF_6$ Emissions Rate (%) = (Total $SF_6$ Emissions for Reporting Year)/
(Total $SF_6$ Nameplate Capacity at End of Reporting Year)

where:

$SF_6$ Nameplate Capacity refers to all $SF_6$ containing equipment owned and/or operated by the entity, at full and proper $SF_6$ charge of the equipment rather than the actual charge of the equipment (which may reflect leakage).

7.70: continued

**310 CMR 7.70(10)(e)2.a.ii. Table 1**
**$SF_6$ Emissions Rate Performance Standards**

**A. Emission Regions**

| Region A | Region B | Region C | Region D | Region E |
|---|---|---|---|---|
| Connecticut | Alabama | Colorado | Arkansas | Alaska |
| Delaware | District of Columbia | Illinois | Iowa | Arizona |
| Maine | Florida | Indiana | Kansas | California |
| Massachusetts | Georgia | Michigan | Louisiana | Hawaii |
| New Jersey | Kentucky | Minnesota | Missouri | Idaho |
| New York | Maryland | Montana | Nebraska | Nevada |
| New Hampshire | Mississippi | North Dakota | New Mexico | Oregon |
| Pennsylvania | North Carolina | Ohio | Oklahoma | Washington |
| Rhode Island | South Carolina | South Dakota | Texas | |
| Vermont | Tennessee | Utah | | |
| | Virginia | Wisconsin | | |
| | West Virginia | Wyoming | | |

**B. Emissions Rate Performance Standards**

| Region | Emission Rate[a] |
|---|---|
| Region A | 9.68% |
| Region B | 5.22% |
| Region C | 9.68% |
| Region D | 5.77% |
| Region E | 3.65% |
| U.S. (National) | 9.68% |

[a]Based on weighted average 2004 emissions rates for U.S. EPA $SF_6$ Partnership utilities in each region. If the weighted average emissions rate in a region is higher than the national weighted average, the default performance standard is the national weighted average emissions rate.

iii. An $SF_6$ offset project shall be eligible even if the $SF_6$ entity-wide emissions rate in the baseline year exceeds the applicable rate in 310 CMR 7.70(10)(e)2.a.ii., provided that the project sponsor demonstrates and the Department determines that the project is being implemented at a transmission and/or distribution entity serving a predominantly urban service territory and that at least two of the following factors prevent optimal management of $SF_6$.

(i) The entity is comprised of older than average installed transmission and distribution equipment in relation to the national average age of equipment.

(ii) A majority of the entity's electricity load is served by equipment that is located underground, and poor accessibility of such underground equipment precludes management of $SF_6$ emissions through regular ongoing maintenance.

(iii) The inability to take a substantial portion of equipment out of service, as such activity would impair system reliability.

(iv) Required equipment purpose or design for a substantial portion of entity transmission and distribution equipment results in inherently leak-prone equipment.

b. Offset Project Description. The offset project sponsor shall provide a detailed narrative of the offset project actions to be taken, including documentation that the offset project meets the eligibility requirements of 310 CMR 7.70(10)(e)2.a. The offset project narrative shall include the following information.

i. Description of the transmission and/or distribution entity suitable in detail to specify the service territory served by the entity.

ii. Owner and operator of the transmission and/or distribution entity.

7.70: continued

c. Emissions Baseline Determination. If the consistency application is filed on or after January 1, 2009, baseline $SF_6$ emissions shall be determined based on annual entity-wide reporting of $SF_6$ emissions for the calendar year immediately preceding the calendar year in which the consistency application is filed (designated the baseline year). If the consistency application is filed prior to 2009, the baseline year may be 2005, but no earlier. The reporting entity shall systematically track and account for all entity-wide uses of $SF_6$ in order to determine entity-wide emissions of $SF_6$. The scope of such tracking and accounting shall include all electric transmission and distribution assets and all $SF_6$-containing and $SF_6$-handling equipment owned and/or operated by the reporting entity.

i. Emissions shall be determined based on the following mass balance method: $SF_6$ Emissions (lbs.) = ($SF_6$ Change in Inventory) + ($SF_6$ Purchases and Acquisitions) – ($SF_6$ Sales and Disbursements) – (Change in Total $SF_6$ Nameplate Capacity of Equipment)

where:

Change in Inventory is the difference between the quantity of $SF_6$ gas in storage at the beginning of the reporting year and the quantity in storage at the end of the reporting year. The term "quantity in storage" includes all $SF_6$ gas contained in cylinders (such as 115-pound storage cylinders), gas carts, and other storage containers. It does not refer to $SF_6$ gas held in $SF_6$-using operating equipment. The change in inventory will be negative if the quantity of $SF_6$ gas in storage increases over the course of the year. Purchases and Acquisitions of $SF_6$ is the sum of all the $SF_6$ gas acquired from other parties during the reporting year, as contained in storage containers or $SF_6$-using operating equipment. Sales and disbursements of $SF_6$ is the sum of all the $SF_6$ gas sold or otherwise disbursed to other parties during the reporting year, as contained in storage containers and $SF_6$-using operating equipment. Change in Total $SF_6$ Nameplate Capacity of Equipment is the net change in the total volume of $SF_6$-containing operating equipment during the reporting year. The net change in nameplate capacity is equal to new equipment nameplate capacity, minus retired equipment nameplate capacity. This quantity shall be negative if the retired equipment has a total nameplate capacity larger than the total nameplate capacity of the new equipment. "Total nameplate capacity" refers to the full and proper $SF_6$ charge of the equipment rather than to the actual charge, which may reflect leakage.

ii. Emissions shall be calculated as follows:

Emissions (tons $CO_2e$) = $[(V_{iby} – V_{iey}) + (PA_{psd} + PA_e + PA_{rre}) – (SD_{op} + SD_{rs} + SD_{df} + SD_{sor}) – (CNP_{ne} – CNP_{rse})]$ x GWP/2000

where (all $SF_6$ values in lbs.):

$V_{iby}$ = $SF_6$ inventory in cylinders, gas carts, and other storage containers (not $SF_6$-containing operating equipment) at the beginning of the reporting year; $V_{iey}$ = $SF_6$ inventory in cylinders, gas carts, and other storage containers (not $SF_6$-containing operating equipment) at the end of the reporting year;

$PA_{psd}$ = $SF_6$ purchased from suppliers or distributors in cylinders;

$PA_e$ = $SF_6$ provided by equipment manufacturers with or inside $SF_6$-containing operating equipment;

$PA_{rre}$ = $SF_6$ returned to the reporting entity after offsite recycling;

$SD_{op}$ = Sales of $SF_6$ to other parties, including gas left in $SF_6$containing operating equipment that is sold;

$SD_{rs}$ = Returns of $SF_6$ to supplier (producer or distributor);

$SD_{df}$ = $SF_6$ sent to destruction facilities;

$SD_{sor}$ = $SF_6$ sent offsite for recycling;

$CNP_{ne}$ = Total $SF_6$ nameplate capacity of new $SF_6$-containing operating equipment at proper full charge;

$CNP_{rse}$ = Total $SF_6$ nameplate capacity of retired or sold $SF_6$-containing operating equipment at proper full charge; and

GWP = $CO_2e$ global warming potential of $SF_6$ (22,200).

7.70: continued

iii. As part of the consistency application required pursuant to 310 CMR 7.70(10)(d)2. and 3. and in annual monitoring and verification reports required pursuant to 310 CMR 7.70(10)(g)2. and 3., the project sponsor shall provide the documentation required at 310 CMR 7.70(10)(e)2.e.i. through iii. to support emissions calculations.

d. Calculating Emissions Reductions. Emissions reductions shall represent the annual entity-wide emissions reductions of $SF_6$ for the reporting entity, relative to emissions in the baseline year. Emissions reductions shall be determined as follows, using the quantification method outlined in 310 CMR 7.70(10)(e)2.c.ii. to determine emissions in both the baseline year and reporting year(s):

Emissions Reduction (tons $CO_2e$) = (Total Pounds of $SF_6$ Emissions in Baseline Reporting Year) – (Total Pounds of $SF_6$ Emissions in Reporting Year) x GWP/2000

where:

GWP = $CO_2e$ global warming potential of $SF_6$ (22,200).

e. Monitoring and Verification Requirements. The annual monitoring and verification report shall include supporting material detailing the calculations and data used to determine $SF_6$ emissions reductions, and shall also provide the following documentation.

i. The project sponsor shall identify a facility(ies) managed by the entity from which all $SF_6$ gas is procured and disbursed and maintain an entity-wide log of all $SF_6$ gas procurements and disbursals. The entity-wide log shall include the weight of each cylinder transported before shipment from the facility(ies) and the weight of each cylinder after return to the facility(ies). A specific cylinder log shall also be maintained for each cylinder that is used to fill equipment with $SF_6$ or reclaim $SF_6$ from equipment. The cylinder log shall be retained with the cylinder and indicate the location and specific identifying information of the equipment being filled, or from which $SF_6$ is reclaimed, and the weight of the cylinder before and after this activity. The cylinder log shall be returned with the cylinder to the facility when the activity is complete or the cylinder is empty.

ii. A current entity-wide inventory of all $SF_6$-containing operating equipment and all other $SF_6$-related items, including cylinders, gas carts, and other storage containers used by the entity. The inventory shall be certified by an independent verifier accredited pursuant to 310 CMR 7.70(10)(f).

iii. The project sponsor shall provide a monitoring and verification plan as part of the consistency application, which shall include an $SF_6$ inventory management and auditing protocol and a process for quality assurance and quality control of inventory data. The monitoring and verification plan shall be certified by an independent verifier accredited pursuant to 310 CMR 7.70(10)(f).

3. Sequestration of Carbon Due to Afforestation. To qualify for the award of $CO_2$ offset allowances under 310 CMR 7.70(10), offset projects that sequester carbon through the conversion of land from a non-forested to a forested condition shall meet the requirements of 310 CMR 7.70(10)(e)3. and all other applicable requirements of 310 CMR 7.70(10).

a. Eligibility.

i. Eligible offset projects shall occur on land that has been in a non-forested state for at least ten years preceding the commencement of the offset project.

ii. Eligible offset projects shall be managed in accordance with widely accepted environmentally sustainable forestry practices and designed to promote the restoration of native forests by using mainly native species and avoiding the introduction of invasive nonnative species. If commercial timber harvest activities are to occur, certification of these activities must be obtained, prior to any harvest activities at the site, through the Forest Stewardship Council (FSC), Sustainable Forestry Institute (SFI), American Tree Farm System (ATFS), or such other similar organizations as may be approved by the Department.

b. Offset Project Description. The offset project sponsor shall provide a detailed narrative of the offset project actions to be taken, including documentation that the offset project meets the eligibility requirements of 310 CMR 7.70(10)(e)3.a. The offset project narrative shall include the following information.

i. Owner of the land within the offset project boundary;

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ii. Detailed map of the land within the offset project boundary and areas adjacent to the offset project boundary;

iii. A copy of the permanent conservation easement required pursuant to 310 CMR 7.70(10)(e)3.f.;

iv. For offset projects located in a state or United States jurisdiction that is not a participating state, a written legal opinion from an attorney licensed to practice in the state where the offset project is located, or from the cooperating regulatory agency, confirming the enforceability of the permanent conservation easement; and

v. Plant species to be planted or established via natural regeneration, and a forest management plan consistent with the requirements at 310 CMR 7.70(10)(e)3.a.ii.

c. Carbon Sequestration Baseline Determination. The existing sequestered carbon within the offset project boundary shall be calculated prior to commencement of the offset project. The carbon sequestration baseline shall be determined based on a sum of measurements, made no more than 12 months prior to offset project commencement, of the carbon content of the following carbon pools.

i. Carbon content shall be calculated for the following required carbon pools:

(i) live aboveground tree biomass;

(ii) live belowground tree biomass;

(iii) soil carbon; and,

(iv) dead organic matter, coarse woody debris, unless the baseline measure-ment for this carbon pool is at or near zero, in which case measurement of this carbon pool during the allocation period is optional.

ii. Carbon content may be calculated for the following optional carbon pools:

(i) live aboveground non-tree biomass; and,

(ii) dead organic matter, forest floor.

iii. Carbon content shall be calculated individually for each carbon pool within the offset project boundary.

iv. To increase the accuracy of measurement and verification, the area within the offset project boundary shall be divided into subpopulations that form relatively homogenous units. When defining subpopulations, the project sponsor shall consider vegetation and tree species (including existing vegetation and trees and those to be utilized as part of the offset project activity) and site factors (soil type, elevation, slope, age class, and other factors as warranted).

v. Calculation of sequestered carbon for each carbon pool in each reporting subpopulation shall be based on the following:

$CO_2$ tons = [(A x C/ha)(44 g/mol $CO_2$/12 g/mol C)] / 0.9072 metric tons/short ton

where:

A = Area in hectares within each reporting subpopulation;

C = Carbon content (metric tons of carbon for each carbon pool); and,

C/ha = Mean carbon content per hectare for each carbon pool.

vi. Total carbon contained within the offset project boundary (represented in $CO_2$ tons, calculated pursuant to 310 CMR 7.70(10(e)3.c.v.) shall be calculated as follows:

$TC_{pb} = TC_{latb} + TC_{lbtb} + TC_s [+ TC_{lantb} + TC_{doff} + TC_{docwd}]$

where:

$TC_{pb}$ = Total carbon content within the offset project boundary (sum of carbon content of all carbon pools in all reporting subpopulations);

$TC_{latb}$ = Sum of carbon content of live aboveground tree biomass in all reporting subpopulations;

$TC_{lbtb}$ = Sum of carbon content of live belowground tree biomass in all reporting subpopulations;

$TC_s$ = Sum of carbon content of soil carbon in all reporting subpopulations;

$TC_{lantb}$ [option] = Sum of carbon content of live aboveground non-tree biomass in all reporting subpopulations;

$TC_{doff}$ [option] = Sum of carbon content of dead organic matter, forest floor in all reporting subpopulations; and,

$TC_{docwd}$ [mandatory/option, as applicable pursuant to 310 CMR 7.70(10)(e)3.c.i.(iv)] = Sum of carbon content of dead organic matter, coarse woody debris in all reporting subpopulations.

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vii. Each individual carbon pool to be measured must be directly measured using a measurement protocol and sample size that achieves a demonstrated quantified accuracy for the combined carbon pool measurement such that there is 95% confidence that the resulting reported value is within 10% of the true mean. Measurement and sampling practices shall meet the following requirements:

(i) An adequate sample size that meets the requirements of 310 CMR 7.70(10)(e)3.c.vii. shall be determined for each subpopulation.

(ii) The minimum number of required sampling plots for each subpopulation shall not be less than 30, and shall be determined based on the following:

$n = [(s \times 1.960)/(\text{mean} \times re)]^2$

where:

n = required number of sample plots for each reporting subpopulation;

s = standard deviation;

mean = mean reported carbon content for the sample population; and,

re = level of sampling error (0.08) to assure a total maximum error of 10% for the 95% confidence interval, which assumes total error due to measurement error of 0.02.

viii. Direct measurement procedures shall be consistent with current forestry good practice and the guidance contained in U.S. Department of Energy, Technical Guidelines Voluntary Reporting of Greenhouse Gases (1605(b)) Program; Chapter 1, Emissions Inventories; Part 1 Appendix: Forestry; Section 3: Measurement Protocols for Forest Carbon Sequestration (March 2006).

d. Calculating Carbon Sequestered. Carbon sequestration shall be determined using a base year approach, where the amount of carbon sequestered is measured as a net increase in carbon relative to the base year measurement. Carbon sequestration shall be the amount of net additional carbon sequestered during each reporting period, based upon aggregate carbon uptake and carbon emissions for the sum of carbon pools, relative to the baseline carbon content or the carbon content as of the previous reporting period (if above the baseline carbon content), as applicable. $CO_2$ offset allowances shall be issued based on the amount of net additional carbon sequestered within the offset project boundary during each reporting period, as represented in tons of $CO_2$. Sequestered carbon shall be calculated using a stock-change approach as follows:

$NCS_t = I_t - I_{t-1}$

where:

$NCS_t$ = Net carbon sequestered in reporting period t;

$I_t$ = Inventory of carbon stock for all carbon pools in all reporting subpopulations within the offset project boundary in reporting period t; and,

$I_{t-1}$ = Inventory of carbon stock for all carbon pools in all reporting subpopulations within the offset project boundary in the reporting period immediately preceding reporting period t.

i. Except as provided in 310 CMR 7.70(10)(e)3.c.i.(iv), each of the carbon pools that were measured as part of the baseline determination must be re-measured using the same methodology, and to the same or better quantified precision consistent with the requirements of 310 CMR 7.70(10)(e)3.c.vii. and viii., as that used for the baseline determination.

ii. The net change in each carbon pool's carbon stock in each reporting subpopulation is calculated by subtracting the baseline carbon stock (or carbon stock at the previous monitoring, if above the baseline carbon content) from the carbon stock at the time of the current monitoring. Determination of carbon stock shall be in accordance with the formulas and procedures in 310 CMR 7.70(10)(e)3.c.

iii. Net carbon stock change for the offset project is the sum of the net changes in the carbon stock of all applicable pools in all reporting subpopulations within the offset project boundary, less ten percent (10%) to account for potential losses of sequestered carbon; however, this 10% discount shall not be required, provided the project sponsor retains long-term insurance, approved by the Department, that guarantees replacement of any lost sequestered carbon for which $CO_2$ offset allowances were awarded pursuant to 310 CMR 7.70(10)(g)1.a.

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e. Monitoring and Verification Requirements. Total carbon stock within the offset project boundary shall be calculated not less than every five years. Monitoring and verification is subject to the following requirements.

i. Monitoring and verification reports shall include data from direct measurement of carbon content for all plots used to determine baseline and reporting period carbon content.

ii. The project sponsor shall provide a monitoring and verification plan as part of the consistency application. The monitoring and verification plan shall be certified by an independent verifier accredited pursuant to 310 CMR 7.70(10)(f). The monitoring and verification plan shall include the following:

(i) Direct carbon measurement procedures consistent with the requirements at 310 CMR 7.70(10)(e)3.c.viii.;

(ii) The designation of subpopulations pursuant to 310 CMR 7.70(10)(e)3.c.iv.;

(iii) The determination of the minimum number of sampling plots pursuant to 310 CMR 7.70(10)(e)3.c.vii.; and,

(iv) If commercial timber harvest activities have occurred or will occur, an assessment of management practices to ensure that the offset project has been or will be managed in accordance with environmentally sustainable forestry practices consistent with the Forest Stewardship Council (FSC), Sustainable Forestry Institute (SFI), American Tree Farm System (ATFS), or such other similar organizations as may be approved by the Department.

f. Carbon Sequestration Permanence. The offset project shall meet the following requirements to address permanence of sequestered carbon.

i. The project sponsor shall place the land within the offset project boundary under a legally binding permanent conservation easement, approved by the Department, that requires the land to be maintained in a forested state in perpetuity.

ii. The conservation easement shall include a requirement that the carbon density within the offset project boundary be maintained at long-term levels at or above that achieved as of the end of the $CO_2$ offset crediting period pursuant to 310 CMR 7.70(10)(c)5.b.

iii. The conservation easement shall require that the land be managed in accordance with environmentally sustainable forestry practices.

4. Reduction or Avoidance of $CO_2$ Emissions from Natural Gas, Oil, or Propane End-use Combustion Due to End-use Energy Efficiency. To qualify for the award of $CO_2$ offset allowances under 310 CMR 7.70(10), offset projects that reduce $CO_2$ emissions by reducing onsite combustion of natural gas, oil, or propane for end-use in an existing or new commercial or residential building by improving the energy efficiency of fuel usage and/or the energy-efficient delivery of energy services shall meet the requirements of 310 CMR 7.70(10)(e)4. and all other applicable requirements of 310 CMR 7.70(10). Eligible new buildings are limited to new buildings that are designed to replace an existing building on the offset project site, or new buildings designed to be zero net energy buildings.

a. Eligibility.

i. Eligible offset projects shall reduce $CO_2$ emissions through one or more of the following energy conservation measures (ECMs):

(i) Improvements in the energy efficiency of combustion equipment that provide space heating and hot water, including a reduction in fossil fuel consumption through the use of solar and geothermal energy;

(ii) Improvements in the efficiency of heating distribution systems, including proper sizing and commissioning of heating systems;

(iii) Installation or improvement of energy management systems;

(iv) Improvement in the efficiency of hot water distribution systems and reduction in demand for hot water;

(v) Measures that improve the thermal performance of the building envelope and/or reduce building envelope air leakage;

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(vi) Measures that improve the passive solar performance of buildings and utilization of active heating systems using renewable energy; and,

(vii) Fuel switching to a less carbon-intensive fuel for use in combustion systems, including the use of gaseous eligible biomas, provided that conversions to electricity are not eligible.

ii. Performance Standards.

(i) All end-use energy efficiency offset projects. All offset projects under 310 CMR 7.70(10)(e)4. shall meet the applicable performance criteria set forth in 310 CMR 7.70(10)(e)4.a.ii(i).

-1. Installation Best Practice. Any combustion equipment and related air handling equipment (HVAC systems) installed as part of an offset project shall be sized and installed in accordance with the applicable requirements and specifications outlined in 310 CMR 7.70(10)(e)4.a.ii(i)-1.

-a. Commercial HVAC systems shall meet the applicable sizing and installation requirements of ANSI/ASHRAE/IESNA Standard 90.12004: Energy Standard for Buildings Except Low-Rise Residential Buildings and ANSI/ASHRAE Standard 62.12004: Ventilation for Acceptable Indoor Air Quality.

-b. Residential HVAC systems shall meet the applicable sizing specifications of Air Conditioner Contractors of America (ACCA) Manual J: Residential Load Calculation (Eight Edition), and the applicable installation specifications of "Specification of Energy-Efficient Installation and Maintenance Practices for Residential HVAC Systems," Consortium for Energy Efficiency, 2000.

-2. Whole-building Energy Performance. Eligible new buildings or whole-building retrofits that are part of an offset project shall meet the requirements of 310 CMR 7.70(10)(e)4.a.ii(i)-.

-a. Commercial buildings shall exceed the energy performance requirements of ANSI/ASHRAE/IESNA Standard 90.12004: Energy Standard for Buildings Except Low-Rise Residential Buildings by 30%, with the exception of multifamily residential buildings classified as commercial by ANSI/ASHRAE/IESNA Standard 90.12004, which shall exceed these energy performance requirements by 20%.

-b. Residential buildings shall exceed the energy performance requirements of the 2004 International Energy Conservation Code Supplement by 30%.

(ii) Offset Projects Commenced Before January 1, 2009. Energy conservation measures implemented as part of an offset project commenced before January 1, 2009 shall meet the performance and prescriptive criteria set forth in 310 CMR 7.70(10)(e)4.a.ii(ii).

-1. Combustion Equipment. Combustion equipment installed as part of an offset project commenced before January 1, 2009 shall meet the energy efficiency performance standards contained in310 CMR 7.70(10)(e)4.a.ii(ii)-1.

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-a. Commercial Boilers. Commercial boilers shall meet or exceed the energy efficiency criteria in Table 2 below.

| 310 CMR 7.70(10)(e)4.a.ii.(ii)-1.-a. Table 2<br>Minimum Commercial Boiler Energy Efficiency | | | |
|---|---|---|---|
| Technology | Size (Btu/hr) | Rating Method | Minimum Efficiency |
| Gas-fired[a] | 125,000-300,000 | AFUE | ≥ 88.0% |
| | 300,000-12,500,000 | Thermal Efficiency[b] | ≥ 90.0% |
| Oil-fired | >300,000 | Thermal Efficiency | ≥ 88.0% |

[a] Gas-fired boilers shall be installed with controls that allow the boiler to operate in condensing mode and installed with vents designed for positive vent static pressure and vent gas temperature that leads to condensate production in the vent.

[b] Thermal Efficiency is defined as useful energy output (Btu) divided by energy input (Btu), and presented as a percentage. This shall be measured under steady state conditions, at full rated useful thermal output, 140°F supply from, and 120°F return water temperature to, the boiler.

-b. Residential Combustion Equipment. Residential combustion equipment, including furnaces, boilers, and water heaters, shall meet or exceed the energy efficiency criteria in Table 3 below.

| 310 CMR 7.70(10)(e)4.a.ii.(ii)-1.-b. Table 3<br>Minimum Residential Combustion Equipment[a] Energy Efficiency | | |
|---|---|---|
| Technology | Rating Method | Minimum Efficiency |
| Gas-fired furnace | AFUE | ≥ 94% |
| Oil-fired furnace | AFUE | ≥ 92% |
| Gas/oil-fired boiler | AFUE | ≥ 90% |
| Gas/oil-fired water heater | Energy Factor | ≥ .62 |

[a] For furnaces, defined as equipment with a heat input rate of less than 225,000 Btu/hr; for boilers, defined as equipment with a heat input rate of less than 300,000 Btu/hr; for water heaters, defined as equipment subject to 10 CFR 430.

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-2. Other Energy Conservation Measures. All other energy conservation measures implemented as part of an offset project shall meet the prescriptive requirements, as applicable, in Energy Benchmark for High Performance Buildings, Version 1.1, New Buildings Institute, 2005 (herein referred to as EBHPB), or state building energy codes, whichever result in better energy performance. Energy conservation measures without specified performance criteria in the referenced EBHPB shall meet the requirements of Federal Energy Management Program (FEMP) Product Energy Efficiency Recommendations, issued pursuant to Executive Orders 13123 and 13221, or Energy Star criteria issued jointly by the U.S. Environmental Protection Agency and U.S. Department of Energy, whichever result in better energy performance.

(iii) Maximum Market Penetration Rate for Offset Projects Commenced on or after January 1, 2009. For offset projects initiated on or after January 1, 2009, the project sponsor shall demonstrate, to the satisfaction of the Department, that the energy conservation measures implemented as part of the offset project have a market penetration rate of less than 5%.

b. Offset Project Description. The offset project sponsor shall provide a detailed narrative of the offset project actions to be taken, including documentation that the offset project meets the eligibility requirements of 310 CMR 7.70(10)(e)4.a. The offset project narrative shall include the following information.

i. Location and specifications of the building(s) where the offset project actions will occur;

ii. Owner and operator of the building(s);

iii. The parties implementing the offset project, including lead contractor(s), subcontractors, and consulting firms;

iv. Specifications of equipment and materials to be installed as part of the offset project; and,

v. Building plans and offset project technical schematics, as applicable.

c. Emissions Baseline Determination. The emissions baseline shall be determined in accordance with the requirements of 310 CMR 7.70(10)(e)4.c., based on energy usage (MMBtu) by fuel type for each energy conservation measure, derived using historic fuel use data from the most recent calendar year for which data is available, and multiplied by an emissions factor and oxidation factor for each respective fuel in Table 4 below.

310 CMR 7.70(10)(e)4.c. Table 4
Emissions and Oxidation Factors

| Fuel | Emissions Factor (lbs. $CO_2$/MMBtu) | Oxidation Factor |
|---|---|---|
| Natural Gas | 116.98 | 0.995 |
| Propane | 139.04 | 0.995 |
| Distillate Fuel Oil | 161.27 | 0.99 |
| Kerosene | 159.41 | 0.99 |

i. Isolation of Applicable Energy Conservation Measure Baseline. The baseline energy usage of the application to be targeted by the energy conservation measure shall be isolated in a manner consistent with the guidance at 310 CMR 7.70(10)(e)4.e.

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ii. Annual baseline energy usage shall be determined as follows:

Energy Usage (MMBtu) = $BEU_{AECM}$ x A

where:

$BEU_{AECM}$ = Annual pre-installation baseline energy use by fuel type (MMBtu) attributable to the application(s) to be targeted by the energy conservation measure(s). If applicable building codes or equipment standards require that equipment or materials installed as part of the offset project meet certain minimum energy performance requirements, baseline energy usage for the application shall assume that equipment or materials are installed that meet such minimum requirements. For offset projects that replace existing combustion equipment, the assumed minimum energy performance required by applicable building codes or equipment standards shall be that which applies to new equipment that uses the same fuel type as the equipment being replaced. Baseline energy usage shall be determined in accordance with the applicable requirements at 310 CMR 7.70(10)(e)4.e.

A = Adjustments to account for differing conditions during the two time periods (pre-installation and post-installation), such as weather, building occupancy, and changes in building use or function. Adjustments shall be determined in accordance with the applicable requirements at 310 CMR 7.70(10)(e)4.e.

iii. Annual baseline emissions shall be determined as follows:

$$\text{Emissions (lbs. } CO_2) = \sum_{i=1}^{n} BEU_i \times EF_i \times OF_i$$

where:

$BEU_i$ = Annual baseline energy usage for fuel type i (MMBtu) demonstrated pursuant to the requirements at 310 CMR 7.70(10)(e)4.e.i. through iv. of 310 CMR 7.70(10)(e)4.;

$EF_i$ = Emissions factor (lbs. $CO_2$/MMBtu) for fuel type i listed at 310 CMR 7.70(10)(e)4.c., Table 4.; and,

$OF_i$ = Oxidation factor for fuel type i listed at 310 CMR 7.70(10)(e)4.c., Table 3.

d. Calculating Emissions Reductions. Emissions reductions shall be determined based upon annual energy savings by fuel type (MMBtu) for each energy conservation measure, multiplied by the emissions factor and oxidation factor for the respective fuel type at 310 CMR 7.70(10)(e)4.c., Table 4.

i. Annual energy savings shall be determined as follows:

Energy Savings (MMBtu) = ($BEU_{AECM}$ x A) – ($PIEU_{ECM}$ x A)

where:

$BEU_{AECM}$ = Annual pre-installation baseline energy use by fuel type (MMBtu) calculated pursuant to 310 CMR 7.70(10)(e)4.e.i. through iv.;

$PIEU_{ECM}$ = Annual post-installation energy use by fuel type (MMBtu) attributable to the energy conservation measure. Post-installation energy usage shall be determined in accordance with the applicable requirements at 310 CMR 7.70(10)(e)4.e.i. through iv.; and,

A = Adjustments to account for any differing conditions during the two time periods (pre-installation and post-installation), such as weather, building occupancy, and changes in building use or function. Adjustments shall be determined in accordance with the applicable requirements at 310 CMR 7.70(10)(e)4.e.

ii. Annual emissions reductions shall be determined as follows:

$$\text{Emissions Reduction (lbs. } CO_2) = \sum_{i=1}^{n} ES_i \times EF_i \times OF_i$$

where:

$ES_i$ = Energy savings for fuel type i (MMBtu) demonstrated pursuant to the requirements at 310 CMR 7.70(10)(e)4.e.;

$EF_i$ = Emissions factor (lbs. $CO_2$/MMBtu) for fuel type i listed at 310 CMR 7.70(10)(e)4.c., Table 4.; and,

$OF_i$ = Oxidation factor for fuel type i listed at 310 CMR 7.70(10)(e)4.c., Table 4.

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e. Monitoring and Verification Requirements. As part of the consistency application, the project sponsor shall provide a monitoring and verification plan certified by an independent verifier accredited pursuant to 310 CMR 7.70(10)(f). Annual monitoring and verification reports shall be certified by an independent verifier accredited pursuant to 310 CMR 7.70(10)(f). Independent verifiers must conduct a site audit when reviewing the first monitoring and verification report submitted by the project sponsor, except for offset projects that save less than 1,500 MMBtu per year. For offset projects that save less than 1,500 MMBtu per year, the project sponsor must provide the independent verifier with equipment specifications and copies of equipment invoices and other relevant offset project-related invoices. All offset project documentation, including the consistency application and monitoring and verification reports, shall be signed by a Professional Engineer, identified by license number. Monitoring and verification shall also meet the following requirements.

i. General Energy Measurement and Verification Requirements. Monitoring and verification of energy usage shall be demonstrated through a documented process consistent with the following protocols and procedures, as applicable.

(i) For existing commercial buildings, determination of baseline energy usage shall be consistent with the International Performance Measurement & Verification Protocol, Volume I: Concepts and Options for Determining Energy and Water Savings (IPMVP), "Option B. Retrofit Isolation" and "Option D. Calibrated Simulation." If a building project involves only energy conservation measures implemented as part of a $CO_2$ emissions offset project, a process consistent with IPMVP "Option C. Whole Facility" may be used, as applicable. Application of the IPMVP general guidance shall be consistent with the applicable detailed specifications in ASHRAE Guideline 142002, Measurement of Energy and Demand Savings.

(ii) For new commercial buildings, determination of baseline energy usage shall be consistent with the International Performance Measurement & Verification Protocol, Volume III: Concepts and Options for Determining Energy Savings in New Construction (IPMVP), "Option D. Calibrated Simulation." Application of the IPMVP general guidance shall be consistent with the applicable detailed specifications in ASHRAE Guideline 142002, Measurement of Energy and Demand Savings.

(iii) For existing and new residential buildings, determination of baseline energy usage shall be consistent with the requirements of the RESNET National Home Energy Rating Technical Guidelines, 2006 (Chapter 3 and Appendix A of 2006 Mortgage Industry National Home Energy Rating System Standards).

ii. Isolation of Applicable Energy Conservation Measure. In calculating both baseline energy usage and energy savings, the applicant shall isolate the impact of each eligible energy conservation measure (ECM), either through direct metering or energy simulation modeling. For offset projects with multiple ECMs, and where individual ECMs can affect the performance of others, the sum of energy savings due to individual ECMs shall be adjusted to account for the interaction of ECMs. For commercial buildings, this process shall be consistent with the requirements of ASHRAE Guideline 142002, Measurement of Energy and Demand Savings, and ANSI/ASHRAE/IESNA Standard 90.12004: Energy Standard for Buildings Except Low-Rise Residential Buildings. For residential buildings, this process shall be consistent with the requirements of RESNET National Home Energy Rating Technical Guidelines, 2006 (Chapter 3 and Appendix A of 2006 Mortgage Industry National Home Energy Rating System Standards). Reductions in energy usage due to the energy conservation measure shall be based upon actual energy usage data. Energy simulation modeling shall only be used to determine the relative percentage contribution to total fuel usage (for each respective fuel type) of the application targeted by the energy conservation measure.

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iii. Calculation of Energy Savings. Annual energy savings are to be determined based on the following:

Energy Savings (MMBtu) = $(BEU_{AECM} \times A) - (PIEU_{ECM} \times A)$

where:

$BEU_{AECM}$ = Annual pre-installation baseline energy use by fuel type (MMBtu) attributable to the application(s) to be targeted by the energy conservation measure(s), based upon annual fuel usage data for the most recent calendar year for which data is available. For new buildings, baseline energy use for a reference building equivalent in basic configuration, orientation, and location to the building in which the eligible energy conservation measure(s) is implemented shall be determined according to ASHRAE Guideline 142002, Measurement of Energy and Demand Savings and ANSI/ASHRAE/IESNA Standard 90.12004, Section 11 and Appendix G. Where energy simulation modeling is used to evaluate an existing building, modeling shall be conducted in accordance with ASHRAE Guideline 142002, Measurement of Energy and Demand Savings, and ANSI/ASHRAE/IESNA Standard 90.12004, Section 11 and Appendix G. For existing and new residential buildings, energy simulation modeling shall be conducted in accordance with the requirements of RESNET National Home Energy Rating Technical Guidelines, 2006 (Chapter 3 and Appendix A of 2006 Mortgage Industry National Home Energy Rating System Standards).

$PIEU_{ECM}$ = Annual post-installation energy use by fuel type (MMBtu) attributable to the energy conservation measure, to be verified based on annual energy usage after installation of the energy conservation measure(s), consistent with the requirements of ASHRAE Guideline 142002,

Measurement of Energy and Demand Savings. Where energy simulation modeling is used to evaluate a new or existing building, modeling shall be conducted in accordance with ASHRAE Guideline 142002, Measurement of Energy and Demand Savings, and ANSI/ASHRAE/IESNA Standard 90.1 2004, Section 11 and Appendix G. For existing and new residential buildings, energy simulation modeling shall be consistent with the requirements of RESNET National Home Energy Rating Technical Guidelines, 2006 (Chapter 3 and Appendix A of 2006 Mortgage Industry National Home Energy Rating System Standards).

A = Adjustments to account for any differing conditions during the two time periods (pre-installation and post-installation), such as weather (weather normalized energy usage based on heating and cooling degree days), building occupancy, and changes in building use or function. For commercial buildings, adjustments shall be consistent with the specifications of ASHRAE Guideline 142002, Measurement of Energy and Demand Savings, and ANSI/ASHRAE/IESNA Standard 90.12004, Section 11 and Appendix G. For residential buildings, adjustments shall be consistent with the specifications of RESNET National Home Energy Rating Technical Guidelines, 2006 (Chapter 3 and Appendix A of 2006 Mortgage Industry National Home Energy Rating System Standards).

iv. Provision for Sampling of Multiple Like Offset Projects in Residential Buildings. Offset projects that implement similar measures in multiple residential buildings may employ representative sampling of buildings to determine aggregate baseline energy usage and energy savings. Sampling protocols shall employ sound statistical methods such that there is 95% confidence that the reported value is within 10% of the true mean. Any sampling plan shall be certified by an independent verifier, accredited pursuant to 310 CMR 7.70(10)(f).

5. Avoided Methane Emissions from Agricultural Manure Management Operations. To qualify for the award of $CO_2$ offset allowances under 310 CMR 7.70(10), offset projects that capture and destroy methane from animal manure and organic food waste using anaerobic digesters shall meet the requirements of 310 CMR 7.70(10)(e)5. and all other applicable requirements of 310 CMR 7.70(10).

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a. Eligibility.

i. Eligible offset projects shall consist of the destruction of that portion of methane generated by an anaerobic digester that would have been generated in the absence of the offset project through the uncontrolled anaerobic storage of manure or organic food waste.

ii. Eligible offset projects shall employ only manure-based anaerobic digester systems using livestock manure as the majority of digester feedstock, defined as more than 50% of the mass input into the digester on an annual basis. Organic food waste used by an anaerobic digester shall only be that which would have been stored in anaerobic conditions in the absence of the offset project.

iii. The provisions of 310 CMR 7.70(10)(c)4.b. and c. shall not apply to agricultural manure management offset projects provided either of the following requirements are met.

(i) The offset project is located in a state that has a market penetration rate for anaerobic digester projects of 5% or less. The market penetration determination shall utilize the most recent market data available at the time of submission of the consistency application pursuant to 310 CMR 7.70(10)(d) and shall be determined as follows:

$MP\ (\%) = MG_{AD} / MG_{STATE}$

where:

$MG_{AD}$ = Average annual manure generation for the number of dairy cows and swine serving all anaerobic digester projects in the applicable state at the time of submission of a consistency application pursuant to 310 CMR 7.70(10)(d); and

$MG_{STATE}$ = average annual manure production of all dairy cows and swine in the state at the time of submission of a consistency application pursuant to 310 CMR 7.70(10)(d).

(ii) The offset project is located at a farm with 4,000 or less head of dairy cows, or a farm with equivalent animal units, assuming an average live weight for dairy cows (lbs./cow) of 1,400 lbs., or, if the project is a regional-type digester, total annual manure input to the digester is designed to be less than the average annual manure produced by a farm with 4,000 or less head of dairy cows, or a farm with equivalent animal units, assuming an average live weight for dairy cows (lbs./cow) of 1,400 lbs.

b. Offset Project Description. The offset project sponsor shall provide a detailed narrative of the offset project actions to be taken, including documentation that the offset project meets the eligibility requirements of 310 CMR 7.70(10)(e)5.a. The offset project narrative shall include the following information.

i. Owner and operator of the offset project;

ii. Location and specifications of the facility where the offset project will occur;

iii. Owner and operator of the facility where the offset project will occur;

iv. Specifications of the equipment to be installed and a technical schematic of the offset project; and

v. Location and specifications of the facilities from which anaerobic digester influent will be received, if different from the facility where the offset project will occur.

c. Emissions Baseline Determination. The emissions baseline shall represent the potential emissions of the $CH_4$ that would have been produced in a baseline scenario under uncontrolled anaerobic storage conditions and released directly to the atmosphere in the absence of the offset project.

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i. Baseline $CH_4$ emissions shall be calculated as follows:
$CO_2e$ (tons) = ($V_m$ x M)/2000 x GWP
where:
$CO_2e$ = Potential $CO_2e$ emissions due to calculated $CH_4$ production under site-specific anaerobic storage and weather conditions;
$V_m$ = Volume of $CH_4$ produced each month from degradation of volatile solids in a baseline uncontrolled anaerobic storage scenario under site-specific storage and weather conditions for the facility at which the manure or organic food waste is generated ($ft^3$);
M = Mass of $CH_4$ per cubic foot (0.04246 lb/$ft^3$ default value at one atmosphere and 20˚C); and,
GWP = Global warming potential of $CH_4$ (23).
ii. The estimated amount of volatile solids degraded each month under the uncontrolled anaerobic storage baseline scenario (kg) shall be calculated as follows:
$VS_{deg} = VS_{avail}$ x f
where:
VS = volatile solids as determined from the equation:
$VS = M_m$ x $TS_{\%}$ x $VS_{\%}$
where:
$M_m$ = mass of manure or organic food waste produced per month (kg);
$TS_{\%}$ = concentration (percent) of total solids in manure or organic food waste as determined through EPA 160.3 testing method (U.S.EPA Method Number 160.3, Methods for the Chemical Analysis of Water and Wastes (MCAWW) (EPA/600/479/020)); and,
$VS_{\%}$ = concentration (percent) of volatile solids in total solids as determined through EPA 160.4 testing method (U.S.EPA Method Number 160.4, Methods for the Chemical Analysis of Water and Wastes (MCAWW) (EPA/600/479/020)).
$VS_{avail}$ = volatile solids available for degradation in manure or organic food waste storage each month as determined from the equation:
$VS_{avail} = VS_p + ½\ VS_{in} – VS_{out}$
where:
$VS_p$ = volatile solids present in manure or organic food waste storage at beginning of month (left over from previous month) (kg);
$VS_{in}$ = volatile solids added to manure or organic food waste storage during the course of the month (kg). The factor of ½ is multiplied by this number to represent the average mass of volatile solids available for degradation for the entire duration of the month; and,
$VS_{out}$ = volatile solids removed from the manure or organic food waste storage for land application or export (assumed value based on standard farm practice).
f = van't Hoff-Arrhenius factor for the specific month as determined using the equation below. Using a base temperature of 30 º C, the equation is as follows:
$f = \exp\{[E(T_2 – T_1)]/[(GC \times T_1 \times T_2)]\}$
where:
f = conversion efficiency of VS to $CH_4$ per month;
E = activation energy constant (15,175 cal/mol);
$T_2$ = average monthly ambient temperature for facility where manure or organic food waste is generated (converted from º Celsius to Kelvin) as determined from the nearest National Weather Service certified weather station (if $T_2 > 5$ º C; if $T_2 < 5$ º C, then f = 0.104);
$T_1$ = 303.15 (30 º C converted to K); and,
GC = ideal gas constant (1.987 cal/K mol).
iii. The volume of $CH_4$ produced ($ft^3$) from degradation of volatile solids shall be calculated as follows:
$V_m = (VS_{deg} \times B_o) \times 35.3147\ ft^3/m^3$
where:
$V_m$ = volume of $CH_4$ ($ft^3$);
$VS_{deg}$ = volatile solids degraded (kg); and,

7.70: continued

$B_o$ = manure or organic food waste type-specific maximum methane generation constant ($m^3$ $CH_4$/kg VS degraded). For dairy cow manure, Bo = 0.24 $m^3$ $CH_4$/kg VS degraded. The methane generation constant for other types of manure shall be those cited at U.S. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2004, Annex 3, Table A-162 (U.S. EPA, April 2007), unless the project sponsor proposes an alternate methane generation constant. If the project sponsor proposes to use a methane generation constant other than the ones found in the above-cited reference, the project sponsor must provide justification and documentation to the Department.

d. Calculating Emissions Reductions. Emissions reductions shall be determined based on the potential emissions (in tons of $CO_2e$) of the $CH_4$ that would have been produced in the absence of the offset project under a baseline scenario that represents uncontrolled anaerobic storage conditions, as calculated pursuant to 310 CMR 7.70(10)(e)5.c.i. through iii., and released directly to the atmosphere. Emissions reductions may not exceed the potential emissions of the anaerobic digester, as represented by the annual volume of $CH_4$ produced by the anaerobic digester, as monitored pursuant to 310 CMR 7.70(10)(e)5.e. If the project is a regional-type digester, $CO_2$ emissions due to transportation of manure and organic food waste from the site where the manure and organic food waste was generated to the anaerobic digester shall be subtracted from the emissions reduction calculated pursuant to 310 CMR 7.70(10)(e)5.c.i. through iii. Transport $CO_2$ emissions shall be determined through one of the following methods.

i. Documentation of transport fuel use for all shipments of manure and organic food waste from offsite to the anaerobic digester during each reporting year and a log of transport miles for each shipment. $CO_2$ emissions shall be determined through the application of an emissions factor for the fuel type used. If this option is chosen, the following emissions factors shall be applied as appropriate.

(i) Diesel fuel: 22.912 lbs. $CO_2$/gallon.

(ii) Gasoline: 19.878 lbs. $CO_2$/gallon.

(iii) Other fuel: submitted emissions factor approved by the Department.

ii. Documentation of total tons of manure and organic food waste transported from offsite for input into the anaerobic digester during each reporting year, as monitored pursuant to 310 CMR 7.70(10)(e)5.e.i., and a log of transport miles and fuel type used for each shipment. $CO_2$ emissions shall be determined through the application of a ton-mile transport emission factor for the fuel type used. If this option is chosen, the following emissions factors shall be applied as appropriate for each ton of manure delivered, and multiplied by the number of miles transported.

(i) Diesel fuel: 0.131 lbs. $CO_2$ per ton-mile.

(ii) Gasoline: 0.133 lbs. $CO_2$ per ton-mile.

(iii) Other fuel: submitted emissions factor approved by the Department.

e. Monitoring and Verification Requirements. Offset projects shall employ a system that provides metering of biogas volumetric flow rate and determination of $CH_4$ concentration. Annual monitoring and verification reports shall include monthly biogas volumetric flow rate and $CH_4$ concentration determination. Monitoring and verification shall also meet the following requirements.

i. If the offset project is a regional-type digester, manure and organic food waste from each distinct source supplying to the anaerobic digester shall be sampled monthly to determine the amount of volatile solids present. Any emissions reduction shall be calculated according to mass of manure and organic food waste (kg) being digested and percentage of volatile solids present before digestion, consistent with the requirements at 310 CMR 7.70(10)(e)5.c. and e.iii., and apportioned accordingly among sources. The project sponsor shall provide supporting material and receipts tracking the monthly receipt of manure and organic food waste (kg) used to supply the anaerobic digester from each supplier.

7.70: continued

ii. If the offset project includes the digestion of organic food waste eligible pursuant to 310 CMR 7.70(10)(e)5.a.ii., organic food waste shall be sampled monthly to determine the amount of volatile solids present before digestion, consistent with the requirements at 310 CMR 7.70(10)(e)5.c. and e.iii., and apportioned accordingly.

iii. The project sponsor shall submit a monitoring and verification plan as part of the consistency application that includes a quality assurance and quality control program associated with equipment used to determine biogas volumetric flow rate and $CH_4$ composition. The monitoring and verification plan shall be specified in accordance with the applicable monitoring requirements listed in Table 5, below. The monitoring and verification plan shall also include provisions for ensuring that measuring and monitoring equipment is maintained, operated, and calibrated based on manufacturer's recommendations, as well as provisions for the retention of maintenance records for audit purposes. The monitoring and verification plan shall be certified by an independent verifier accredited pursuant to 310 CMR 7.70(10)(f).

310 CMR 7.70(10)(e)5.e.iii. Table 5
Input Monitoring Requirements

| Input Parameter | Measurement Unit | Frequency of Sampling | Sampling Method(s) |
|---|---|---|---|
| Influent flow (mass) into the digester | Kilograms (kg) per month (wet weight) | Monthly total into the digester | a) Recorded weight<br><br>b) Digester influent pump flow<br><br>c) Livestock population and application of American Society of Agricultural and Biological Engineers (ASABE) standard (ASAE D384.2, March 2005) |
| Influent total solids concentration (TS) | Percent (of sample) | Monthly, depending upon recorded variations | U.S. EPA Method Number 160.3, Methods for the Chemical Analysis of Water and Wastes (MCAWW) (EPA/600/4-79/020) |
| Influent volatile solids (VS) concentration | Percent (of TS) | Monthly, depending upon recorded variations | USEPA Method Number 160.4, Methods for the Chemical Analysis of Water and Wastes (MCAWW) (EPA/600/4-79/020) |
| Average monthly ambient temperature | Temperature $^oC$ | Monthly (based on farm averages) | Closest National Weather Service-certified weather station |

iv. The project sponsor shall verify biogas $CH_4$ composition quarterly through gas sampling and third party laboratory analysis using applicable U.S. EPA test methods.

(f) Accreditation of Independent Verifiers.

1. Standards for Accreditation. Independent verifiers may be accredited by the Department to provide verification services as required of project sponsors under 310 CMR 7.70(10), provided that independent verifiers meet all of the requirements of 310 CMR 7.70(10)(f).

7.70: continued

a. Verifier Minimum Requirements. Each accredited independent verifier shall demonstrate knowledge of the following topics:

i. utilizing engineering principles;

ii. quantifying greenhouse gas emissions;

iii. developing and evaluating air emissions inventories:

iv. auditing and accounting principles;

v. knowledge of information management systems;

vi. knowledge of the requirements of 310 CMR 7.70(10) and other applicable requirements of 310 CMR 7.70; and

vii. such other qualifications as may be required by the Department to provide competent verification services as required for individual offset categories specified at 310 CMR 7.70(10)(e).

b. Organizational Qualifications. Accredited independent verifiers shall demonstrate that they meet the following requirements:

i. Verifiers shall have no direct or indirect financial relationship, beyond a contract for provision of verification services, with any offset project developer or project sponsor;

ii. Verifiers shall employ staff with knowledge, experience, and, where appropriate, professional licenses relevant to the specific category(ies) of offset projects at 310 CMR 7.70(10)(e) that they seek to verify;

iii. Verifiers shall hold a minimum of one million U.S. dollars of professional liability insurance. If the insurance is in the name of a related entity, the verifier shall disclose the financial relationship between the verifier and the related entity, and provide documentation supporting the description of the relationship; and,

iv. Verifiers shall demonstrate that they have implemented an adequate management protocol to identify potential conflicts of interest with regard to an offset project, offset project developer, or project sponsor, or any other party with a direct or indirect financial interest in an offset project that is seeking or has been granted approval of a consistency application pursuant to 310 CMR 7.70(10)(d)5., and remedy any such conflicts of interest prior to providing verification services.

c. Prequalification of Verifiers. The Department may require prospective verifiers to successfully complete a training course, workshop, or test developed by the Department or its agent, prior to submitting an application for accreditation.

2. Application for Accreditation. An application for accreditation shall not contain any proprietary information, and shall include, on a form prescribed by the Department, the following:

a. The applicant's name, address, email address, telephone number, and facsimile transmission number;

b. Documentation that the applicant has at least two years of experience in each of the knowledge areas specified at 310 CMR 7.70(10)(f)1.a.i. through v., and as may be required pursuant to 310 CMR 7.70(10)(f)1.a.vii.;

c. Documentation that the applicant has successfully completed the requirements at 310 CMR 7.70(10)(f)1.c., as applicable;

d. A sample of at least one work product that provides supporting evidence that the applicant meets the requirements at 310 CMR 7.70(10)(f)1.a. and b. The work product shall have been produced, in whole or part, by the applicant and shall consist of a final report or other material provided to a client under contract in previous work. For a work product that was jointly produced by the applicant and another entity, the role of the applicant in the work product shall be clearly explained;

e. Documentation that the applicant holds professional liability insurance as required pursuant to 310 CMR 7.70(10)(f)1.b.iii.; and

f. Documentation that the applicant has implemented an adequate management protocol to address and remedy any conflict of interest issues that may arise, as required pursuant to 310 CMR 7.70(10)(f)1.b.iv.

3. Department Action on Applications for Accreditation. The Department shall approve or deny a complete application for accreditation within 90 days after submission. Upon approval of an application for accreditation, the independent verifier shall be accredited for a period of three years from the date of application approval.

7.70: continued

4. Reciprocity. Independent verifiers accredited in other participating states may be deemed to be accredited in Massachusetts, at the discretion of the Department.

5. Conduct of Accredited Verifiers.

a. Prior to engaging in verification services for an offset project sponsor, the accredited verifier shall disclose all relevant information to the Department to allow for an evaluation of potential conflict of interest with respect to an offset project, offset project developer, or project sponsor. The accredited verifier shall disclose information concerning its ownership, past and current clients, related entities, as well as any other facts or circumstances that have the potential to create a conflict of interest.

b. Accredited verifiers shall have an ongoing obligation to disclose to the Department any facts or circumstances that may give rise to a conflict of interest with respect to an offset project, offset project developer, or project sponsor.

c. The Department may reject a verification report and certification statement from an accredited verifier, submitted as part of a consistency application required pursuant to 310 CMR 7.70(10)(d)2. or submitted as part of a monitoring and verification report submitted pursuant to 310 CMR 7.70(10)(g)2., if the Department determines that the accredited verifier has a conflict of interest related to the offset project, offset project developer, or project sponsor.

d. The Department may revoke the accreditation of a verifier at any time given cause, for the following:

i. Failure to fully disclose any issues that may lead to a conflict of interest situation with respect to an offset project, offset project developer, or project sponsor;

ii. The verifier is no longer qualified due to changes in staffing or other criteria;

iii. Negligence or neglect of responsibilities pursuant to the requirements of 310 CMR 7.70(10); and,

iv. Intentional misrepresentation of data or other intentional fraud.

(g) Award and Recordation of $CO_2$ Offset Allowances.

1. Quantities of $CO_2$ Offset Allowances Awarded and Subsequently Recorded.

a. Award of $CO_2$ Offset Allowances.

i. $CO_2$ Emissions Offset Projects. Following the issuance of a consistency determination under 310 CMR 7.70(10)(d)5.b. and the approval of a monitoring and verification report under the provisions of 310 CMR 7.70(10)(g)5., the Department shall award one $CO_2$ offset allowance for each ton of demonstrated reduction in $CO_2$ or $CO_2$ equivalent emissions or sequestration of $CO_2$.

ii. $CO_2$ Emissions Credit Retirement. If a project sponsor received a consistency determination pursuant to 310 CMR 7.70(10)(d)5.b., one $CO_2$ offset allowance shall be awarded for each ton of reduction of $CO_2$ or $CO_2$ equivalent or sequestration of $CO_2$, represented by the relevant credits or allowances retired. If a credit or allowance is represented in metric tons, 1.1023 tons shall be awarded for every metric ton, provided that total $CO_2$ offset allowances awarded shall be rounded down to the nearest whole ton.

b. Recordation of $CO_2$ Offset Allowances. After $CO_2$ offset allowances are awarded under 310 CMR 7.70(10)(g)1.a., the Department shall record such $CO_2$ offset allowances in the project sponsor's general account.

2. Deadlines for Submittal of Monitoring and Verification Reports.

a. For $CO_2$ emissions offset projects undertaken prior to January 1, 2009, the project sponsor must submit the monitoring and verification report covering the pre-2009 period on or before June 30, 2009.

b. For $CO_2$ emissions offset projects undertaken on or after January 1, 2009, the monitoring and verification report must be submitted within six months following the completion of the last calendar year during which the offset project achieved $CO_2$ equivalent reductions or sequestration of $CO_2$ for which the project sponsor seeks the award of $CO_2$ offset allowances.

7.70: continued

3. Contents of Monitoring and Verification Reports. For an offset project, the monitoring and verification report shall include the following information.

a. The project's sponsor's name, address, email address, telephone number, facsimile transmission number, and account number.

b. The $CO_2$ emissions reduction or $CO_2$ sequestration determination as required by the relevant provisions of 310 CMR 7.70(10)(e), including a demonstration that the project sponsor complied with the required quantification, monitoring, and verification procedures under 310 CMR 7.70(10)(e), as well as those outlined in the consistency application approved pursuant to 310 CMR 7.70(10)(d)5.b.

c. A signed statement that reads "The undersigned project sponsor hereby confirms and attests that the offset project upon which this monitoring and verification report is based is in full compliance with all of the requirements of 310 CMR 7.70(10). The project sponsor holds the legal rights to the offset project, or has been granted the right to act on behalf of a party that holds the legal rights to the offset project. I understand that eligibility for the award of $CO_2$ offset allowances under 310 CMR 7.70(10) is contingent on meeting the requirements of 310 CMR 7.70(10). I authorize the Department or its agent to audit this offset project for purposes of verifying that the offset project, including the monitoring and verification plan, has been implemented as described in the consistency application that was the subject of a consistency determination by the Department. I understand that this right to audit shall include the right to enter the physical location of the offset project. I submit to the legal jurisdiction of Massachusetts."

d. A list of all offset projects under the sponsor's ownership or control (or under the ownership or control of any entity which controls, is controlled by, or has common control with the sponsor) for which a consistency application or a monitoring and verification application has been submitted under 310 CMR 7.70(10), or similar provisions in the rules of other participating states. If any consistency application or monitoring and verification application has been denied or revoked by the Department or any participating state, then such status shall be documented and explained. If any $CO_2$ offset allowance has been revoked or retired by the Department or any participating state as a result of a determination that a project sponsor has not complied with the requirements of 310 CMR 7.70(10), or similar provisions in the rules of other participating states, then such action shall be documented and explained. The Department reserves the right to reject a consistency application or a monitoring and verification application on the basis of previous fraud, deceit, deception, misrepresentation, submittal of false or misleading information to the Department or other participating states regarding $CO_2$ emissions offset projects, or a finding under 310 CMR 7.70(10)(c)8. of failure to comply with the requirements of 310 CMR 7.70(10), or similar provisions in the rules of other participating states.

e. A verification report and certification statement signed by an independent verifier accredited pursuant to 310 CMR 7.70(10)(f) that documents that the independent verifier has reviewed the monitoring and verification report and evaluated the following in relation to the applicable requirements at 310 CMR 7.70(10)(e), and any applicable guidance issued by the Department:

i. The adequacy and validity of information supplied by the project sponsor to determine $CO_2$ emissions reductions or $CO_2$ sequestration pursuant to the applicable requirements at 310 CMR 7.70(10)(e);

ii. The adequacy and consistency of methods used to quantify, monitor, and verify $CO_2$ emissions reductions and $CO_2$ sequestration in accordance with the applicable requirements at 310 CMR 7.70(10)(e) and as outlined in the consistency application approved pursuant to 310 CMR 7.70(10)(d)5.b.; and,

iii. Such other evaluations and verification reviews as may be required by the Department. The adequacy and validity of information supplied by the project sponsor to demonstrate that the offset project meets the applicable eligibility requirements of 310 CMR 7.70(10)(e).

f. Disclosure of any voluntary or mandatory programs, other than the $CO_2$ Budget Trading Program, to which greenhouse gas emissions data related to the offset project has been, or will be reported.

7.70: continued

g. For offset projects located in a state or United States jurisdiction that is not a participating state, a demonstration that the project sponsor has complied with all requirements of the cooperating regulatory agency in the state or United States jurisdiction where the offset project is located.

h. The offset project sponsor shall make the following certification: "I certify that I have personally examined the foregoing information, and am familiar with the information contained in this application and any attachments thereto and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information contained in this application, is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

i. Monitoring and verification reports shall be submitted in a format approved by the Department.

4. Place for Filing Monitoring and Verification Reports. The monitoring and verification report must be filed with the same regulatory agency that issued the consistency determination for the offset project pursuant to 310 CMR 7.70(10)(d)5.b.

5. Department Action on Monitoring and Verification Reports. The Department shall approve or deny a complete monitoring and verification report, in a format approved by the Department, filed with the Department pursuant to 310 CMR 7.70(10)(g)4., within 90 days following receipt of a complete report. A complete monitoring and verification report is one that is in an approved form and is determined by the Department to be complete for the purpose of commencing review of the monitoring and verification report. In no event shall a completeness determination prevent the Department from requesting additional information in order to enable the Department to approve or deny a monitoring and verification report, submitted in a format approved by the Department, and filed under 310 CMR 7.70(10)(g).

## 7.71: Reporting of Greenhouse Gas Emissions

(1) Purpose. The purpose of 310 CMR 7.71 is to implement the reporting and verification requirement for statewide greenhouse gas emissions and to monitor and ensure compliance with the reporting provisions of M.G.L. c. 21N, the Climate Protection and Green Economy Act, St. 2008, c.298, § 6.

(2) Definitions. The definitions in 310 CMR 7.00: *Definitions* apply to 310 CMR 7.71. The following additional terms have the following meanings when they appear in 310 CMR 7.71. Where a term defined in 310 CMR 7.00: *Definitions* also appears in 310 CMR 7.71, the definition in 310 CMR 7.71 is applicable for the purpose of 310 CMR 7.71.

Approved Verification Body means a firm accredited by the American National Standards Institute to conduct greenhouse gas (GHG) inventory verification services for members of The Climate Registry.

Biogenic Greenhouse Gas Emissions means emissions of carbon dioxide that result from the combustion of biogenic (plant or animal) material, excluding fossil fuels.

Carbon Dioxide Equivalent means the amount of carbon dioxide by weight that would produce the same amount of global warming impact as a given weight of another greenhouse gas, based on the best available science, including information from the Intergovernmental Panel on Climate Change. The global warming potentials included in the General Reporting Protocol shall be used to quantify and report greenhouse gas emissions in carbon dioxide equivalents pursuant to 310 CMR 7.71.

$CO_2$ Budget Trading Program means a multi-state $CO_2$ air pollution control and emissions reduction program established by regulation in several states, including Massachusetts pursuant to 310 CMR 7.70, for the purpose of reducing emissions of $CO_2$ from electric generating units.

Direct Emissions means emissions from motor vehicles and emissions from stationary emission sources including, but not limited to, emissions from factory stacks, manufacturing processes and vents, fugitive emissions, and other process emissions.

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Direct Stack Emissions means direct emissions, excluding emissions from motor vehicles.

Emission Point means any place at or from which any greenhouse gas is emitted to the ambient air.

Emission Source means any stationary emission source, or any motor vehicle, from which any greenhouse gas is emitted to the ambient air.

Emitting Electricity Generators means electricity generators that are powered by any fossil or biogenic fuels.

Emitting Megawatt Hours means megawatt hours that are generated by emitting electricity generators.

Entity means a person that owns or operates, in whole or in part, a source of greenhouse gas emissions from a generator of electricity or a commercial or industrial site including, but not limited to, a transportation fleet.

Facility means a building, structure or installation located on contiguous or adjacent properties of an entity.

General Reporting Protocol means version 1.1 of The Climate Registry's General Reporting Protocol, dated May 2008, and the associated list of clarifications and corrections, dated April 27, 2009.

General Verification Protocol means version 1.0 of The Climate Registry's General Verification Protocol, dated May 2008, and the associated list of updates and clarifications, dated March 2, 2009.

Greenhouse Gas means any chemical or physical substance that is emitted into the air and that the Department may reasonably anticipate will cause or contribute to climate change including, but not limited to, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride.

Motor Vehicle means any equipment or mechanical device propelled primarily on land by power other than muscular power but does not mean railroad and railway engines and railway cars, vehicles operated by the system known as trolley motor or trackless trolley, or devices used for domestic purposes, such as lawnmowers or snowblowers.

Non-emitting Electricity Generators means electricity generators powered by hydro, nuclear, ocean, solar or wind power.

Non-emitting Megawatt Hours means megawatt hours that are generated by non-emitting electricity generators.

Registry means the regional greenhouse gas registry and reporting system designated by the Department to receive and publish greenhouse gas emissions data reported pursuant to 310 CMR 7.71(5) and (8).

Retail Seller means a competitive supplier licensed by the Department of Public Utilities or, as each is defined in M.G.L. c. 164A, § 1, an electric utility, municipal electric department or municipal light board.

Short Ton means 2000 pounds or 0.9072 metric tons.

Stationary Emission Source means any individual stationary piece of equipment from which any greenhouse gas is emitted to the ambient air, or any other stationary emission point.

(3) Applicability.

(a) Any entity owning, operating, or controlling a facility is subject to the requirements of 310 CMR 7.71(5) through (7) if:

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1. said facility is required to report air emissions data to the Department pursuant to 310 CMR 7.00: *Appendix C* (The Air Operating Permit Program) and had stationary emission sources that emitted greenhouse gases during the previous calendar year;

2. said facility has one or more stationary emission sources that collectively emitted greenhouse gases in excess of 5,000 short tons of greenhouse gases in carbon dioxide equivalents during the previous calendar year. In determining whether a facility has one or more stationary emission sources that collectively emit greenhouse gases in excess of 5,000 short tons, all direct stack emissions from all stationary emission sources and processes at the facility shall be included; or

3. said facility was subject to the requirements of 310 CMR 7.71 (3)(a)1. or 2. in any past year.

(b) Exemption for Facilities with Low or Reduced Emissions.

1. Notwithstanding 310 CMR 7.71(3)(a)3., any entity may petition the Department to be exempted from the requirement to report greenhouse gas emissions from a facility provided the following requirements are met. Said petition shall be submitted using a form provided by the Department.

a. The entity is not required to report greenhouse gas emissions from the facility pursuant to 310 CMR 7.71(3)(a)1. or 2.;

b. The entity is unlikely to be required to report greenhouse gas emissions from the facility pursuant to 310 CMR 7.71(3)(a)1. or 2. for any future year; and,

c. At least one greenhouse gas emission report documenting greenhouse gas emissions from said facility of less than 5,000 short tons of greenhouse gases in carbon dioxide equivalents has been submitted pursuant to 310 CMR 7.71(5) and (6), verified pursuant to 310 CMR 7.71(7), and published in the registry.

2. The Department may approve a petition submitted pursuant to 310 CMR 7.71 (3)(b) only if the Department determines that all of the requirements set forth in 310 CMR 7.71(3)(b)1. have been met. In determining whether to approve or deny a petition pursuant to 310 CMR 7.71(3)(b), the Department may consider any information contained in said petition, and any other relevant information.

3. If the Department has approved a petition in accordance with 310 CMR 7.71(3)(b)2., the annual reporting requirement in 310 CMR 7.71(3)(a)3. shall not apply to said facility until such time as the reporting of greenhouse gas emissions from said facility is again required pursuant to 310 CMR 7.71(3)(a)1. or 2.

(c) In determining whether an entity is subject to the requirements of 310 CMR 7.71 for calendar year 2009, only a facility's carbon dioxide emissions shall be considered in assessing whether the threshold in 310 CMR 7.71(a)2. has been exceeded.

(d) All retail sellers of electricity are subject to the requirements of 310 CMR 7.71(9).

(4) Registration of 2008 Emissions. By April 15, 2009, any entity owning, operating or controlling a facility that:

(a) combusted any combination of solid, liquid, and gaseous fossil fuels that resulted in direct stack emissions of more than 5,000 short tons of carbon dioxide emissions during 2008; or

(b) reported air emissions pursuant to 310 CMR 7.00: *Appendix C* and combusted any quantity of any fossil fuel that resulted in direct stack emissions of carbon dioxide during 2008, shall register with the Department using a form provided by the Department.

(5) Annual Reporting by Facilities that Emit Greenhouse Gases.

(a) Deadlines and General Reporting Requirements.

1. Facilities that are Required to Report Air Emissions Data Pursuant to 310 CMR 7.00: *Appendix C*.

a. By April 15, 2010, and April 15th of each year thereafter, any entity owning, operating or controlling a facility that is required to report air emissions data to the Department pursuant to 310 CMR 7.00: *Appendix C* and had stationary emission sources that collectively emitted greenhouse gases in excess of 5,000 short tons of greenhouse gases in carbon dioxide equivalents during the previous calendar year, or was previously required to report direct emissions pursuant to 310 CMR 7.71(5)(a)1.a., shall report and certify direct emissions of greenhouse gases for the previous calendar year in accordance with 310 CMR 7.71(5) and (6).

7.71: continued

b. By April 15, 2010, and April 15th of each year thereafter, any entity owning, operating or controlling a facility that is required to report air emissions data to the Department pursuant to 310 CMR 7.00: *Appendix C* and had stationary emission sources that collectively emitted an amount of greenhouse gases that is less than or equal to 5,000 short tons of greenhouse gases in carbon dioxide equivalents during the previous calendar year, and did not previously report direct emissions pursuant to 310 CMR 7.71(5)(a)1.a. or 2., shall report and certify direct stack emissions of greenhouse gases for the previous calendar year in accordance with 310 CMR 7.71(5) and (6).

2. Facilities that are not Required to Report Air Emissions Data Pursuant to 310 CMR 7.00: *Appendix C*. By April 15, 2010, and April 15th of each year thereafter, any entity owning, operating, or controlling a facility that is not required to report air emissions data to the Department pursuant to 310 CMR 7.00: *Appendix C* and had stationary emission sources that collectively emitted greenhouse gases in excess of 5,000 short tons of greenhouse gases in carbon dioxide equivalents during the previous calendar year, or was previously required to report direct emissions pursuant to 310 CMR 7.71(5)(a)2. for any past year, shall report and certify direct emissions of greenhouse gases for the previous calendar year in accordance with 310 CMR 7.71(5) through (7).

(b) Motor Vehicle Emissions. Any entity required to report direct emissions from a facility pursuant to 310 CMR 7.71(5)(a)1.a. or 2. shall report emissions from motor vehicles that the entity or its affiliate owns or leases, and that were assigned to that facility. Motor vehicles are considered to be assigned to a facility if they operate in support of that facility more often than they operate in support of any other facility.

(c) Greenhouse gas emissions shall be reported in accordance with all applicable requirements of the General Reporting Protocol, and in accordance with the following:

1. Greenhouse gas emissions shall be quantified, to the extent practicable, in accordance with a "Tier A" methodology identified in the General Reporting Protocol. If a "Tier B" or "Tier C" methodology is used to quantify emissions from a particular emissions source or facility, the reporting entity shall document the rationale and justification for using a methodology other than a "Tier A" methodology. These records shall be retained at the facility for five years and provided to the Department on request.

2. Greenhouse gas emissions from each stationary emissions source at a facility shall be reported separately to the extent practicable. If emissions from one or more stationary emissions sources at a facility are not reported separately, the reporting entity shall document the rationale and justification for not reporting emissions from each stationary emissions source separately. These records shall be retained at the facility for five years and provided to the Department on request.

3. Simplified estimation methods, as described in chapter 11 of the General Reporting Protocol, may be used to estimate emissions from any source or group of emissions sources at a facility, provided that the combined total emissions from such sources do not exceed 1000 short tons of greenhouse gases in carbon dioxide equivalents.

4. In cases where the General Reporting Protocol does not include a specific methodology that can be used to quantify emissions from a particular emission source or process, emissions shall be quantified, to the extent practicable given equipment and procedures in place at the facility, in accordance with existing industry best practice or internationally accepted best practices, including industry or sector-specific methodologies published by The Climate Registry. Records that document the methodology and data used to quantify emissions in accordance with existing industry best practice methods or internationally accepted best practices shall be retained at the facility for five years and provided to the Department on request.

5. In cases where an emissions factor is used to calculate emissions from material throughput (*e.g.*, fuel consumption), the quantity of the material, and any characteristics of the material that are needed to determine the correct emission factor, shall be reported.

(d) A facility-specific report submitted in accordance with 310 CMR 7.71 shall be considered to constitute a complete report, regardless of how the General Reporting Protocol defines or uses the word "entity" to specify organizational boundaries.

(e) Greenhouse gas emissions shall be reported electronically to the Department in a format that can be accommodated by the registry.

7.71: continued

(f) If required by the registry or the Department, the reporting entity shall report emissions in metric tons. One metric ton equals 1.102 short tons.

(g) Notwithstanding any other provisions of 310 CMR 7.71, only emissions of carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride are required to be reported.

(h) Notwithstanding any other provisions of 310 CMR 7.71, for emissions that occur during calendar year 2009, only emissions of carbon dioxide resulting from combustion of fuels are required to be reported.

(i) Notwithstanding any other provisions of 310 CMR 7.71, for emissions that occur during calendar year 2009, only emissions of greenhouse gases from stationary emission sources, and from vehicles that are designed or intended primarily for operation on public roadways, are required to be reported.

(j) Postponement of the Reporting Deadline for The Climate Registry Reporters.

1. Notwithstanding the April 15th reporting deadline in 310 CMR 7.71(5)(a), the Department may postpone the reporting deadline for any facility until June 30th of that year if:

a. the entity reporting greenhouse gas emissions from said facility pursuant to 310 CMR 7.71 is a member of The Climate Registry by March 15th;

b. greenhouse gas emissions from said facility are being included in a voluntary, entity-wide report to The Climate Registry; and,

c. the entity notifies the Department of its intent to postpone reporting by March 15th using a form provided by the Department.

2. If notification is provided pursuant to 310 CMR 7.71(7)(j)1., and greenhouse gas emissions from said facility are not included in a voluntary, entity-wide report that is submitted to The Climate Registry by June 30th, or are not reported pursuant to 310 CMR 7.71(5) by June 30th, then any entity owning, operating, or controlling said facility shall be deemed to be out of compliance with the April 15th reporting deadline specified in 310 CMR 7.71(5)(a).

(6) Requirements for Certification, Recordkeeping, and Public Release of Facility Reports.

(a) Entities subject to the requirement to report greenhouse gas emissions in accordance with 310 CMR 7.71(5) shall certify greenhouse gas emissions reports using a form provided by the Department or the registry. The form shall include, but not be limited to, the following:

1. Any information deemed necessary by the Department to identify the reporting facility.

2. The following certification statement: "I certify that I have personally examined the greenhouse gas emissions report for this facility and am familiar with the information contained in that report and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

3. The authorized signature and contact information of the entity subject to the requirement to report greenhouse gas emissions in accordance with 310 CMR 7.71(5).

(b) Copies of documents and other information supplied to the Department, the registry, or an approved verification body to comply with 310 CMR 7.71(5) and (7) shall be retained at the facility for five years from the date of submittal.

(c) All supporting documentation and calculations related to quantifying and reporting greenhouse gas emissions from the facility shall be retained at the facility for five years from the date of submittal and made available to the Department upon request.

(d) Information submitted pursuant to 310 CMR 7.71(5) shall be available to the public electronically through the registry.

(7) Triennial Verification of Facility Reports.

(a) Entities subject to the requirement to report greenhouse gas emissions from a facility in accordance with 310 CMR 7.71(5) shall employ an approved verification body to verify the greenhouse gas emissions report for that facility once every three years in accordance with the following staggered schedule:

1. Entities that reported greenhouse gas emissions in excess of 25,000 short tons of carbon dioxide that occurred during 2009 from a facility shall employ an approved verification body and verify the 2010 greenhouse gas emissions report for that facility by December 31, 2011, and for every third year thereafter (*e.g.*, the 2013 report shall be verified by December 31, 2014).

7.71: continued

2. Entities that were not subject to the verification requirement in 310 CMR 7.71(7)(a)1. for a facility, and that reported greenhouse gas emissions in excess of 10,000 short tons of greenhouse gases in carbon dioxide equivalents that occurred during 2010 for that facility, shall employ an approved verification body and verify the 2011 greenhouse gas emissions report for that facility by December 31, 2012, and for every third year thereafter (*e.g.*, the 2014 report shall be verified by December 31, 2015).

3. Entities that were not subject to the verification requirement in 310 CMR 7.71(7)(a)1. or 2. for a facility, and that reported any greenhouse gas emissions that occurred in 2012 for that facility, shall employ an approved verification body and verify the 2012 greenhouse gas emissions report for that facility by December 31, 2013, and for every third year thereafter (*e.g.*, the 2015 report will be verified by December 31, 2016).

4. Entities that were not subject to the verification requirement in 310 CMR 7.71(7)(a)1., 2., or 3. for a facility, and that reported any greenhouse gas emissions that occurred in any year after 2012 from that facility, shall employ an approved verification body and verify the greenhouse gas emissions report for that facility by December 31st of the calendar year following the calendar year during which the emissions occurred, and for every third year thereafter.

5. In order to establish a common triennial verification schedule for a group of facilities, an entity may choose to employ an approved verification body to verify the greenhouse gas emissions report for any facility in advance of the schedule established for that facility pursuant to 310 CMR 7.71(7)(a). Once a greenhouse gas emissions report for a facility has been verified in advance of the schedule established for that facility pursuant to 310 CMR 7.71(7)(a), any entity that is subject to the requirement to report greenhouse gas emissions from that facility in accordance with 310 CMR 7.71(5) shall employ an approved verification body to verify the greenhouse gas emissions report for that facility for every third year thereafter, and shall not be subject to any other reporting schedule established pursuant to 310 CMR 7.71(7)(a).

(b) Verification shall be documented using a form provided by the Department. The verification form shall include, but not be limited to, the following:

1. Any information deemed necessary by the Department to identify the reporting facility and the approved verification body.

2. Any information deemed necessary by the Department to ensure that the approved verification body is aware of all relevant provisions of 310 CMR 7.71.

3. The following certification statement: "I certify that I have personally examined the greenhouse gas emissions report for this facility and am familiar with the information contained in that report and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

4. The authorized signature and contact information of the approved verification body.

(c) Approved verification bodies may exempt from the verification process emissions from a facility included in a report submitted pursuant to 310 CMR 7.71(5) if said emissions are:

1. carbon dioxide emissions that resulted from combusting either fossil fuels or biogenic fuels, and that were quantified and reported in accordance with 40 CFR Part 75. In the event that emissions quantified and reported in accordance with 40 CFR Part 75 include emissions resulting from the combustion of both biogenic and fossil fuels, said emissions shall be exempt from the verification process only if the biogenic and fossil portions of said emissions are separately quantified in accordance with 40 CFR Part 75;

2. greenhouse gas emissions that have been quantified, reported, and verified in accordance with the offset provisions in 310 CMR 7.70(10), or corresponding provisions in the CO2 Budget Trading Program regulations of any other state; or,

3. greenhouse gas emissions that have been voluntarily reported to The Climate Registry, verified in accordance with the General Verification Protocol, and made publically available by The Climate Registry.

(d) The Department may require the entity that reported greenhouse gas emissions from a facility, or the approved verification body that verified an emissions report, to explicitly identify any emissions that have been exempted from the verification process pursuant to 310 CMR 7.71(7)(c).

7.71: continued

(e) Verification shall be in accordance with all applicable requirements of the General Verification Protocol. Notwithstanding any references to a reporting "entity" in the General Reporting Protocol or the General Verification Protocol, a facility subject to the requirement to report greenhouse gas emissions in accordance with 310 CMR 7.71(5) shall be considered to constitute a complete reporting entity for the purpose of reporting greenhouse gas emissions in accordance with 310 CMR 7.71(5).

(f) Verification by an approved verification body shall be at the expense of the entity reporting greenhouse gas emissions in accordance with 310 CMR 7.71(5).

(g) In the event that errors in a certified greenhouse gas report are discovered during the verification process, the reporting entity shall correct said errors and any corresponding errors in the previous two annual reports, and shall re-certify said reports.

(h) Not later than December 31, 2014, the Department shall complete a review, including an opportunity for public comment, of the verification requirement established pursuant to 310 CMR 7.71(7). This review shall evaluate the costs of verification to facilities, the quality and uses of the data in the registry, and any other information relevant to determining whether the verification requirement should be amended.

(8) Voluntary Reporting by Facilities.

(a) Voluntary Compliance. Any entity owning, controlling or operating a facility that is not subject to 310 CMR 7.71(5)(a) may voluntarily report direct emissions or direct stack emissions from that facility in accordance with 310 CMR 7.71(5)(b) through (i), provided that the facility is located in Massachusetts and that all requirements of 310 CMR 7.71(5) through (8), including the requirement to employ an approved verification body are met.

(b) Voluntary Inclusion of Additional Data Elements in Reports. Any entity which submits a greenhouse gas emissions report for a facility in accordance with 310 CMR 7.71(5) or (8)(a) may voluntarily include any additional greenhouse gas emissions data that can be accommodated by the registry in the report, provided that such emissions are calculated in accordance with all applicable requirements of 310 CMR 7.71 (5) through (7), and provided that such emissions are reported electronically in a format that can be accommodated by the registry. Additional voluntary greenhouse gas emissions data may include, but is not limited to, indirect emissions due to electricity consumption at any facility, motor vehicle emissions from a facility that emitted less than 5,000 short tons of greenhouse gas emissions in a particular year, and emissions of gases other than carbon dioxide that occurred in 2009.

(9) Reporting Requirements for Retail Sellers of Electricity.

(a) Each retail seller of electricity shall annually report to the Department its megawatt hours sold and associated greenhouse gas emissions. Biogenic and non-biogenic greenhouse gas emissions shall be reported separately. This report shall be on a form provided by the Department and shall include a spreadsheet showing the calculations required under 310 CMR 7.71(9)©).

(b) Deadlines.

1. An initial report shall be submitted within 30 days after the Department posts on its website in 2010 the final annual emission factors listed in 310 CMR 7.71(9)(c) for 2005, 2006, or 2007, as determined by the Department. Any retail seller choosing to report under the options of 310 CMR 7.71(9)(d)3. through 7. shall report the information required by 310 CMR 7.71(9)(d)3. through 7. within 30 days after the Department posts the draft annual emission factors on its website in 2010.

2. Beginning with 2010 calendar year emissions, the annual report shall be submitted by the first day of the next month that is a full calendar month after the Department posts on its website the final annual emission factors listed in 310 CMR 7.71(9)(c).

3. In order to finalize the annual biogenic and non-biogenic emission factors, the Department shall:

a. post draft annual emission factors, including methodologies and data sources, on its website for public comment for 30 days and notify retail sellers of the posting and of the deadline for submittal of public comment; and,

b. post final annual emission factors, including methodologies and data sources, on its website and notify retail sellers of the posting.

7.71: continued

(c) All retail sellers shall use the following formula to calculate greenhouse gas emissions:
GHG = EF * MWh / 2000 pounds per short ton

Where:

GHG = Short tons of greenhouse gases (in carbon dioxide equivalents) associated with electricity sold in MA in a particular calendar year.

EF = Emission factors supplied by the Department each year for biogenic and non-biogenic greenhouse gas emissions (pounds carbon dioxide equivalents per megawatt hour).

MWh = Annual electricity consumed by customers in a particular calendar year, increased to account for the portion of electricity lost during transmission and distribution (line losses), as specified in 310 CMR 7.71(9)(d)1. and 2. (megawatt hours).

(d) Source of Megawatt Hour Data.

1. Retail sellers subject to the Renewable Portfolio Standard (RPS) regulations at 225 CMR 14.00 or 15.00 shall report, and use in calculating biogenic and non-biogenic greenhouse gas emissions, the same number of megawatt hours used to calculate any RPS obligation under 225 CMR 14.00 or 15.00, inclusive of line losses.

2. Municipal electric department and municipal light board retail sellers not subject to 225 CMR 14.00 or 15.00 shall report, and use in calculating biogenic and non-biogenic greenhouse gas emissions, the same number of megawatt hours reported in the annual return to the Department of Public Utilities, inclusive of line losses.

3. Optional RPS Retail Seller Reporting of Non-emitting RPS-Eligible Electricity. Retail sellers subject to 225 CMR 14.00 or 15.00 may choose to subtract any megawatt hours of electricity generated by non-emitting electricity generators from the amount of megawatt hours reported in 310 CMR 7.71(9)(d)1. to report calculations of biogenic and non-biogenic greenhouse gas emissions, in addition to those required in 310 CMR 7.71(9)(d)1., if such non-emitting megawatt hours are reported in the annual report due under 310 CMR 7.71(9)(a) and provided the following criteria are met:

a. if used to demonstrate compliance by that retail seller with any RPS obligation under 225 CMR 14.00 or 15.00, such megawatt hours match those reported to the Department of Energy Resources for compliance with 225 CMR 14.00 or 15.00; or

b. if not used to demonstrate compliance with any RPS obligation under 225 CMR 14.00 or 15.00:

i. were otherwise eligible to be used to demonstrate compliance with any RPS obligation under 225 CMR 14.00 or 15.00, and

ii. whose associated renewable energy certificates in the New England Power Pool Generation Information System are retired from that retail seller's Massachusetts Retail Subaccount, as defined in the New England Power Pool Generation Information System Operating Rules, and

iii. such megawatt hours match those in that retail seller's New England Power Pool Generation Information System report, which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated.

4. Optional RPS Retail Seller Reporting of Non-emitting Non-RPS-eligible Electricity. Retail sellers subject to 225 CMR 14.00 or 15.00 may choose to subtract any megawatt hours of electricity generated by non-emitting electricity generators from the amount of megawatt hours reported in 310 CMR 7.71(9)(d)1. to report calculations of biogenic and non-biogenic greenhouse gas emissions, in addition to those required in 310 CMR 7.71(9)(d)1., if such non-emitting megawatt hours are reported in the annual report due under 310 CMR 7.71(9)(a) and provided the following criteria are met:

a. such non-emitting megawatt hours were not eligible to be used to demonstrate compliance with any RPS obligation under 225 CMR 14.00 or 15.00; and

b. the associated certificates in the New England Power Pool Generation Information System are retired from that retail seller's Massachusetts Retail Subaccount, as defined in the New England Power Pool Generation Information System Operating Rules, and

c. such non-emitting megawatt hours match those in that retail seller's New England Power Pool Generation Information System report, which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated, and

7.71: continued

d. the retail seller provides a copy of the contract or contracts establishing that the retail seller has purchased electricity from such non-emitting electricity generators, in addition to the certificates retired under 310 CMR 7.71(9)(d)4.b., which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated.

5. Optional Non-RPS Retail Seller Reporting of Non-emitting Electricity. Retail sellers not subject to 225 CMR 14.00 or 15.00 may choose to subtract any megawatt hours of electricity generated by non-emitting electricity generators from the amount of megawatt hours reported in 310 CMR 7.71(9)(d)2. to report calculations of biogenic and non-biogenic greenhouse gas emissions, in addition to those required in 310 CMR 7.71(9)(d)2., if such non-emitting megawatt hours are reported in the annual report due under 310 CMR 7.71(9)(a), and provided the following criteria are met:

a. such non-emitting megawatt hours are no greater than those reported in the annual return submitted to the Department of Public Utilities, and

b. for non-emitting electricity generators owned by the retail seller, the retail seller provides information from the New England Power Pool Generation Information System showing that the certificates associated with the non-emitting megawatt hours of electricity were Unsettled Certificates whose attributes were aggregated in Residual Mix Certificates, both as defined in the New England Power Pool Generation Information System Operating Rules, which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated, and

c. for non-emitting electricity generators not owned by the retail seller, the retail seller provides a copy of the contract or contracts establishing that the retail seller has purchased electricity from such non-emitting electricity generators and reports such megawatt hours, which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated.

6. Optional Retail Seller Reporting of Emitting Electricity. Retail sellers may choose to report calculations of biogenic and non-biogenic greenhouse gas emissions, in addition to those required in 310 CMR 7.71(9)(d)1. and 2., based on 310 CMR 7.71(9)(d)6.d. and the amount of any megawatt hours of electricity generated by emitting electricity generators subtracted from the amount of megawatt hours reported in 310 CMR 7.71(9)(d)1. or 2., if such emitting megawatt hours are reported in the annual report due under 310 CMR 7.71(9)(a), and provided the following criteria are met:

a. such megawatt hours are reported to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated; and

b. for retail sellers subject to 225 CMR 14.00 or 15.00.

i. the associated certificates in the New England Power Pool Generation Information System are retired from that retail seller's Massachusetts Retail Subaccount, as defined in the New England Power Pool Generation Information System Operating Rules; and

ii. such emitting megawatt hours match those in that retail seller's New England Power Pool Generation Information System report, which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated; and

iii. for emitting electricity generators not owned by the retail seller, if the retail seller provides a copy of the contract or contracts establishing that the retail seller has purchased electricity from such emitting electricity generator, in addition to the certificates retired under 310 CMR 7.71(9)(d)6.b.i., which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated.

7.71: continued

c. for retail sellers not subject to 225 CMR 14.00 or 15.00:

i. such non-emitting megawatt hours are no greater than those reported in the annual return submitted to the Department of Public Utilities; and

ii. for emitting electricity generators owned by the retail seller, the retail seller provides information from the New England Power Pool Generation Information System showing that the certificates associated with the emitting megawatt hours of electricity were Unsettled Certificates whose attributes were aggregated in Residual Mix Certificates, both as defined in the New England Power Pool Generation Information System Operating Rules, which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated; and

iii. for emitting electricity generators not owned by the retail seller, the retail seller provides a copy of the contract or contracts establishing that the retail seller has purchased electricity from such emitting electricity generators, which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated.

d. For all retail sellers:

i. if all megawatt hours generated by a particular stationary emission source that reports under 310 CMR 7.71(5) or (8) are subtracted by a retail seller under 310 CMR 7.71(9)(d)6. and all carbon dioxide, methane and nitrous oxide emissions associated with generation of such megawatt hours of electricity subtracted under 310 CMR 7.71(9)(d)6. match the emissions reported under 310 CMR 7.71(5) or (8), then the retail seller shall so state in the report submitted under 310 CMR 7.71(9)(d)6.a.

ii. if only a portion of the emissions reported by a particular stationary emission source under 310 CMR 7.71(5) or (8) are associated with the megawatt hours of electricity subtracted under 310 CMR 7.71(9)(d)6., then the retail seller shall document an apportionment of the emissions, and shall submit such documentation to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated.

iii. if the carbon dioxide, methane and nitrous oxide emissions associated with generation of the megawatt hours of electricity by a particular stationary emission source subtracted under 310 CMR 7.71(9)(d)6. are not reported under 310 CMR 7.71(5) or (8), such emissions, and documentation of any apportionment of carbon dioxide, methane and nitrous oxide emissions, shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated. Total carbon dioxide, methane and nitrous oxide emissions of the particular stationary emission source shall be verified by an approved verification body by the last day of the year after the calendar year in which the megawatt hours were generated, beginning with the later of 2010 emissions or the emissions associated with the first year a particular stationary emission source's megawatt hours are subtracted under 310 CMR 7.71(9)(d)6., and for every third year thereafter that a particular stationary emission source's megawatt hours are subtracted under 310 CMR 7.71(9)(d)6.

7. Retail Seller Reporting of Total Electricity Adjustments. Retail sellers shall report calculations of biogenic and non-biogenic greenhouse gas emissions, in addition to those required in 310 CMR 7.71(9)(d)1. and 2., totaling any reporting chosen under 310 CMR 7.71(9)(d)1. through 6.

(e) Retail sellers subject to the requirement to report greenhouse gas emissions in accordance with 310 CMR 7.71(9) shall certify greenhouse gas emissions reports using a form provided by the Department. The form shall include, but not be limited to, the following:

1. Any information deemed necessary by the Department to positively identify the retail seller.

2. The following certification statement: "I certify that I have personally examined the greenhouse gas emissions report I am submitting and am familiar with the information contained in that report and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

7.71: continued

3. The authorized signature and contact information of the entity subject to the requirement to report greenhouse gas emissions in accordance with 310 CMR 7.71(9).

(f) Copies of documents and other information supplied to the Department, the registry, or an approved verification body to comply with 310 CMR 7.71(9) shall be retained by the retail seller for five years from the date of submittal.

(g) All supporting documentation and calculations related to quantifying and reporting greenhouse gas emissions from the retail seller shall be retained by the retail seller for five years from the date of submittal and made available to the Department upon request.

REGULATORY AUTHORITY

310 CMR 7.00: M.G.L. c. 111, § 142A through J.

## 310 CMR 7.00: APPENDIX A: EMISSION OFFSETS AND NONATTAINMENT REVIEW

(1) Introduction. 310 CMR 7.00: *Appendix A* sets forth the Massachusetts preconstruction review program for stationary sources of air pollution (not including indirect sources) pursuant to sections 172(c)(5) and 173 of the Clean Air Act. A new major source or major modification either that is located in an area designated as nonattainment pursuant to section 107(d) of the Act, published at 40 CFR 81, for any National Ambient Air Quality Standards (NAAQS) for which the source or modification would be major or that is major for volatile organic compounds or oxides of nitrogen must meet the stringent conditions set forth in this appendix prior to receiving approval to construct. These conditions are designed to insure that the increased emissions will be controlled to the greatest degree possible; that more than equivalent offsetting emission reductions (emission offsets) will be obtained from existing sources; and that there will be reasonable further progress toward achievement of the National Ambient Air Quality Standards (NAAQS).

(2) Definitions. The definitions found in 310 CMR 7.00 apply to Appendix A. The following words and phrases shall have the following meanings as they appear in 310 CMR 7.00: *Appendix A.* Where a term is defined in the 310 CMR 7.00 definitions section and the definition also appears in 310 CMR 7.00: *Appendix A* definition section, the definition in Appendix A controls.

Actual Emissions means:

(a) As of a particular date, actual emissions shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The Department shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period. For the purposes of calculating a net emissions increase where actual emissions exceed allowable emissions, the actual emissions for the unit will be presumed to be equivalent to the source-specific allowable emissions of the unit.

(b) For either an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) or an emissions unit(s) complying with 310 CMR 7.08(2), 7.18, 7.19, 7.24, or 7.27, actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit, provided the source owner or operator maintains and submits to the Department, on an annual basis for a period of five years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed ten years, may be required by the Department if it determines such period to be more representative of normal source post-change operations.

(c) For any emissions unit (except as provided for in 310 CMR 7.00: *Appendix A* Actual Emissions(b)) which has not begun normal operations on the particular date, actual emissions shall equal the federal potential emissions of the unit on that date.

Allowable Emissions means the emissions rate, in tons per year, of a stationary source calculated by multiplying the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) times the most stringent of:

(a) Any applicable standards set forth in 40 CFR part 60 (NSPS) or 61 (NESHAPS);

(b) Any applicable Massachusetts SIP emissions limitation including a limitation with a future compliance date; or

(c) Any emissions rate specified as a federally enforceable permit condition, including a limitation with a future compliance date.

Begin Actual Construction means physical on-site construction activities on an emissions unit which is of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

Appendix A: continued

Building, Structure, Facility, or Installation means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Any marine vessel is a part of a facility while docked at the facility. Any marine vessel is a part of an Outer Continental Shelf (OCS) source while docked at and within 25 miles en route to and from the OCS source. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same Major Group (*i.e.*, which have the same two-digit code) as described in the *Standard Industrial Classification Manual*, 1987.

Clean Coal Technology (CCT) means any technology at a new or existing emissions unit(s), including technologies applied at the precombustion, combustion, or post combustion stage, which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

Clean Coal Technology Demonstration Project means a project using funds appropriated under the heading 'Department of Energy-Clean Coal Technology,' up to a total amount of $2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the United States Environmental Protection Agency (EPA). The Federal contribution for a qualifying project shall be at least 20% of the total cost of the demonstration project.

Coastal Waters means tidal waters over permanently or periodically submerged lands lying between the mean high tide line and a line seaward from the coastline to the boundary line of each State. The boundary shall extend no more than three geographical miles into the Atlantic Ocean.

Commence means as applied to construction of a major stationary source or major modification that the owner or operator has all necessary preconstruction approvals or permits and either has:

(a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or,

(b) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

Complete means, in reference to an application for a plan approval, that the application contains all of the information necessary for processing the application, as determined by the Department. Designating an application administratively complete for purposes of permit processing does not preclude the Department from requesting or accepting any additional information.

Construction means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in an increase in actual emissions.

Corresponding Onshore Area means, for stationary sources located in, or on, navigable rivers and lakes, coastal waters, or the Outer Continental Shelf (OCS), the onshore attainment or nonattainment area which is closest to the source. However, the Department or EPA may determine that another area with more stringent requirements with respect to the control and abatement of air pollution may reasonably be expected to be affected by such emissions. Such determination shall be based on the potential for air pollutants from the offshore source to reach the other onshore area and the potential of such air pollutants to affect the efforts of the other onshore area to attain or maintain any Federal or State ambient air quality standard or to comply with the provisions of 310 CMR 7.00: *Appendix A*.

Appendix A: continued

Electric Utility Steam Generating Unit means any steam electric generating unit that is constructed for the purpose of supplying more than a of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

Emissions Unit means any part of a stationary source, which emits or would have federal potential emissions of any pollutant (including fugitive emissions), subject to regulation under the Act.

Energy Input means the total gross calorific value (where gross calorific value is measured by ASTM Method D2015-66, D240-64, or D1826-64) of all fuels burned. Energy input is calculated in British thermal units (Btu) per hour using the higher heating value of the fuel.

Fossil Fuel-Fired Boiler means a unit (or combination of such units) which combusts fossil fuel (or receives energy from other fossil fuel-fired units) to produce steam by indirect heat transfer and includes such units that produce steam for electric generation. The energy input for such units includes any energy provided to such units from the combustion of fossil fuels in other units. The total energy input from fossil fuel-firing for a combination of such units is the sum of the energy inputs from fossil fuel-firing for each unit.

Fossil Fuel-Fired Electric Plant means one or more units (a plant) that combust fossil fuel to produce electricity. The total energy input for such a plant from fossil fuel-firing is the sum of the energy inputs from fossil fuel-firing for each combustion unit that is part of such plant.

Fugitive Emissions means those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.

Indian Governing Body means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

Indian Tribe means any Indian tribe, band, nation, or other organized group or community which is Federally recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

Lowest Achievable Emission Rate (LAER) means, for any source, the more stringent rate of emissions based on the following:

(a) The most stringent emissions limitation which is contained in any state SIP for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or

(b) The most stringent emissions limitation which is achieved in practice by such class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within a stationary source.

In no event shall LAER allow a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable pursuant to applicable new source standards of performance.

Major Modification means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant, for which the existing source is major, subject to regulation under the Act.

(a) Any net emissions increase that is considered significant for VOCs shall be considered significant for ozone; and

(b) For the purpose of applying the requirements of 310 CMR 7.00: *Appendix A* to major stationary sources of $NO_x$ any significant net emissions increase of $NO_x$ is considered significant for ozone, in addition to any separate requirements for $NO_x$ under part C or D of Title I of the Act; and

Appendix A: continued

(c) A physical change or change in the method of operation shall not include:

1. Routine maintenance, repair and replacement; or

2. Use of an alternative fuel or raw material by reason of an order under sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act; or

3. Use of an alternative fuel by reason of an order or rule under sec. 125 [Measures to Prevent Economic Disruption or Unemployment] of the Act; or

4. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste; or

5. Use of an alternative fuel or raw material by a stationary source where:

a. The source is approved to use such fuel or raw material under any plan approval issued under 310 CMR 7.00: *Appendix A*; or

b. The source was capable of accommodating such fuel or raw material before December 21, 1976, unless such change would be prohibited under any federally-enforceable permit condition which was established after December 21, 1976 pursuant to 40 CFR part 52.21 (Prevention of significant deterioration of air quality), plan approval requirements under 310 CMR 7.02(1), 310 CMR 7.00: *Appendix A*, 310 CMR 7.00: *Appendix B*(3), operating permits issued either under 310 CMR 7.00: *Appendix C* or pursuant to 40 CFR part 71 or prohibited under any other federally-enforceable regulatory requirements; or

6. An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally-enforceable permit condition which was established after December 21, 1976 pursuant to 40 CFR 52.21 (Prevention of significant deterioration of air quality), plan approval requirements under 310 CMR 7.02(2), 310 CMR 7.00: *Appendix A*, 310 CMR 7.00: *Appendix B*(3), operating permits issued either under 310 CMR 7.00: *Appendix C* or pursuant to 40 CFR part 71 or prohibited under any other federally-enforceable regulatory requirements; or

7. Any change in ownership at a stationary source; or

8. The addition, replacement or use of a pollution control project at either an existing electric utility steam generating unit or an emissions unit(s) in order to comply with 310 CMR 7.08(2), 7.18, 7.19, 7.24, or 7.27, unless the Department determines that such addition, replacement, or use renders the unit less environmentally beneficial; or unless

a. The Department has reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of Title I of the Act, if any; and

b. The Department determines that the increase will cause or contribute to a violation of any national ambient air quality standard or PSD increment, or visibility limitation; or

9. The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

a. the Massachusetts SIP, and

b. other requirements necessary to attain and maintain the national ambient air quality standard during the project and after it is terminated.

Major Stationary Source means any stationary source of air pollutants which emits, or has the federal potential emissions greater than or equal to, 100 tpy or more of any pollutant subject to regulation under the Act, except that lower emissions thresholds shall apply as follows:

50 TPY of volatile organic compounds (VOC), or

50 TPY of oxides of nitrogen ($NO_x$).

In addition, any physical change that would occur at a stationary source not previously qualifying as a major stationary source will be considered a major stationary source, if the physical change would result in the following increases either in actual emissions or in the federal potential to emit, greater than or equal to:

Appendix A: continued

50 TPY of volatile organic compounds (VOC), or
50 TPY of oxides of nitrogen ($NO_x$), or
100 TPY or more of any other pollutant subject to regulation under the Act.

(a) A stationary source that is major for VOC shall be considered major for ozone. VOC emissions, as precursors to the pollutant ozone, are subject to the requirements of 310 CMR 7.00: *Appendix A*; and

(b) For the purpose of applying the requirements of 310 CMR 7.00: *Appendix A* to major stationary sources of $NO_x$ a stationary source that is major for $NO_x$ is considered major for ozone, in addition to any separate requirements for $NO_x$ under part C or D of Title I of the Act; and

(c) The fugitive emissions of a stationary source shall not be included in determining, for any of the purposes of 310 CMR 7.00: *Appendix A*, whether the stationary source is a major stationary source, unless the stationary source belongs to one of the following categories of stationary sources:

Carbon black plants (furnace process); or
Coal cleaning plants (with thermal dryers); or
Coke oven batteries; or
Charcoal production plants; or
Chemical process plants; or
Fuel conversion plants; or
Fossil fuel-fired boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input; or
Fossil fuel-fired electric plants of more than 250 million British thermal units per hour heat input; or
Glass fiber manufacturing plants; or
Hydrofluoric acid plants; or
Iron and steel mills; or
Kraft pulp mills; or
Lime plants; or
Municipal incinerators (or combinations thereof) capable of charging more than 50 tons of refuse per day; or
Nitric acid plants; or
Outer continental shelf sources; or
Petroleum refineries; or
Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels; or
Phosphate rock processing plants; or
Portland cement plants; or
Primary aluminum ore reduction plants; or
Primary copper smelters; or
Primary lead smelters; or
Primary zinc smelters; or
Secondary metal production plants; or
Sintering plants; or
Sulfuric acid plants; or
Sulfur recovery plants; or
Taconite ore processing plants; or
Any other stationary source category regulated under sec. 111 (NSPS) or 112 (NESHAPS) of the Act before November 15, 1990.

Navigable Rivers and Lakes means non-tidal bodies of water which were navigable at the time the States in which they are located became members of the United States. This term does not include waters over lands now or heretofore constituting a part of the public lands of the United States, if such lands were not meandered in connection with the public survey of such lands under the laws of the United States and title to such lands was lawfully conveyed from the United States or any State to any person.

Necessary Preconstruction Approvals or Permits means those permits or plan approvals required under Federal air quality control laws and regulations, and those air quality control laws and regulations which are part of the Massachusetts State Implementation Plan.

Appendix A: continued

Net Emissions Increase means

(a) The amount by which the sum of the following exceeds zero:

1. Any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source; and

2. Any other increases and decreases in actual emissions at the source shall be included for netting purposes, that are contemporaneous with the particular change and are otherwise creditable as described in 310 CMR 7.00: *Appendix A* Net Emissions Increase(b), (c), (d), (e) and (f).

(b) An increase or decrease is contemporaneous with the particular change only if it occurs over any period of five consecutive calendar years which includes the calendar year the increase will occur, but not earlier than January 1, 1990.

(c) An increase or decrease in actual emissions must have occurred prior to the increase from the particular change in order for the increase or decrease to be considered contemporaneous for purposes of calculating a net emissions increase.

(d) An increase or decrease in actual emissions is creditable only if the increase or decrease in actual emissions has not been credited in a previous plan approval issued under 310 CMR 7.00: *Appendix A*, unless that approval has been rescinded.

(e) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(f) A decrease in actual emissions is creditable only to the extent that:

1. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions; and

2. It is federally-enforceable at and after the time that actual construction on the particular change begins; and

3. The reduction was not required as a condition of the Massachusetts SIP, in demonstrating attainment or reasonable further progress, in issuing any permit or plan approval under 310 CMR 7.00: *Appendix A*, 310 CMR 7.02(3)(j)6. (BACT requirement), 40 CFR 52.21 (PSD), operating permits issued either under 310 CMR 7.00: *Appendix C* or 40 CFR part 71 or otherwise required under the Act ; and

4. For VOC emissions, the decreased emissions have approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and

5. The unit was actually operated one or more years and emitted the nonattainment pollutant for which the decrease is being sought. Reductions of permitted emissions for units that were never operated cannot be considered creditable emissions decreases.

(g) An emissions increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

(h) Emission reduction credits (ERCs) withdrawn from the Department's Emission Reduction Banking System are creditable if the ERCs meet the criteria in 310 CMR 7.00: *Appendix A* Net Emissions Increase(a) through (g).

Nonattainment Pollutant means an air pollutant (or precursor of the pollutant, as applicable) for which an area is designated nonattainment (as of the date on which a complete application is filed) pursuant to § 107(d) [Nonattainment Designations] of the Act or oxides of nitrogen (NOx) or volatile organic compounds (VOC).

Outer Continental Shelf (OCS) shall have the meaning provided, as of the date of promulgation of 310 CMR 7.00, by section 2 of the Outer Continental Shelf Lands Act (43 U.S.C. 1331 *et seq*).

Outer Continental Shelf Source means any equipment, activity, or facility which:

(a) Emits or has federal potential emissions of any air pollutant; and

(b) Is regulated or authorized under the Outer Continental Shelf Lands Act (43 U.S.C. 1331 *et seq*); and

(c) Is located on the OCS or in or on the waters above the OCS.

Appendix A: continued

Pollution Control Project means any activity or project at either an existing electric utility steam generating unit or at an emissions unit(s) to comply with 310 CMR 7.08(2), 7.18, 7.19, 7.24, or 7.27 for purposes of reducing emissions from such unit. Such activities or projects are limited to:

(a) The installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls and electrostatic precipitators; or

NON-TEXT PAGE

Appendix A: continued

(b) an activity or project to accommodate switching to a fuel which is less polluting than the fuel used prior to the activity or project, including, but not limited to natural gas or coal re-burning, or the co-firing of natural gas and other fuels for the purpose of controlling emissions; or

(c) a permanent clean coal technology demonstration project conducted under title II, sec. 101(d) of the Further Continuing Appropriations Act of 1985 (sec. 5903(d) of title 42 of the United States Code), or subsequent appropriations, up to a total amount of $2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the EPA; or

(d) a permanent clean coal technology demonstration project that constitutes a repowering project ; or

(e) an activity or project to reduce emissions of VOC or $NO_x$ to comply with 310 CMR 7.08(2), 7.18, 7.19, 7.24, or 7.27.

Reasonable Further Progress means such annual incremental reductions in emissions of the relevant air pollutant as are required by part D (Plan Requirements for Nonattainment Areas) of the Act or may reasonably be required by the Department or EPA for the purpose of ensuring attainment of the applicable national ambient air quality standards in an area by the applicable statutory deadline or resulting from shutdowns that are credited towards attainment.

Repowering means:

(a) replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the EPA, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990 ; or

(b) any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

Representative Actual Annual Emissions means the average rate, in tons per year, at which the source is projected to emit a pollutant for the two-year period after a physical change or change in the method of operation of a unit, (or a different consecutive two-year period within ten years after that change, where the Department determines that such period is more representative of normal source operations), considering the effect any such change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the Department:

(a) shall consider all relevant information, including but not limited to historical operational data, the company's own representations, filings with Massachusetts Department of Public Utilities or Federal regulatory authorities, filings with the Department pursuant to 310 CMR 7.12, Department regulations and approvals issued pursuant to those regulations and compliance plans under title IV of the Clean Air Act; and

(b) shall exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

Appendix A: continued

Secondary Emissions means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, which do not come from the major stationary source or major modification itself. For the purpose of 310 CMR 7.00: *Appendix A*, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not otherwise be constructed or undergo an increase in emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include tailpipe emissions from any source regulated under title II of the Act or any emissions from in-transit, non-OCS marine vessels.

Significant means

(a) In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

| POLLUTANT | EMISSION RATE |
|---|---|
| Carbon monoxide: | 100 tpy |
| Ozone: | 25 tpy of nitrogen oxides ($NO_x$) where an administratively complete application was received on or after November 15, 1992 for the physical change or change in the method of operation. |
| Ozone: | 40 tpy of VOC<br>25 tpy of VOC where an administratively complete application was received on or after November 15, 1992 for the physical change or change in the method of operation. |
| Sulfur dioxide: | 40 tpy |
| Particulate matter: | 15 tpy as PM10 |
| Lead: | 0.6 tpy |

(b) A net increase in emissions of VOCs or $NO_x$ that would result from either any physical change in or change in the method of operation, of a stationary source is significant if such increase exceeds applicable thresholds when aggregated with all, creditable and contemporaneous, increases and decreases, in emissions of the same pollutant.

Stationary Source means any building, structure, facility, or installation which emits or which may emit any air pollutant subject to regulation under the Act.

(a) A stationary source may consist of one or more emissions units and:

1. may be a land-based point or area source; or
2. may be located in, or on, the OCS or other submerged lands beneath navigable waters (lakes, rivers, and coastal waters adjacent to Outer Continental Shelf lands) ; or
3. may be any internal combustion engine, or engine combination, greater than 175 horsepower (hp) used for any stationary application; or
4. may be any internal combustion engine regulated under Sec. 111 (NSPS) of the Act, regardless of size; or
5. may be any internal combustion engine of less than 175 horsepower (hp) not actually controlled to meet a regulation under Sec. 213 (Nonroad Engines and Vehicles) of the Act.

(b) A stationary source does not include:

1. emissions resulting directly from an internal combustion engine for transportation purposes; or
2. tailpipe emissions from any source regulated under title II of the Act or any emissions from in-transit, non-OCS marine vessels.

Appendix A: continued

Temporary Clean Coal Technology Demonstration project means a CCT demonstration project that is operated for a period of five years or less, and which complies with the Massachusetts SIP and other requirements necessary to attain and maintain the national ambient air quality standard during the project and after it is terminated.

(3) Applicability and exemptions. (*see* also 310 CMR 7.00: *Appendix A*(10) Source Obligation.)

(a) Any major stationary source or major modification to which the requirements of 310 CMR 7.00: *Appendix A* apply shall not receive a plan approval to begin actual construction unless the Department is satisfied that the stationary source or modification will meet the requirements of 310 CMR 7.00: *Appendix A*.

(b) The requirements of 310 CMR 7.00: *Appendix A* shall apply only to any new major stationary source or major modification that is major for either:

1. the pollutant (or precursor of the pollutant, as applicable) for which an area is designated nonattainment (as of the date on which a complete application is filed) pursuant to § 107(d) [Nonattainment Designations] of the Act if the stationary source or modification would be constructed in the designated nonattainment area; or
2. oxides of nitrogen (NOx) or volatile organic compounds (VOC).

(c) The requirements of 310 CMR 7.00: *Appendix A* shall apply in any Outer Continental Shelf area for which the corresponding onshore area is designated as nonattainment as of the date on which a complete application is filed in accordance with 310 CMR 7.00: *Appendix A*.

(d) If a stationary source is in one of the categories listed in the definition of 310 CMR 7.00: *Appendix A* Major Stationary Source(c), fugitive emissions, to the extent quantifiable, are included when calculating federal potential emissions to determine if the stationary source or modification is subject to the provisions of 310 CMR 7.00: *Appendix A*.

(e) In the case of any major stationary source of volatile organic compounds located in the area (other than a source which emits or has federal potential emissions of 100 tons or more of volatile organic compounds per year), whenever any physical change or change in the method of operation at that source results in any increase (other than a *de minimis* increase) in emissions of volatile organic compounds from any discrete operation, unit or other pollutant emitting activity at the source, such increase shall be considered a modification for purposes of 310 CMR 7.00: *Appendix A*, except that such increase shall not be considered a modification for such purposes if the owner or operator of the source elects to offset the increase by greater reduction in emissions of volatile organic compounds concerned from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1. If the owner or operator does not make such election, such change shall be considered a modification for such purposes, but in applying 310 CMR 7.00: *Appendix A*(4)(c) in the case of any such modification, the best available control technology (BACT), as defined in 310 CMR 7.00: DEFINITIONS, shall be substituted for the lowest achievable emission rate (LAER).

(f) In the case of any major stationary source of volatile organic compounds located in the area which emits or has federal potential emissions 100 tons or more of volatile organic compounds per year, whenever any physical change or change in the method of operation at that source results in any increase (other than a de minimis increase) in emissions of volatile organic compounds from any discrete operation, unit or other pollutant emitting activity at the source, such increase shall be considered a modification for purposes of 310 CMR 7.00: *Appendix A*, except that if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of volatile organic compounds from other operations, units or activities within the source at an internal offset ratio of at least 1.3 to 1, the requirements of 310 CMR 7.00: *Appendix A*(4)(c) (concerning the lowest achievable emission rate (LAER) shall not apply.

(g) 310 CMR 7.00: *Appendix A*(3)(e) and (f) apply to modifications at major stationary sources of $NO_x$ in the same way that they apply to sources of volatile organic compounds.

(4) Control technology review.

(a) A new major stationary source or major modification at an existing major stationary source shall meet each applicable emissions limitation under the Massachusetts SIP and each applicable emissions standard of performance under 40 CFR parts 60 (NSPS) and 61 (NESHAPS).

Appendix A: continued

(b) A new major stationary source shall meet the lowest achievable emission rate (LAER) for each pollutant subject to the provisions of 310 CMR 7.00: *Appendix A* that would have federal potential emissions in major amounts. This provision applies to each new emissions unit at which emissions would occur. Major amounts are as follows:

1. VOC - 50 tons or more per year.
2. $NO_x$ - 50 tons or more per year.
3. 100 tons per year or more of any other pollutant subject to regulation under the Act.

(c) A major modification shall meet the lowest achievable emission rate (LAER) for each pollutant subject to the requirements of 310 CMR 7.00: *Appendix A* which would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of the physical change or change in the method of operation in the unit being proposed. LAER will not be required for previous modifications included in the determination of net emissions increase considered in determining major modification status, but which are not to be modified as part of the proposed project.

(d) For phased construction projects, the determination of the lowest achievable emission rate (LAER) shall be reviewed and modified as appropriate at the latest reasonable time, but no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the stationary source may be required to demonstrate the adequacy of any previous determination of the lowest achievable emission rate to the next phase of construction.

(5) Reasonable Further Progress.

(a) Sufficient offsetting emissions shall be in effect such that the total emissions from existing sources in the area, from new or modified sources which are not major stationary sources, and from the proposed source will be sufficiently less than the total emissions from existing sources prior to the application for such plan approval to construct or modify so as to represent (when considered together with the SIP provisions required under sec. 172 of the Act) reasonable further progress by the time the proposed source or modification is to commence operation; and

(b) for the purposes of satisfying the requirements of 310 CMR 7.00: *Appendix A*(5)(a), the determination of total emissions at both the time prior to the application for a plan approval subject to the requirements of 310 CMR 7.00: *Appendix A* and the time such permitted source or modification would commence operation, shall be made in a manner consistent with the Massachusetts SIP approved by the EPA concerning baseline emissions for the demonstration of reasonable further progress and attainment of the national ambient air quality standards for the particular pollutant subject to review pursuant to 310 CMR 7.00: *Appendix A*.

(6) Emissions Offsets.

(a) Prior to the issuance of a plan approval for any emissions unit(s), for which offsets are required pursuant to 310 CMR 7.00: *Appendix A*, emission offsets must be made federally enforceable; and

(b) For a new major stationary source of NOx or major modification of a major stationary source of NOx located in a area that is not a nonattainment area, prior to commencing operation of any emission unit(s), for which offsets are required under 310 CMR 7.00: *Appendix A*, NOx emission offsets must actually occur and be obtained from the same source or other sources within the Ozone Transport Region. For a new major stationary source of VOC or major modification of a VOC source located in an area that is not a non-attainment area, prior to commencing operation of any emission unit(s), for which offsets are required under 310 CMR 7.00: Appendix A, VOC emission offsets must actually occur and be obtained from the same source or other sources within the Ozone Transport Region that contributes to a violation of the NAAQS in a non-attainment area that the new source or modification will impact. For a new major stationary source or major modification located in a nonattainment area, prior to commencing operation of any emission unit(s) for which offsets are required under 310 CMR 7.00: *Appendix A*, emission offsets must actually occur and be obtained from the same source or other sources in the same nonattainment area, except that such emissions reductions may be obtained from a source in another nonattainment area if:

1. The other area has an equal or higher nonattainment classification than the area in which the source is located; and

Appendix A: continued

2. Where the proposed new source or modified source is located in a nonattainment area, emissions from such other area contribute to a violation of a national ambient air quality standard in the nonattainment area in which the proposed new or modified source would construct.

(c) Emission offsets for a land-based stationary source may not be obtained from Outer Continental Shelf (OCS) sources. However, emission offsets for an OCS source may be obtained from land-based stationary sources.

(d) The increase in emissions of any applicable nonattainment air pollutant allowed from either the proposed new major stationary source or from the proposed changes at the major stationary source that are part of the major modification, shall be offset by an equal or greater reduction, as applicable, in the actual emissions of such air pollutant from the same or other sources.

(e) In meeting the requirements of 310 CMR 7.00: *Appendix A*(6)(d), the ratio of total actual emission reductions to the increase in actual emissions shall be as follows:

1. 1.2:1 of VOC or $NO_x$; or
2. 1:1 of any other pollutant subject to regulation under 310 CMR 7.00: *Appendix A.*

(f) Shutdowns.

1. Emissions reductions achieved by shutting down an existing source or curtailing production or operating hours below baseline levels may be generally credited if such reductions are real, surplus, permanent, quantifiable and federally enforceable. In addition, the shutdown or curtailment is creditable only if it occurred after December 31, 1990, and the following conditions have been met:
   a. the Department has submitted a completed emissions inventory as required by The Clean Air Act, § 182(a)(1)ct; and
   b. the Department has submitted complete revisions to 310 CMR 7.00: *Appendix A* as required by The Clean Air Act, § 182(a)(2)(C); and
   c. the Department submits the 15% VOC reduction plan required by the Clean Air Act, § 182(b)(1)(A); and
   d. the Department submits the attainment demonstration required by The Clean Air Act 182(c)(2); or
2. If any of the submissions in 310 CMR 7.00: *Appendix A*(6)(f)1.a. through d. are delinquent, incomplete or disapproved, emissions reductions from shutdowns or curtailments can not be used, unless the shutdown or curtailment occurred either on or after the date the new source plan approval application is filed or unless the applicant can establish that the proposed new source is a replacement for the shutdown or curtailed source, and the cutoff date provisions of *Appendix A*(6)(f)1. are observed.

(g) With respect to a proposed increase in VOC emissions, no emissions credit shall be allowed for reductions in any organic compound specifically excluded from the definition of "VOCs" in 310 CMR 7.00.

(h) Credit for an emissions reduction may not be claimed to the extent that the Department has relied on the reduction as a condition of the Massachusetts SIP, in demonstrating attainment or reasonable further progress, in issuing any permit or plan approval under 310 CMR 7.02(3)(j)6. (BACT requirement), 310 CMR 7.00: *Appendix A*, 40 CFR 52.21 (PSD), operating permits issued either under 310 CMR 7.00: *Appendix C* or pursuant to 40 CFR part 71 or otherwise required under the Act. Incidental emissions reductions which are not otherwise required under the Act may be creditable as emissions reductions for such purposes if such emissions reductions meet the applicable requirements of 310 CMR 7.00: *Appendix A*(6).

(i) Emission reduction credits (ERCs) withdrawn from the Massachusetts Emission Reduction Credit Bank (310 CMR 7.00: *Appendix B*(3)) may be used as offsets, providing the ERCs are federally enforceable and meet all of the requirements under 310 CMR 7.00: *Appendix A*(6).

(j) Emission reductions generated by the seasonal control of ozone precursors (VOC or $NO_x$), during the period May 1 through September 30, may be used at any time during the calendar year. Emission reductions generated by the seasonal control of VOC or $NO_x$, during the period October 1 through April 30, may only be used during the period October 1 through April 30th. Emission reductions generated by the seasonal control of carbon monoxide, during the period November 1st through February 28th, may be used at any time during the calendar year. Emission reductions generated by the seasonal control of carbon monoxide, during the period March 1 through October 31, may only be used during the period March 1st through October 31st.

Appendix A: continued

(7) Source Impact Analysis. The applicant shall demonstrate to the satisfaction of the Department that;

(a) the emissions offsets required under 310 CMR 7.00: *Appendix A*(6), when considered in conjunction with the proposed emissions increase will have a net air quality benefit in the affected area; and

(b) the emissions from the proposed new major stationary source or major modification will not contribute to nonattainment in, or interfere with maintenance by any other state of any national primary or secondary ambient air quality standard ; and

(c) the emissions from the proposed new major stationary source or major modification will not interfere with measures required to be included in the applicable implementation plan for any other State under a program for the prevention of significant deterioration or for the protection of visibility.

(8) Additional conditions for approval. In order for the Department to issue an approval under 310 CMR 7.00: *Appendix A*, the following conditions shall be met:

(a) All major stationary sources in Massachusetts owned or operated by the owner or operator of the proposed source (or by any entity controlling, controlled by, or under common control with such owner or operator) which are subject to federally enforceable emission limitations must be in compliance, or on a federally enforceable schedule for compliance, with all applicable emissions limitations and standards under the Act.

(b) By means of an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed new or modified stationary source, the owner or operator of the proposed stationary source or modification shall demonstrate to the satisfaction of the Department that the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

(c) The Administrator has not determined that the Massachusetts SIP is not being adequately implemented for the nonattainment area (as applicable) in which the proposed stationary source or modification is to be constructed in accordance with the requirements of part D of the Act.

(9) Public participation.

(a) The Department shall notify all applicants as to any administrative or technical deficiencies in the application or information submitted.

(b) After receipt of a technically complete application the Department shall:

1. Make a proposed decision as whether the plan approval application should be approved, approved with conditions, or disapproved.

2. Make available, in at least one location in each region in which the proposed source would be constructed, a copy of all materials the applicant submitted, a copy of the proposed decision, and a copy or summary of other materials, if any, considered in making the proposed decision.

3. Notify the public, by advertisement in a newspaper of general circulation in each region in which the proposed source would be constructed of the opportunity for comment at a public hearing in accordance with the provisions of M.G.L. c. 30A, § 2. as well as of the opportunity to submit written public comment to the Department.

4. Send a copy of the notice of public comment to the applicant, the EPA, and officials and agencies having jurisdiction over the location where the proposed construction would occur as follows: any other State or local air pollution control agencies, the chief executives of the city where the source would be located; any comprehensive regional land use planning agency, and any Federal Land Manager, or Indian Governing body whose lands may be affected by emissions from the source or modification.

5. Consider all public comments (written and oral) submitted at any public hearing(s) in making a final decision on the approvability of the application. The Department shall make all comments available for public inspection in the same locations where the Department made available preconstruction information relating to the proposed source or modification.

6. Make a final decision as to whether the plan approval application should be approved, approved with conditions, or disapproved.

Appendix A: continued

7. Notify the applicant in writing of the final decision and make such notification available for public inspection at the same location where the Department made available preconstruction information and public comments relating to the source.

(10) Source Obligation.

(a) Except as provided for in 310 CMR 7.00: *Appendix A*(10)(b),

1. any owner or operator who constructs or operates either a stationary source or modification not in accordance with the terms of the approval to construct issued under 310 CMR 7.00: *Appendix A*; or

2. any owner or operator of a stationary source or modification subject to 310 CMR 7.00: *Appendix A*, who commences construction after November 15, 1992 without applying for and receiving approval under 310 CMR 7.00: *Appendix A*,

shall be considered in noncompliance with 310 CMR 7.00: *Appendix A*, unless a complete application to construct or substantially reconstruct or alter under 310 CMR 7.02(1) was filed by November 15, 1992 and the change was approved by the Department.

(b) If an owner or operator of a stationary source began construction of a new source or a modification before the applicable date specified in 310 CMR 7.00: *Appendix A* (10)(b)(1. through 4.), then the owner or operator need not comply with 310 CMR 310 CMR 7.00: *Appendix A*.

1. If the source or modification resulted in an increase in actual emissions of VOCs, then the applicable date is January 10, 1980.

2. If the source or modification resulted in an increase in actual emissions of CO, then the applicable date is January 10, 1980, or the date on which the location in which the construction or modification occurred was declared in the Federal Register to be in nonattainment.

3. If the source or modification resulted in an increase in actual emissions of NOx, then the applicable date is November 15, 1990.

4. If the source or modification resulted in an increase in any other nonattainment pollutant, then the applicable date is the date on which the location in which the construction or modification occurred was declared in the Federal Register to be in nonattainment for that pollutant.

(c) Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

(d) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the Massachusetts SIP and any other requirements under local, State or Federal law.

(e) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation on the capacity of the source or modification to emit a pollutant, where such enforceable limitation was established after August 7, 1980, then the requirements of 310 CMR 7.00: *Appendix A* shall apply to the source or modification as though no previous approval had been issued on the source or modification.

NON-TEXT PAGE

## APPENDIX B: U EMISSION BANKING, TRADING, AND AVERAGING

(1) Introduction. 310 CMR 7.00: *Appendix B*(1) through (6) establishes principles and procedures which can be utilized by facilities to comply with the requirements of 310 CMR 7.18, 310 CMR 7.19 and 310 CMR 7.00: *Appendix A*. 310 CMR 7.00: *Appendix B* contains provisions to allow emission averaging or "bubbles" and provisions to allow for the creation and use of emission reduction credits to be "banked", used or traded among facilities.

(2) Definitions. The definitions found in 310 CMR 7.00 apply to 310 CMR 7.00: *Appendix B*. The following words and phrases shall have the following meanings as they appear in 310 CMR 7.00: *Appendix B*. Where a term is defined in the 310 CMR 7.00 definitions section and the definition also appears in 310 CMR 7.00: *Appendix B*, the definition in 310 CMR 7.00: *Appendix B* controls.

Actual Emissions means, the average rate, in tons per year, at which a unit actually emitted the pollutant during the two-year period which precedes the date of application and which is representative of normal production rates or activity levels. The Department shall allow the use of a different two year consecutive time period, within five years immediately prior to the date of application, upon a determination that the alternative two year period is more representative of normal source operation. Actual emissions shall be calculated using the eligible source's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

Allowable Emissions means the emissions rate of a source calculated using either the production or activity rates associated with the maximum rated capacity of the source , and the hours of operation or the permitted hours of operation or capacity provided that such permit is federally enforceable and so as not to exceed the following:

(a) Any applicable standards set forth in 40 CFR part 60 (NSPS) or 61 (NESHAPS);

(b) Any applicable Massachusetts SIP emissions limitation including a limitation with a future compliance date; or

(c) Any emissions rate specified as a federally enforceable permit condition, including a limitation with a future compliance date.

Area Source means stationary and non-road sources of emissions who are too small and/or too numerous to be individually included in a stationary source emission inventory examples being home heating furnaces, aircraft, commercial vessels, gas stations and lawn mowers.

Baseline means the emission level set for an eligible source and calculated in accordance with methods described in 310 CMR 7.00: *Appendix B*(3)(c), which reflects the lower of actual emissions, or allowable emissions and which serves as the level below which emission reductions are considered surplus and can be eligible for approval by the Department as Emission Reduction Credits (ERC). As future allowable emission rates or emission standards become effective, the lowest of future allowable emissions, allowable emissions or actual emissions will be the baseline below which reductions must be made to be considered surplus.

Bubble means an alternative emission control strategy where two or more existing emission points are regarded as being placed under a hypothetical bubble, which is then regarded as a single emission source.

Curtailment means a permanent reduction in hours of operation or process rate, said reduction approved in a permit issued by the Department.

Direct Determination means a calculation or measurement based on source specific information rather than from estimates of emission and control efficiencies.

Eligible Source means any stationary, area or mobile source of VOC, NOx or CO emissions which is eligible to participate in emissions banking and trading at any point in time.

Appendix B: continued

Emission Estimation means calculation of emissions using estimated emission factors and assumptions of control efficiency not based in whole or in part on actual measurement or detailed records for an emission unit.

Emission Limiting means a program or strategies that directly specify limits on total mass emission, emission related parameters (*e.g.*, emission rates per unit of product) or levels of emission reductions that are required to be met by eligible sources.

Emission Reduction Credit (ERC) means the actual air pollutant reductions from an emitting source that have been certified by the Department as enforceable, permanent, quantifiable, real, and surplus in accordance with the requirements of 310 CMR 7.00: *Appendix B.*

Enforceable means those limitations and conditions which are enforceable by the Department of Environmental Protection and the EPA. Examples of such enforceable mechanisms include, but are not limited to the following:

(a) Conditions in pre-construction permits issued pursuant to 40 CFR 52.21 (federal delegated PSD programs); or

(b) Limitations developed pursuant to 40 CFR Parts 60 (NSPS) and 61 (NESHAPS); or

(c) Requirements contained in the EPA-approved Massachusetts State Implementation Plan (SIP), or source-specific SIP revisions that are approved by EPA; or

(d) Conditions in pre-construction "plan approvals" issued by the Commonwealth of Massachusetts, provided that those pre-construction "plan approval" regulations have been approved by the EPA in the *Federal Register* as meeting the requirements of 40 CFR 51.160.

(e) Permits issued pursuant to generic bubble regulations that have been approved by EPA as adhering to the December 4, 1986, Emissions Trading Policy Statement.

(f) Information contained in a Department-issued Emission Reduction Credit approval for retrospectively approved ERCs, as to by what means the ERCs were created.

Future Allowable means the maximum emission rate, process rate or activity level assumed in the most recent Department adopted State Implementation Plan for Ozone or State Implementation Plan for Carbon Monoxide. An example might be the future allowable (1994) emission rate for Leather Coating operations at 27.4 pounds of VOC per gallon of solid applied [310 CMR 7.18(22)] which when applied to the two year average capacity utilization factor and two year average hours of operation for an eligible source, would result in the estimate of baseline starting on the rule effective date in 1994. Prior to this effective date, credit is calculated using a baseline that includes the lower of actual or allowable emissions at the time of application.

Irreversible Process Change means a process modification or equipment substitution that completely and irreversibly eliminates key emitting properties of the emission unit. For example, elimination of solvent use in a process line.

Mass ERC Bank means the Massachusetts registry for ERCs quantified by mass (*e.g*. tons). ERCs from this bank may be used either for compliance pursuant to 310 CMR *7.00: Appendix B*(3) or for "discrete" offsets pursuant to 310 CMR 7.00: *Appendix B*(3) and 310 CMR 7.00: *Appendix A.*

NEPOOL Marginal Emission Rate or Successor Organization Rate means the corresponding calendar year $NO_x$ emission rate determined by NEPOOL or a successor organization through accepted modeling or data gathering techniques reviewed and approved by the Department.

Netting means the mechanism used to secure an exemption of modifications at existing stationary sources from preconstruction permit requirements under 310 CMR 7.00 Appendix A (Emission Offsets and Nonattainment Review) and/or 40 CFR 52.21 (Prevention of Significant Deterioration) regulations which apply when there is a significant net emissions increase.

Appendix B: continued

Non-inventoried Emission Source Category means air pollutants emitted into the ambient air from any source category which has not been included in the Department's 1990 emission inventories.

Offset means the use of an Emission Reduction Credit to compensate for emission increases of a nonattainment pollutant from a new major stationary or modified major stationary source subject to the requirements of 310 CMR 7.00: *Appendix A.*

Permanent means that emission reductions implemented for the purpose of generating Emission Reduction Credit must be assured for the life of the corresponding Emission Reduction Credit through a federally enforceable mechanism.

Program Baseline means the level of emissions, or emission related parameters for each eligible source or group of sources from which the program results (*e.g.* quantifiable emission reductions) shall be determined. For purposes of 310 CMR 7.00: *Appendix B*, the program baseline shall be the 1990 Base Year Emission Inventory of Volatile Organic Compound, Oxides of Nitrogen and Carbon Monoxide.

Quantifiable means that the amount, rate, and characteristics of an emission reduction can be measured through a replicable method acceptable to the Department of Environmental Protection and the EPA.

Rate ERC Bank means the Massachusetts registry of ERC that have been certified at a continuous rate (i.e. tons per year). ERCs from the Rate ERC Bank may be used for the purposes of offsets pursuant to 310 CMR 7.00: *Appendix B*(3) and 310 CMR 7.00: *Appendix A.*

Real means the reduction in actual emissions released into the air.

Remaining Useful Life means the length of time for which the equipment that is being shut down would have continued to operate had the owner/operator chosen not to shut down the equipment and apply for certification of credits at that time. Remaining useful life shall be ten years except in those cases where the Department determines a shorter period is appropriate, or the applicant demonstrates to the Department's satisfaction that a period of longer than ten years is warranted. The Department will use the following criteria for making the determination including, but not limited to: the age of the equipment; the type of equipment; maintenance history; operating history; and industry norms. In any case, remaining useful life shall not exceed 20 years.

Replicable means methods which are sufficiently clear and unambiguous such that the same or equivalent results would be obtained by the application of the methods by different users.

Shutdown means the earlier of (1) the date that the Department verifies that the source is shutdown or 2) the date that operations and emissions from an emitting unit ceased and the associated emission units have been removed or rendered inoperable.

State Implementation Plan (SIP) means the most recently prepared plan or revision thereof required by the Clean Air Act, 42 USC Section 7410, which has been either adopted by the Department and submitted to the United States Environmental Protection Agency (EPA) for approval or approved by the United States Environmental Protection Agency (EPA), whichever is more stringent.

Surplus means, emission reductions beyond an established source baseline which, as such, are not required by the Department adopted SIP, relied upon in any applicable attainment demonstration, or credited in any RFP or milestone demonstration.

Transfer means the conveyance of ownership of an Emission Reduction Credit from one entity to another.

Appendix B: continued

Use for the purposes of 310 CMR 7.00: *Appendix B*, the term "use" shall mean to employ for emission averaging or emission trading an ERC such that the person who owns or controls the ERC has received a plan approval from the Department which factors the ERC into the emissions from the facility for purposes of compliance with emission limitations or emission offset requirements.

(3) Emission Reduction Credit Banking and Trading.

(a) Introduction and statement of purpose. The goal of the program, defined by 310 CMR 7.00: *Appendix B*(3), is to encourage the creation and trading of surplus emission reductions as Emission Reduction Credits (ERC) to be used for purposes of offsets, netting and cost effective compliance without interfering with any applicable requirements concerning attainment, reasonable further progress or any other applicable air pollution control requirement.

(b) Applicability.

1. Entry into this program is voluntary.

2. 310 CMR 7.00: *Appendix B*(3) applies to the owner/operator of eligible sources including stationary sources, area sources and mobile sources applying for certification of surplus emission reductions as emission reduction credits (ERC).

3. Nothing in 310 CMR 7.00: *Appendix B* shall require that ERCs be listed in either the Rate ERC Bank or the Mass ERC Bank if the ERCs are being transferred to other facilities operated or owned, in whole or part, by the creator of the ERCs, provided that the requirements of 310 CMR 7.00: *Appendix B*(3)(e) are met prior to use of the ERCs.

4. Nothing in 310 CMR 7.00: *Appendix B* shall require that emission reductions, created for the purpose of offsets, be submitted for approval through the emission banking program if the emission reductions are used by the facility or within facilities owned by the same economic entity which created the emission reductions and provided that the requirements of 310 CMR 7.00: *Appendix A* are met.

(c) Generation of Emission Reduction Credit.

1. General Principles which apply to generation of Emission Reduction Credits (ERC).

a. Emission reductions within Massachusetts shall be recognized as ERCs only after the approval of the Department has been obtained in accordance with 310 CMR 7.00: *Appendix B*(3).

b. Emission reductions generated for the purpose of creating ERCs must meet, at minimum, all of the following principles, to receive approval as emission reduction credits.

i. The reductions must have occurred after December 31, 1990.

ii. The reductions must be real reductions of emissions of: Volatile Organic Compounds (VOC), Oxides of Nitrogen (NOx), or Carbon Monoxide (CO);

iii. The reductions must be surplus in that they are reductions in emissions below the baseline established for the eligible source.

iv. The reductions must be permanent and the amount and duration of the reduction must be documented; and,

v. The reductions must be quantifiable, with a replicable basis for calculating the amount of reduction as well as reliable methods for assessing compliance with the emission rates after the reduction has been made, and the reductions must be enforceable.

c. Emission reductions cannot be recognized as ERCs if said reductions are required by Federal or Department permits, plan approvals, agreements, administrative or judicial orders, or other enforcement actions or regulations.

d. Emission reductions can only be eligible for certification pursuant to 310 CMR 7.00: *Appendix B*(3) if said reductions occur from emissions sources within the geographical boundaries of Massachusetts. ERCs generated by sources outside of the Commonwealth may be used by facilities within the Commonwealth pursuant to 310 CMR 7.00: *Appendix B*(3)(f).

e. Emission reductions eligible for credit are those emissions reductions below baseline for the eligible source.

f. Emission reductions considered eligible for consideration as ERCs include:

Appendix B: continued

i. Shutdown or curtailment provided that the applicant can demonstrate to the satisfaction of the Department that demand for the services or product will not or cannot shift to other similar sources in the State resulting in no net decrease in emissions from the source category. Where emission reductions from shutdowns of electric generating facilities will be used exclusively as offsets for new facilities pursuant to 310 CMR 7.00: *Appendix A*, the ERC will not be adjusted for shifting demand. If such reductions are to be deposited in the Mass ERC Bank, credit will be available only to the extent that the emission rate from the unit being shut down or curtailed is greater than the applicable NEPOOL marginal emission rate or successor organization rate.

ii. Control of an emission unit beyond that required by Massachusetts Air Pollution Regulations or federal law and regulations.

iii. Seasonal Controls with the recognition that VOC and NOx emission reductions created by the application of seasonal controls will be subject to use restrictions as defined in 310 CMR 7.00: *Appendix B*(3)(e)8.

iv. Early implementation of future emission controls provided that the reductions commence before promulgation of the regulations establishing the new emission controls. These reductions are surplus only up to the effective date for compliance with the program or emission controls. Credit will cease to accrue upon the effective date of the new emission controls.

v. Emission reductions which result from application of mobile and area source controls provided that the reductions meet all other requirements of 310 CMR 7.00: *Appendix B* including provisions for establishment of baseline and replicable quantification as well as compliance monitoring methods.

g. Emission reductions are not eligible for consideration as an ERCs if said reductions are generated by an un-inventoried area source category (*e.g.*, small bakeries) or if said reductions are generated by biogenic sources (*e.g.*, trees).

2. Calculation of Credit.

a. Credit shall be calculated by first calculating baseline emissions, second calculating the post reduction emissions, and third multiplying the difference between the baseline emissions and post reduction emissions by the applicable compliance assurance factor. The ERC amount is the result of complete application of these three steps.

b. Baseline emissions will be expressed in tons of pollutant emitted per day or per year, whichever is more appropriate and shall be further defined as ozone or non-ozone (October 1 - April 30) season.

Step 1:

c. Baseline emissions will be established for each stationary source according to the following formula:

baseline = ER x (CU x H)

Where:

ER equals the lower of the actual or allowable emission rate

ER shall be expressed as mass of emission per unit of production or thruput (*e.g.*, pounds of VOC per gallon of solids applied or pounds of NOx per million Btu)

CU equals the actual average hourly capacity utilization (*e.g.*, expressed in terms of millions of Btu per hour or numbers of gallons of solids applied in an hour).

H equals the actual number of hours of operation per day.

ERC, CU and H are based on average historical values for the factors for two representative years within the five years immediately prior to the date of application.

Appendix B: continued

d. Baseline emissions will be established for each area source measure according to the following formula:

baseline = ER x ACT

Where:

ER equals the emission rate as determined by the Department and EPA in the most recent emission inventory using EPA approved methods and emission factors including AP-42 and Volume IV for Area Source, or the EPA Off-road Study for off-road sources. Assumptions shall be consistent with the most recent adopted periodic emission inventory prepared by the Department.

ER must be the lower of actual, or allowable emission rate and shall be expressed as mass of emission per unit of production or thruput (*e.g.*, pounds per 1000 gallons burned or pounds per capita, as is appropriate)

ACT equals the actual average activity factor expressed in a manner so as to be consistent with the units required by the emission rate such as number of gallons burned, or number of persons affected.

e. Baseline emissions will be established for each Mobile Source by methods approved or published by EPA or the Department, including but not limited to:

i. Interim guidelines on the Generation of Mobile Source ERC, 58 FR 11134.

ii. Guidance for Implementation of Accelerated Retirement of Vehicle programs, U.S. EPA, February 1993.

iii. Program for Generation of Emission Credits by Urban Buses, U.S. EPA, January 1993.

3. Calculation of post-reduction emissions.

Step 2:

a. Creditable, workable and replicable methods must be used to quantify post-reduction emissions reflecting the real emission reduction below baseline emissions. The post-reduction emissions shall be calculated using methods as or more accurate than those used to calculate baseline emissions.

b. Post-reduction emissions for DSM shall be determined after implementation of these DSM measure(s) and based on review of historical records covering a period of no less than one year collected since implementation, and shall be calculated in conformance with guidance provided and approved by the Massachusetts DPU.

4. Calculation of the Emission Reduction Credit.

a. Step 3: The emission reduction is calculated by first subtracting post-reduction emissions from baseline emissions.

b. The emission reduction will be certified by the Department as an emission reduction credit after application of a compliance assurance multiplier to the resulting difference between baseline emissions and post-reduction emissions. The applicable compliance assurance multiplier will be determined by the Department within the ranges provided in the table below. Actual ERC adjustment will be set for individual circumstances and conditions within these ranges.

| Method of Compliance Assurance | Compliance Assurance Multiplier |
|---|---|
| Irreversible process change | 1.0 |
| Compliance Assessment by Direct Determination: | |
| Continuous Emission Monitoring System (CEMS) installed pursuant to 40 CFR part 75 | 1.0 |
| Mass Balance Reconciliation | 0.85 - 0.99 |
| CEMS other than 40 CFR part 75 | 0.80 - 0.95 |

Appendix B: continued

| | |
|---|---|
| Compliance Assessment by Testing: | |
| Periodic Stack Test / Emission Test | 0.80 - 0.90 |
| Testing of Capture Efficiency and control | |
| | |
| Emission Determinations using estimates of | |
| capture and control and/or emission factors | 0.50 - 0.80 |

i. The resulting amount of credit will be rounded to the nearest ton.

ii. Once the three step calculation has been completed, and the result rounded to the nearest ton, the resulting ERCs shall not be subject to adjustment of value.

c. ERCs certified from discrete, retrospective reductions shall be expressed in total tons and will be placed in the Mass ERC Bank. ERCs from the Mass ERC Bank may be used as offsets pursuant to 310 CMR 7.00: *Appendix A* with approval of the Department.

d. ERCs certified from either shutdowns or enforceable prospective over-control of emissions shall be expressed in tons per year, and will be placed in the Rate ERC Bank. In the event the owner of ERCs from a shutdown wishes to transfer the ERCs to the Mass ERC Bank, the Department will assign the ERCs from the shutdown a "remaining useful life" in years, which will be used to transfer the ERCs from the Rate ERC Bank to the Mass ERC Bank. If the ERC transferred are from shutdown of an electric generating facility, the Department will also subtract the NEPOOL marginal emission rate or successor organization rate replacement power in effect at the time of original certification of the ERCs.

(d) Procedure For Certification of Emission Reductions as ERC.

1. An application for certification of ERCs may be submitted in advance of the time when the reduction is actually made (prospective certification) or after the reduction has been made (retrospective certification).

2. Unapprovable sources of generation and quantities.

a. ERCs may not be generated from non-inventoried sources. In other words, only sources accounted for in SIP and RFP planning (inventoried sources) may be used to generate credits.

b. ERCs can be approved only where the emission reduction, as calculated under 310 CMR 7.00 *Appendix B*(3)(c)4.a., is greater than 5 tons per year for deposit in the Rate ERC Bank, or greater than 5 tons for the Mass ERC Bank.

3. For emission reductions implemented prior to January 1, 1994, an Emission Reduction Credit Application must be submitted to the Department by September 30, 1994.

4. For emission reductions implemented after January 1, 1994, an Emission Reduction Credit Application must be submitted to the Department within six months of:

a. the end date of the period being evaluated for a retrospective discrete emission reductions.

b. the approval date of a federally enforceable mechanism for prospective emission reductions other than 310 CMR 7.00 *Appendix B*(3).

5. Application Procedures.

a. Any person who owns or operates an emission unit at which an eligible emission reduction has occurred or will occur may submit an Emission Reduction Credit (ERC) application in accordance with the requirements of 310 CMR 7.00: *Appendix B.*

b. The ERC application shall be submitted on a standard form supplied by the Department with documentation provided by the applicant as to the calculation method for baseline and the post-reduction emissions as required by 310 CMR 7.00: *Appendix B*(3) as well as a proposed method for determining and assuring compliance.

c. ERC applications shall express emission reductions in tons, or in tons per year if for offsets, and indicate what portions of the reductions were made during the period May 1 - September 30 (ozone season).

d. ERC applications shall contain sufficient information to allow the Department to evaluate each emission reduction consistent with the requirements of 310 CMR 7.00: *Appendix B*(3).

Appendix B: continued

e. The ERC application shall be signed by a responsible official.

f. The ERC application shall comply with provisions of 310 CMR 4.00 *et seq*. for fees and permit procedures.

6. ERC approvals will be emission-limiting, either prospectively or retrospectively, as applicable. An ERC approval will be issued pursuant to 310 CMR 7.00: *Appendix B*(3). To be made federally enforceable, it must contain the specific quantifiable emission limits reflecting the change in emission rate, operating conditions and other measures taken to generate the ERCs. All emissions limitations, controls, and other requirements imposed by such approvals must be at least as stringent as all other applicable limitations and requirements contained in the SIP, enforceable under the SIP, or otherwise federally enforceable. All limitations, controls, and other requirements imposed by such approvals must be permanent, quantifiable, and enforceable as a practical matter.

a. In order to confirm emission reductions claimed in conjunction with an application for a prospective Emission Reduction Credit, the Department will require sources to implement compliance assurance methods such as monitoring, recordkeeping and reporting as part of the ERC certification approval.

b. The Department may also require the applicant to conduct source testing utilizing Department or EPA approved test methods, including but not limited to those methods referenced in 40 CFR Part 60 Appendix A, or 310 CMR 7.18(2), or 310 CMR 7.19(13), as appropriate for the source.

c. In addition, the Department may require regular submittal of information which the Department determines is necessary to maintain the integrity of the ERC.

7. A person having ownership of ERCs has the exclusive right to possess and dispose of the ERCs subject to the applicable restrictions contained in the certification approval and 310 CMR 7.00: *Appendix B*(3).

8. ERCs in the Rate ERC Bank shall revert to the state to be retired for the benefit of the environment if they have not been used by midnight of the date ten years from the date of Department approval. ERCs in the Mass ERC Bank shall not expire or cease to exist after a set period of time, even if not traded or used.

(e) Withdrawal, Transfer, and Use of Emission Reduction Credits.

1. The Department must issue a federally enforceable approval to a person seeking to use ERCs prior to the use of any ERCs. This includes approvals to construct or operate issued to stationary sources and a practical equivalent to be issued to persons who have applied to use ERCs in area and mobile source situations.

2. Persons seeking to use ERCs must obtain an amount of credit equal to five percent more than the amount needed for the offset or compliance calculation. This five percent increment shall be held by the applicant and not used or sold until such time that the Department determines whether or not the excess credit can be released for use. Such a determination shall be made by the Department on or about January 1, 1999. If the Department determines it cannot release said ERCs for use, the ERCs will by operation of law be retired for the benefit of the environment.

3. ERCs may not be used to meet the requirements of, or result in violation of federal New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAPS), the requirements for Lowest Achievable Emission Rate (LAER), the requirements for Best Available Control Technology (BACT), Maximum Achievable Control Technology (MACT), Title IV, section 183(e) and 183(f) of the Clean Air Act, cause a violation of a National Ambient Air Quality Standard for criteria pollutants, cause a violation of a PSD increment or create a nuisance condition. ERCs may not be used to stay below an applicability threshold of the Clean Air Act or 310 CMR 7.00 *et seq.*

4. ERCs may not be used to comply with performance standards established by regulation, such as, operating procedure requirements (*e.g.* covers on degreasers, operating within a specific temperature range) or to comply with requirements for record keeping, reporting or facility testing as may be required by the Department.

5. Where ERCs are used for netting under 310 CMR 7.00: Appendix A, the ERCs must meet the criteria in 310 CMR 7.00: *Appendix A* Net Emissions Increase(a) through (g), as applicable.

Appendix B: continued

6. Certified ERCs can be traded between emission sectors (*e.g.* from mobile sources to stationary sources) provided that credit generated by stationary source reductions may under no circumstances be used to comply with any mobile source requirement.

7. ERCs generated through emission reductions of one pollutant can not be used for trading or averaging with another pollutant.

8. ERCs generated by the control of ozone precursors (VOC and NOx) during the period May 1- September 30, can be used at any time during the calendar year. ERCs generated by control of ozone precursors during the period October 1 through April 30, can only be used in the same season as generated (October 1 through April 30).

9. ERCs generated by the use of seasonal control of carbon monoxide during the period November 1- February 28, can be used at any time during the calendar year. ERCs generated through use of seasonal control of carbon monoxide during the period March 1 through October 31 can only be used in the in the same season as generated (March 1- October 31).

10. ERCs approved from shutdown or curtailment of an emission unit where the emitting operations are based on manufacturing activity and the operations, and jobs associated with the emitting activity are shifted outside of Massachusetts, are eligible for use only in Massachusetts. This provision does not apply to electric generating facilities.

11. ERCs generated by shutdowns are presumptively available only for offsets pursuant to 310 CMR 7.00: *Appendix A*. If at any time prior to use of ERCs as offsets an owner of said ERCs wishes to use them for compliance purposes, the Department will assign a "remaining useful life" to said ERCs which will be used to transfer the ERCs from the Rate ERC Bank to the Mass ERC Bank. If the ERCs were generated by an electric generating facility shutdown, the Department will also subtract the NEPOOL marginal emission rate or successor organization rate in effect at the time of original ERC certification. Offset credits generated outside of the Commonwealth of Massachusetts are not eligible for conversion to mass-based credits.

12. ERCs from the Rate ERC Bank used as offsets pursuant to a 310 CMR 7.00: *Appendix A* approval, must be retired at the approved annual offset rate regardless of the facility's annual actual emissions. In addition, ERCs from the Mass ERC Bank used as offsets pursuant to a 310 CMR 7.00 *Appendix A* approval, must be obtained for the current year of operation plus four subsequent years of operation; and five years of ERCs, available for use in each of those five years, must be held at all times for the approval to remain valid. These ERCs will be retired on December 31 of each year, beginning with the first calendar year or any portion thereof, in which the facility operates.

13. ERCs utilized as offsets are considered "used" commencing with startup of a facility; ERCs with an expiration date prior to actual startup of a source needing offsets will not be acceptable as offsets for the facility.

14. ERCS created by $NO_x$ emissions reductions during the period from May 1 through September 30 in either 1997 or 1998 may be converted to $NO_x$ allowances pursuant to 310 CMR 7.27(9)(d).

(f) Interstate Trading of ERCs.

1. Federally enforceable emission reductions generated by facilities outside the Commonwealth may be used in the Commonwealth, and ERC generated in the Commonwealth may be used in other states or jurisdictions, provided that the State within which the other facility is located has executed a Memorandum of Understanding concerning emission trading with the Commonwealth.

2. Said Memoranda of Understanding will include at a minimum:

a. the requirement that creditable emission reductions be real, surplus, permanent, quantifiable and federally enforceable;

b. discounts as appropriate to make ERCs generated outside of the Commonwealth equivalent with ERCs generated in the Commonwealth;

c. restrictions on allowable directionality of trades if necessary;

d. state-specific notification or other requirements, as necessary;

e. ERC lifetimes and expiration dates, if applicable;

f. ozone season definition and restrictions;

Appendix B: continued

g. the requirement that any ERC generated outside of the Commonwealth can be used in the Commonwealth only in compliance with 310 CMR 7.00: *Appendix B*(3)(e), except where specifically stated otherwise; and

h. averments of cooperation on enforcement and reporting.

3. Interstate emission reduction credit trades must comply with the specific requirements of the applicable Memorandum of Understanding.

(g) Emission Reduction Credit Registry.

1. Upon satisfaction of all applicable requirements of 310 CMR 7.00: *Appendix B*, approved emission reduction credits shall be registered in an Emission Reduction Credit Registry operated or overseen by the Department. Such registry shall include:

a. Name of generator and contact person;

b. Pollutant associated with the ERCs;

c. Amount of ERC expressed in tons, or in tons per year if banked in Rate ERC Bank;

d. Any seasonal use restrictions on the ERCs;

e. Whether the ERCs may be used or are reserved as part of a 5% set aside pursuant to 310 CMR 7.00: *Appendix B*(3)(e)2.

2. ERCs shall be tracked within the Emission Reduction Credit Registry by assigning a serial number to each ton of ERC, or ton per year if banked for use as offsets. The serial number will provide information about the type of pollutant, type of ERC (rate/mass), seasonality and first year available for use.

3. Information related to emission reduction credits maintained in the Emission Reduction Credit Registry shall be available for public review.

(h) Program review.

1. The Department shall maintain records of ERCs and shall account for unused ERCs as "emitted" within the context of RFP and periodic emission inventory reports.

2. The Department shall conduct a review of the emission trading program beginning in 1995 and every three years thereafter. This review shall evaluate the handling of applications for ERC approval and use, and the legitimacy of approved ERCs, and may include review of ERCs creation and use protocols, and compliance assessment of sources using ERCs.

3. The program review shall also include assessment of the impact of the program on Reasonable Further Progress, attainment or maintenance of the National Ambient Air Quality Standards, and ascertain if there is any significant effect from interstate trades pursuant to 310 CMR 7.00: *Appendix B*(3)(f).

4. Should a review reveal the need to make program revisions, the Department shall, within six months of the review findings, propose the appropriate program revisions.

5. The results of Department reviews and the findings shall be reported in the context of required RFP and periodic inventory reports (every three years).

6. Program Baseline for this program is the most recent revision of the 1990 Base Year Emission Inventory of Volatile Organic Compound, Oxides of Nitrogen and Carbon Monoxide and the State Implementation Strategy Plan submittal of November 15, 1993 which describes programs and strategies to be used by the Commonwealth to attain and maintain NAAQS for ozone and carbon monoxide. Source baseline as described in previous sections is defined within the context of the program baseline (the lower of actual, allowable or future allowable emissions) so as to avoid interference with attainment and maintenance of NAAQS.

(4) Emission Averaging (Bubble).

(a) Introduction.

1. The purpose of 310 CMR 7.00 *Appendix* B(4) is to specify requirements by which one or more facilities operated or controlled by the same economic entity can comply with either 310 CMR 7.18 or 7.19, respectively, using emissions averaging, herein referred to as a bubble, under either 310 CMR 7.18(2)(b) or 7.19(14).

2. In an emissions bubble, a person who operates or controls one or more facilities with more than one emission unit subject to regulation by 310 CMR 7.00, may apply to the Department to meet the requirements of either 310 CMR 7.18 or 7.19 through a mix of control techniques. The emissions of the various emission units are averaged over a 24 hour period, except as provided for in 310 CMR 7.00 *Appendix* B(4)(e)5.

Appendix B: continued

(b) Applicability.

1. 310 CMR *Appendix* B(4) applies to any person who operates or controls a facility(ies) subject to either 310 CMR 7.18 (3) through (7), (10) through (12), (14) through (16), (21) through (27) or 310 CMR 7.19(4), (5), (7), (8), (12), that set an emission limitation in either pounds of VOC per gallon of solids applied or pounds of $NO_x$ per million Btu of heat input, respectively, and who chooses to comply by emission averaging.

2. For bubbles to comply with 310 CMR 7.18, emission units subject to emissions standards other than pounds of VOC per gallon of solids applied (*e.g.* such as pounds of VOC per pound of solids applied, pounds of VOC per 1000 square feet covered, metric units, *etc*.) may be averaged with other emission units subject to an emission limitation in the same units of measure.

3. For bubbles under 310 CMR 7.19, 310 CMR 7.19(14)(a), (b) and (c) describe which emissions units can be averaged together to comply with 310 CMR 7.19 and under what replicable and equivalent methods.

4. A bubble can not be used to comply with work practice requirements of either 310 CMR 7.18 or 7.19.

5. For purposes of 310 CMR 7.00 *Appendix* B(4), emission bubbles are only allowed for the purpose of compliance at a single facility or multiple facilities which are operated by or under the control of the same economic entity.

6. Nothing in 310 CMR 7.00 *Appendix* B(4) relieves a facility from having to comply with other requirements of 310 CMR 7.00, *et seq*. as may be applicable.

NON-TEXT PAGE

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7. For facilities which have Department approved bubbles where the application was received prior to May 25, 1988, the approved bubble conditions, recordkeeping and reporting requirements shall remain in force and no revision of said bubble approvals is required by 310 CMR 7.00 *Appendix* B(4), unless and until the facility wishes to have the existing bubble approval modified. At that time, the request to modify the bubble shall be subject to 310 CMR 7.00 *Appendix* B(4).

(c) General Bubble Requirements.

1. Compliance with emission requirements, through use of a bubble, will be approved by the Department providing that:

a. The bubble has been approved by the Department in accordance with 310 CMR 7.00 *Appendix* B(4).

b. At no time may the use of a bubble result in a violation of a National Ambient Air Quality Standard for nitrogen dioxide ($NO_2$), particulate matter or carbon monoxide (CO) as determined by modelling.

c. At no time may the use of a bubble result in total VOC or $NO_x$ emissions at a facility exceeding the applicable emission limitations in 310 CMR 7.18 or 7.19 averaged over a 24 hour period (except as provided for in 310 CMR 7.00 *Appendix* B(4)(e)5.) for emission units in the bubble.

d. At no time may use of a bubble result in total VOC emissions exceeding a monthly facility emission baseline as calculated under 310 CMR 7.00: *Appendix* B(4)(e)2. At no time may use of a bubble with an averaging time longer than 24 hours result in $NO_x$ emissions exceeding the daily cap as calculated in 310 CMR 7.00 Appendix B(4)(e)5.

e. Organic compounds, that are specifically excluded from the definition of VOC in 310 CMR 7.00, shall not be used to emission average.

f. At no time may use of a bubble under 310 CMR 7.00 *Appendix* B(4) be used to meet the requirements of, or result in an increase in emissions for any emission unit above a New Source Performance Standard (NSPS), National Emission Standard for Hazardous Air Pollutants (NESHAP), the requirement for Best Available Control Technology (BACT), the requirement for Lowest Achievable Emission Rate (LAER) or Maximum Achievable Control Technology (MACT).

g. Emission reductions used in a bubble must be real in that the emission reductions must be from an emission unit which actually operated within the two year time period immediately preceding the application for the bubble.

h. Emission reductions used in a bubble must be permanent and the amount and duration of the reduction must be documented.

i. Emission reductions used in the bubble must be quantifiable with a replicable method for calculating the amount of reduction, as well as, a replicable method for assessing compliance with the emission rates after the reduction has been made.

j. Emission limitations must be federally enforceable and will be documented in the facility's emission control plan approval issued by the Department.

(d) Application for a Bubble.

1. Application for approval of an emission bubble shall be made as part of the submittal to the Department of an emission control plan pursuant to either 310 CMR 7.18(20) or 310 CMR 7.19(3) and shall include:

a. Identification of all emission units to be included in the bubble, and

b. Demonstration of how compliance will be met and maintained, and

c. Demonstration that all emission units included in the bubble are operated by or under the control of the same economic entity, and

d. Demonstration that the bubble will not increase emissions of an emission unit included in the bubble above the following standards as applicable:

i. A Best Available Control Technology (BACT) determination pursuant to 310 CMR 7.02(3), or 40 CFR 52.21, or

ii. A Lowest Achievable Emission Rate (LAER) determination pursuant to 310 CMR 7.00 *Appendix* A, or

iii. A Federal New Source Performance Standard (NSPS [40 CFR Part 60]), or

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iv. A National Emission Standard for Hazardous Air Pollutants (NESHAP [40 CFR Part 61]), or

v. A Maximum Achievable Control Technology (MACT) determination pursuant to 40 CFR Part 63.

e. For bubbles to comply with 310 CMR 7.19, evidence that the bubble will not cause an exceedance of the National Ambient Air Quality Standard for nitrogen dioxide ($NO_2$) or carbon monoxide (CO).

f. For facilities wishing to bubble either VOC or $NO_x$ emissions, documentation that the bubble will result in total VOC or $NO_x$ emissions, respectively, in compliance with the applicable emission limitation on a 24-hour basis as calculated under 310 CMR 7.00: *Appendix* B(4)(e)1. Exceptions to this averaging period may be granted by the Department as provided for in 310 CMR 7.00 *Appendix* B(4)(e)5. For VOC bubbles, the person must document that the bubble will result in total VOC emissions below the emissions baseline on a monthly basis.

g. Documentation that emission reductions used in the bubble are real, quantifiable, permanent and federally enforceable.

2. After approval of 310 CMR 7.00 Appendix B(4) by EPA into the Massachusetts SIP, certain applications to bubble will still require EPA approval. Persons wishing to include mobile and area sources in a bubble are required to have the approval of the EPA prior to inclusion of those sources in the bubble.

3. Sources subject to enforcement action require the approval of EPA prior to use of a bubble to comply with 310 CMR 7.18 or 7.19. If EPA does not object to the use of a bubble by any facility subject to enforcement action during the public comment period, then this will be taken as EPA approval to bubble.

(e) Bubble Calculation.

1. In order to comply with a bubble for VOC or $NO_x$, the combined actual emissions (AcE) over a daily (or other period as allowed by 310 CMR 7.00 *Appendix* B(4)(e)5.) from all emission units in the bubble must be less than or equal to the allowable emission total (AlE) as determined by the following equations:

$$AcE = (Ac_1 \times B_1) + (Ac_2 \times B_2) + (...) + (Ac_n \times B_n)$$

$$AlE = (A_1 \times B_1) + (A_2 \times B_2) + (...) + (A_n \times B_n) + ERC$$

Where:

AcE = the combined actual emissions from the facility in pounds per day.

AlE = the allowable emissions from the facility in pounds per day.

$Ac_1$, $Ac_2$,...$Ac_n$ = the actual emission rate of each emission unit (*e.g.* for VOC; pounds of VOC per gallon of solids applied; for $NO_x$, pounds of $NO_x$ per million Btu heat input) included in the bubble. Where a single CEMS is used to determine the emission rate of more than one emission unit, this will be a combined emission rate.

$A_1$, $A_2$,...$A_n$ = the most stringent applicable emission limitation for each unit of production (*e.g.* for VOC; pounds of VOC per gallon of solids applied; and for $NO_x$, pounds of $NO_x$ per million Btu heat input).

$B_1$,$B_2$,...$B_n$ = the actual number of production units processed each day (e.g. for VOC: gallons of solids applied; for $NO_x$; million Btu heat input per day).

ERC = the daily quantity of federally enforceable emission reduction credits (ERCs) from sources of either VOC or $NO_x$ emissions, certified by the Department under 310 CMR 7.00 Appendix B(3).

2. In addition to 310 CMR 7.00 *Appendix* B(4)(e)1., in order to comply with a bubble for VOC the total combined actual emissions, over a calendar month, from all emission units in the bubble must be less than the baseline emissions determined by the following equation:

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$$BE = (ER \times CU \times H) + (ERC \times D)$$

Where:

BE = the baseline emissions from the facility in pounds per month. Baseline emissions for a bubble is the sum of the baseline emissions for all emission units in the bubble.

ER = Emission rate specified in terms of mass emission per unit of production or throughput (*e.g.* pounds of VOC per gallon of solids applied) representative of the 1990 emission rate, the future allowable emission rate as determined by the SIP, 310 CMR 7.18 or other federally enforceable emission rate, whichever is lowest.

CU = Average hourly capacity utilization (e.g. gallons of solids applied per hour).

H = average number of hours of operation per month.

D = Number of days per month that the ERC generating facility operates.

ERC = the daily quantity of federally enforceable ERCs from emission units emitting VOC certified by the Department under 310 CMR 7.00 Appendix B(3).

3. In order to determine the average hourly Capacity Utilization (CU) and average number of hours of operation per month (H) in 310 CMR 7.00 *Appendix* B(4)(e)2., the facility shall average the CU rate and monthly H over the two calendar year period immediately preceding the date of the application for a bubble. Documentation in sufficient detail to enable Department staff to replicate the determination of CU and H must be submitted with the application.

4. Should it be determined that the two year historical production information required to determine CU and H is not representative of normal historical production for the facility, the applicant may submit suitable and sufficient documentation to demonstrate to the Department that two alternative consecutive years within the five year period preceding the application should be used to determine CU and H for the facility. The Department shall have final approval of the use of alternative historical production information.

5. Should it be determined for a $NO_x$ bubble that a 24 hour averaging period is insufficient to respond to the production demands at a specific facility, a facility operator or controller may submit suitable and sufficient documentation to demonstrate to the Department that an averaging period of up to and including 30 days for the bubble is more feasible given the production process and product requirements of the specific facility. Applications for a bubble with an averaging period of greater than 24 hours shall include a commitment from the facility to maintain a daily "cap" on maximum total emissions. The cap shall be determined according to the following equation:

$$Cap = (A_1 \times EI_2 \times H) + (A_2 \times EI_2 \times H) + (....) + (A_N \times EI_n \times H) + ERC$$

Where:

Cap = The emission cap for the facility in pounds per day. The emission cap for a bubble is the sum of the emission caps for all emission units in the bubble.

$A_1$, $A_2$,...$A_n$ = The emission rate for each emission unit specified in terms of mass emission per unit of production (e.g. pounds of $NO_x$ per million Btu) representative of the 1990 emission rate, the future allowable emission rate as determined by the SIP, 310 CMR 7.19 or other federally enforceable emission rate, whichever is lowest.

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$EI_1$, $EI_2$,...$EI_n$ = The maximum energy input capacity for each emission unit in million Btu per hour.

H = 24 hours per day.

ERC = the daily quantity of federally enforceable ERCs from emission units emitting $NO_x$ certified by the Department under 310 CMR 7.00 Appendix B(3).

(f) Department Review of a Request to Bubble. The following conditions apply to bubble applications;

1. The Department shall review each application for a bubble in a complete submittal of an emission control plan pursuant to 310 CMR 7.18(20) and 7.19(3).
2. An approved emissions bubble shall be in effect for a period of no more than five years from the date of Department final approval. However, for facilities subject to 310 CMR 7.00 Appendix C, with five year terms or less, the expiration date of the bubble shall be identical with the expiration date of the operating permit. At least nine months prior to the expiration of the bubble, the facility must reapply for permission to bubble. The Department shall review the bubble for compliance and may either renew the bubble or allow the bubble to expire. Should the bubble expire, the facility that held the bubble shall return to complying with applicable regulations based on continuous compliance for each regulated emission unit which was formerly in the bubble. Bubbles that do not already contain an emissions cap will not be required to take one as part of the renewal. For facilities with existing caps, new caps will not be recalculated.
3. The emission limitations in a bubble approval may be specific for each emission unit or may be expressed as a multi-emission unit average.

(g) Compliance Determination.

1. The Department shall determine compliance with the terms and conditions of the bubble through any means the Department judges to be adequate based upon the criteria listed below:
   a. The provisions and emission limitations of any approved bubble shall be incorporated in the approval of the emission control plan submitted under 310 CMR 7.18(20) or 7.19(3).
   b. Said emission control plan approval shall include, but not be limited to source specific emission limitation (*e.g.* pounds of VOC per gallon of solids applied; pounds of $NO_x$ per million Btu heat input) and emission cap (*e.g.* pounds of VOC per month; pounds of $NO_x$ per day) limits where applicable, record keeping requirements and test methods used to determine compliance.
   c. Compliance with this approval shall be determined utilizing Department and EPA approved test methods and/or continuous emissions monitoring system, including but not limited to those methods referenced in 310 CMR 7.13, 7.14, 7.18(2), 7.19(13) as appropriate for the facility and emissions units.
   d. In order for a facility to demonstrate compliance with the emission limitations of a bubble it is required that records shall be maintained. Records shall be kept on a daily basis for each emissions unit in the bubble and shall be specific enough to demonstrate compliance with the emission limits of the bubble for the facility as a whole. Record keeping shall include, but not be limited to:
      i. Process information and identification of equipment;
      ii. For surface coating operations, coating formulation information including the name of the coating, the color of the coating, the identification number for the coating as it relates to coating consumption information, the density of the coating, the total VOC contained in the coating by weight percent, the solids content of the coating as a volume percent, the percent by weight of exempt solvents as identified in the definition of VOC at 310 CMR 7.00 and the formulation of the diluents used or mixed in the coating (pounds VOC per gallon of diluent);
      iii. For surface coating, daily coating/diluent consumption rate for each emissions unit in the bubble. Daily total of solvents used in clean-up.

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iv. For bubbles to comply with 310 CMR 7.19, comply with the recordkeeping requirements contained in 310 CMR 7.19(13)(d).

v. Daily emissions or emission rates calculated in a manner to be consistent with the compliance averaging period approved for the facility.

vi. Any other information determined to be necessary by the Department to demonstrate compliance.

2. Records shall be kept at the facility and maintained for a five year period. The records must be accessible for review by the Department or EPA.

3. Persons holding an approved bubble plan must submit to the appropriate regional office of the Department quarterly (January - March, April - June, July -September, October - December) summary calculations based on daily emission calculations of 1) actual emissions, 2) allowable emissions, 3) whether actual emission exceeded allowable emissions over the reporting period, and 4) whether the facility was in compliance with the emission baseline cap for each day/month. Said submittal must be made 30 days after the end of the quarter for which the report is being prepared.

4. Any exceedance of the bubble emissions limitations must be recorded and reported to include the date of exceedance and quantity of excess emissions and reported to the Department by the thirtieth of the month following the close of the calendar quarter in which the exceedance occurred.

(5) Enforcement.

(a) The Department shall enforce the provisions of 310 CMR 7.00: *Appendix B* under applicable law and regulations.

(b) For purposes of 310 CMR 7.00: *Appendix B*(3), a violation of the emission limitation provisions of any permit issued or modified to reflect the creation of an emission reduction credit shall be enforced at the point of ERC creation.

(6) Public participation. The following conditions apply to applications under 310 CMR 7.00: *Appendix* B:

(a) For persons applying under 310 CMR 7.00: *Appendix* B(4) to comply with either 310 CMR 7.18 or 7.19, the emission control plan approved by the Department must be approved by EPA as a SIP revision if EPA has not approved 310 CMR 7.00 *Appendix* B(4) as a part of the Massachusetts SIP.

(b) For persons applying for Emission Reduction Credit under 310 CMR 7.00 *Appendix* B(3), the approval issued by the Department must be approved by EPA as a SIP revision if EPA has not approved 310 CMR 7.00 *Appendix* B(3) as a part of the Massachusetts SIP.

(c) The Department shall notify all applicants as to any administrative or technical deficiencies in the application or information submitted.

(d) After receipt of a technically complete application the Department shall:

1. Make a proposed decision as to whether the application should be approved, approved with conditions, or a decision that the application should be disapproved.

2. Make available, in at least one location in the region in which the facility is located, a copy of all non-confidential materials the applicant submitted, a copy of the proposed approval, and a copy or summary of other materials, if any, considered in making the proposed approval.

3. For persons owning or operating a facility applying under either 310 CMR 7.00: *Appendix* B(3) or (4), the Department will publish a notice of public hearing in accordance with M.G.L. c. 30A. The Department shall allow for a 30 day public comment period following the published notice. After the public hearing on a proposed approval and the close of the public comment period the Department will issue a final approval or disapproval.

4. Send a copy of the notice of public comment to the applicant, the EPA, and officials and agencies having jurisdiction over the community in which the facility is located, including local air pollution control agencies, chief executives of said community and any regional land use planning agency.

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5. Consider all public comments in making a final decision whether or not to approve the application. The Department shall make all comments available for public inspection in the same location(s) where the Department made available information relating to the proposed approval under 310 CMR 7.00: *Appendix* B(3) or (4).
6. Make a final decision as to whether the plan approval application should be approved, approved with conditions, or disapproved.
7. Notify the applicant and the EPA in writing of the final decision and make such notification available for public inspection at the same location where the Department made available information and public comments relating to the source.

(7) Greenhouse Gas Credit Banking and Trading.

(a) Introduction and Statement of Purpose. The goal of the program set forth in 310 CMR 7.00: *Appendix B*(7) is to reduce, avoid or sequester emissions of greenhouse gas (GHG) in order for affected facilities as defined in 310 CMR 7.29 ("affected facilities") to use GHG Credits for compliance with the applicable provisions of 310 CMR 7.29(5)(a)5.

(b) Definitions. The definitions in 310 CMR 7.00 apply to 310 CMR 7.00: *Appendix B*(7). However, the following terms have the following meanings when they appear in 310 CMR 7.00: *Appendix B*(7). Where a term defined in 310 CMR 7.00 definitions also appears in 310 CMR 7.00: *Appendix B*(7)(b), the definition in 310 CMR 7.00: *Appendix B*(7)(b) controls.

Additional means GHG emission reductions, avoided emissions, or sequestered emissions that are not required by local, state or federal law or regulation, or as part of a local, state or federal permit, plan, or plan approval, agreement, administrative or judicial order, or as part of an enforcement action (including such laws, regulations, permits, plans, plan approvals, agreements, orders or actions taken to reduce other pollutants) at the time of submittal of a certification application. A requirement to obtain a permit or plan approval under local, state, or federal law solely for the purpose of constructing, installing, or operating a voluntary emission reduction, avoided emission, or sequestered emission project shall not be considered when determining whether or not such project is additional.

Afforestation means the conversion of land that has been in a non-forested state for at least the ten years prior to the filing of an initial application for GHG Credit certification to a forested state.

Avoided Emissions means emissions of a GHG that do not occur and which would have otherwise occurred if not for specific projects undertaken.

Cancel, Cancelled, or Cancellation means transferring an allowance or credit to a cancellation account, or otherwise terminating such allowance or credit in a manner consistent with its program of origin, to prevent subsequent use in a regulatory or voluntary program, or use for any purpose other than compliance with the $CO_2$ emissions standards of 310 CMR 7.29.

Cancellation Account means the account established in a Kyoto Protocol signatory country for purposes of canceling allowances. Such account will not be established by the Department.

Carbon Dioxide Equivalent or $CO_{2e}$ means the weight of a quantity of a GHG multiplied by its Global Warming Potential.

Certification means the process of reviewing and conditionally approving a quantity of emission reductions, avoided emissions or sequestered emissions as GHG Credits.

Clean Development Mechanism, or CDM, means a mechanism, created under the Kyoto Protocol, that allows for the creation and use of CDM CERs to demonstrate compliance with emissions targets established by the Kyoto Protocol.

Clean Development Mechanism Certified Emissions Reduction, or CDM CER, means a greenhouse gas emissions offset currency created for projects that reduce, avoid, or sequester emissions of greenhouse gases in developing countries. CDM CERs are issued by the Executive Board of the Clean Development Mechanism, and are usable for meeting country-specific greenhouse gas emissions targets established by the Kyoto Protocol.

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Coastal Waters means the waters within the 12-mile limit pursuant to the Tariff Act of 1930 19 USC § 1401.

Energy Conservation Measure means an action that reduces demand for electricity. An Energy Conservation Measure means the installation or implementation of one or more of the following measures:

(a) the design, acquisition, and installation of projects which result in energy savings, or

(b) the modification of maintenance and operating procedures in a building or facility which result in energy savings, or

(c) the installation, replacement, or modification of equipment, fixtures, or materials in a building or facility which reduce energy consumption, and include, but are not limited to, modifications to windows and doors; caulking and weather-stripping, insulation; automatic energy control systems; hot water systems; equipment required to operate steam, hydraulic, and ventilation systems; plant and distribution system modifications including replacement of burners, furnaces or boilers; devices for modifying fuel openings; electrical or mechanical furnace ignition stems; utility plant system conversions; replacement or modification of lighting fixtures; and energy recovery systems.

Energy Conservation Measures do not include reductions in labor, load shifting, or measures that do not reduce energy use directly.

Enforceable means enforceable by the Department.

European Union Emissions Trading Scheme or EU ETS means a multi-country, multi-sector greenhouse gas emission trading scheme implemented in 2005 by the European Commission to control emissions of greenhouse gases.

European Union Emissions Trading Scheme Phase II Allowance or EU ETS Phase II Allowance means an allowance that can be used during the second trading period of the EU ETS, which lasts from 2008-2012, and can be used to demonstrate compliance with emission reduction targets established by the European Commission.

GHG Credit means a credit based on an amount of emission reductions, avoided emissions or sequestered emissions of a GHG. One GHG Credit has an assigned value of one ton of carbon dioxide equivalent. GHG Credits shall be expressed in whole tons. When certifying or verifying GHG Credits, the number of GHG Credits is rounded down for decimals less than 0.5 and rounded up for decimals of 0.5 or greater.

GHG Expendable Trust means the trust established pursuant to 801 CMR 50.00 for the purpose of providing a separate segregated interest-bearing account for the receipt of payments made pursuant to 310 CMR 7.00: *Appendix B*(7)(d)5.

GHG Registry means the database of Massachusetts GHG Credits that have been certified, verified, voided or used.

Global Warming Potential or GWP means the ratio of the global heat trapping effect, direct and indirect, of one mass unit of a gas to that of the same mass unit of carbon dioxide over 100 years. In implementing 310 CMR 7.00: *Appendix B*(7), the Department shall utilize the GHG GWPs, as published by the Intergovernmental Panel on Climate Change (IPCC), at the time of submittal of a certification application.

Greenhouse Gas or GHG means any of the gases for which a GWP is listed by the Intergovernmental Panel on Climate Change.

Kyoto Protocol means an international commitment, adopted in Kyoto on December 11 1997, to stabilize greenhouse gas emissions.

Appendix B: continued

Leakage means displacement of reduced, avoided, or sequestered GHG emissions to an area or location outside of the boundary of a project which reduced, avoided or sequestered the GHG emissions.

Permanent means that GHG emission reductions, avoided emissions, or sequestered emissions implemented for the purpose of generating GHG Credits must be assured for the life of the corresponding GHG Credits.

Phase II of the EU ETS means the second trading period of the EU ETS, which lasts from 2008-2012.

Real means actual.

Renewable Energy Generation Measure means an energy supply-side measure using sources that are essentially inexhaustible or regenerative. Renewable sources of energy include, but are not limited to, wood, geothermal, wind, photovoltaic and solar thermal energy.

Sequestered Emissions means carbon that has successfully been captured and securely stored that would have otherwise been emitted to or remained in the atmosphere.

Verifiable means that emission reductions, avoided emissions or sequestered emissions can be determined through replicable (as defined in 310 CMR 7.00: *Appendix B*(2)) methods which are acceptable to the Department.

Verification means the process of determining the extent to which certified GHG emission reductions, avoided emissions or sequestered emissions actually occurred.

(c) Applicability.

1. Entry into this GHG Banking and Trading Program is voluntary.
2. 310 CMR 7.00: *Appendix B*(7) applies to affected facilities and any other person applying for certification or verification of GHG Credits.
3. GHG Credits certified or verified under 310 CMR 7.00: *Appendix B*(7) may only be used to satisfy the requirements of 310 CMR 7.29(5)(a)5., except as provided in 310 CMR 7:00: *Appendix B*(7)(h).
4. Applications for certification or verification of GHG Credits pursuant to 310 CMR 7.00: *Appendix B*(7)(e) may be submitted by any person.
5. Applications to verify and use EU ETS Phase II Allowances and CDM CERs pursuant to 310 CMR 7.00: *Appendix B*(7)(i) may be submitted only by affected facilities.

(d) Creation of GHG Credits.

1. GHG Credits may be created by projects which reduce emissions, avoid emissions, or sequester emissions. Examples include, but are not limited to: landfill gas combustion; sulfur hexafluoride ($SF_6$) capture; afforestation; natural gas, oil and propane end-use efficiency; methane capture from farming operations; stationary, area and mobile source projects; renewable energy projects; and energy conservation measures.
2. The following are not eligible for certification as GHG Credits: nuclear power generation, under-water and under-ground sequestration, and over-compliance with the cap and rate limitations in 310 CMR 7.29 by affected facilities.
3. Except as allowed pursuant to 310 CMR 7.00: *Appendix B*(7)(d)4, emission reduction, avoided emission or sequestered emission projects shall be located within the geographic limits of:
    a. Connecticut, Delaware, Maine, Massachusetts, Maryland, New Hampshire, New Jersey, New York, Rhode Island, Vermont, or the coastal waters thereof; or,
    b. The United States, or the coastal waters thereof, not including those regions specified in 310 CMR 7.00: *Appendix B*(7)(d)3.a.

Appendix B: continued

4. Offset Trigger Price.
   a. The Department shall establish an offset trigger price for 2006, 2007, and 2008. The offset trigger price for calendar year 2006 shall be $6.50 per ton of $CO_{2e}$. For each calendar year after 2006, until such time as the offset trigger price is exceeded, the Department shall publish the new offset trigger price by January 31st, which shall be equal to the previous year's offset trigger price adjusted up or down according to the previous year's Consumer Price Index.
   b. By February 15, 2007, the Department shall determine whether the offset trigger price for the previous calendar year was exceeded, or whether there are insufficient GHG Credits available for purchase at or below the offset trigger price for the previous calendar year in the geographic region specified in 310 CMR 7.00: *Appendix B*(7)(d)3. In determining whether the offset trigger price for the previous calendar year was exceeded, the Department may consider the average calendar year price of GHG Credits or of applied-for GHG Credits for the previous year, or any other relevant information.
   c. Notwithstanding 310 CMR 7.00: *Appendix B*(7)(d)3., if the Department determines by February 15, 2007 that the offset trigger price for the previous calendar year was exceeded, or that there are insufficient GHG Credits available for purchase at or below the offset trigger price for the previous calendar year in the geographic region specified in 310 CMR 7.00: *Appendix B*(7)(d)3., then, for all subsequent years, applicants may apply for certification and verification of projects that occur anywhere on Earth, and certification and verification of greenhouse gas allowances and credits from any allowance or credit system.
   d. By June 1, 2008, the Department shall determine whether there are insufficient GHG Credits available for purchase at or below the offset trigger price in the geographic regions specified in 310 CMR 7.00: *Appendix B*(7)(d)3. In determining whether there are insufficient GHG Credits available for purchase at or below the offset trigger price, the Department may consider the average price of GHG Credits or applied-for GHG Credits, or any other relevant information. Notwithstanding 310 CMR 7.00: *Appendix B*(7)(d)3., if the Department determines by June 1, 2008 that there are insufficient GHG Credits available for purchase at or below the offset trigger price in the geographic regions specified in 310 CMR 7.00: *Appendix B*(7)(d)3., then, pursuant to 310 CMR 7.00: *Appendix B*(7)(i), affected facilities may apply to verify and use EU ETS Phase II Allowances and CDM CERs that are eligible for use under Phase II of the EU ETS.
5. Trust Trigger Price.
   a. The Department shall establish a trust trigger price for 2006, 2007, and 2008. The trust trigger price for calendar year 2006 shall be $10.00 per ton of $CO_{2e}$. For each calendar year after 2006, the Department shall publish the new trust trigger price by January 31st, which shall be equal to the previous year's trust trigger price adjusted up or down according to the previous year's Consumer Price Index plus 2%.
   b. By February 15, 2007, the Department shall determine whether the trust trigger price for the previous calendar year was exceeded. In making this determination, the Department may consider the average calendar year price of GHG Credits, of applied-for GHG Credits, or of projects funded or credits or allowances purchased by the GHG Expendable Trust for the previous year, or any other relevant information.
   c. Notwithstanding 310 CMR 7.00: *Appendix B*(7)(d)3. and 4., if the Department determines by February 15, 2007 that the trust trigger price for the previous calendar year was exceeded, then, to demonstrate compliance with 310 CMR 7.29(5)(a)5., affected facilities may pay into the GHG Expendable Trust at the price established pursuant to 310 CMR 7.00: *Appendix B*(7)(d)5.a. to offset all or a portion of emissions above the historical actual emissions or excess emissions pursuant to 310 CMR 7.29(5)(a)5.c. and d., so that a combination of GHG Credits and payments into the GHG Expendable Trust equals emissions above historical actual emissions plus excess emissions.

Appendix B: continued

6. Notwithstanding 310 CMR 7.00: *Appendix B*(7)(d)3., 4., and 5., if, at any time prior to September 1, 2009, the Commissioner determines that the price of GHG Credits or of applied-for GHG Credits substantially exceeds either of the price thresholds established in 310 CMR 7.00: *Appendix B*(7)(d)4. or 5., or if insufficient GHG Credits are available, then the Commissioner may, after public notice in the Environmental Monitor, and an opportunity for public comment: expand the geographic scope; allow payments into the GHG Expendable Trust at the rate set forth in 310 CMR 7.00: *Appendix B*(7)(d)5; or reduce the annual average $CO_{2e}$ tonnage requirements for certification of projects under 310 CMR 7.00: *Appendix B*(7)(e)3. If the geographic scope is expanded pursuant to 310 CMR 7.00: *Appendix B*(7)(d)6., then applicants for projects that occur outside of the geographic limits of the United States or the coastal waters thereof shall follow the procedures in 310 CMR 7.00: *Appendix B*(7)(i). This provision shall have no effect on and after September 1, 2009.

7. In order to be certified or verified as GHG Credits pursuant to 310 CMR 7.00: *Appendix B*(7), emission reductions, avoided emissions, or sequestered emissions shall be real, additional, verifiable, permanent, and enforceable and occur on or after January 1, 2006.

8. In the case of sequestered emissions, in order for a GHG Credit to be permanent, the owner shall, at a minimum, place the land within the sequestration project boundary under a legally binding instrument, acceptable to the Department, such that the sequestered emissions remain captured and securely stored in perpetuity.

9. In order to be certified or verified as GHG Credits pursuant to 310 CMR 7.00: *Appendix B*(7), emission reductions, avoided emissions, or sequestered emissions shall be generated only by projects built and generating energy (in the case of certain avoided emissions), or built and in use, or installed and operational (in the case of emission reductions or sequestered emissions) on or after January 1, 2006.

10. Except as provided in 310 CMR 7.00: *Appendix B*(7)(h), GHG Credits may be created for emissions reduced, avoided, or sequestered up to and including December 31, 2008, provided administratively complete applications for certification and verification are submitted to the Department no later than March 31, 2009. The Department shall have sole discretion to determine whether applications for certification and verification of GHG Credits are administratively complete.

(e) Procedure For Certification and Verification of Emission Reductions, Avoided Emissions, or Sequestered Emissions that Occur Within the Geographic Limits of the United States and the Coastal Waters Thereof as GHG Credits.

1. An application for certification of GHG Credits may be submitted to the Department in advance of the time when the emission reduction, avoided emission, or sequestered emission actually occurs (prospective certification) or after the emission reduction, avoided emission, or sequestered emission has actually occurred (retrospective certification).

2. In order for GHG Credits to be eligible for verification, an application for verification of GHG Credits shall be submitted to the Department within two calendar years after the end of the calendar year in which the emission reduction, avoided emission, or sequestered emission actually occurred. Applicants may apply for verification a maximum of two times per calendar year per approved certification.

3. For project-based emission reductions, avoided emissions, or sequestered emissions located within the geographic scope set forth in 310 CMR 7.00: *Appendix B*(7)(d)3.a., only those projects which generate an annual average over the period applied for of 5,000 or more tons $CO_{2e}$, as calculated under 310 CMR 7.00: *Appendix B*(7)(d), are eligible to be certified as GHG Credits. For project-based emission reductions, avoided emissions, or sequestered emissions located within the geographic scope set forth in 310 CMR 7.00: *Appendix B*(7)(d)3.b., only those projects which generate an annual average over the period applied for of 20,000 or more tons $CO_{2e}$, as calculated under 310 CMR 7.00: *Appendix B*(7)(d), are eligible to be certified as GHG Credits.

4. Application Procedures for projects.

a. Applications are required for certification and verification of GHG Credits from emissions reduction, avoided emission and sequestration projects.

Appendix B: continued

b. The GHG Credit application shall be submitted on a form supplied by the Department and shall include but not be limited to: a complete description of the project; a quantification protocol that details the calculation method for the quantification of pre- and post-project emissions for emission reductions, quantity of avoided emissions, or quantity of sequestered emissions; and a proposed method for determining, monitoring and assuring compliance.

c. GHG Credit applications shall express emission reductions, avoided emissions, and or sequestered emissions in whole tons of $CO_{2e}$. When certifying or verifying GHG Credits, the number of GHG Credits is rounded down for decimals less than 0.5 and rounded up for decimals of 0.5 or greater.

d. GHG Credit applications shall contain sufficient information to allow the Department to evaluate each emission reduction, avoided emission or sequestered emission consistent with the requirements of 310 CMR 7.00: *Appendix B*(7). Where applicable, the applicant shall specify the best management practice used to determine an emissions baseline.

e. GHG Credit applications shall be submitted by and bear the signature of a responsible official having the legal authority to bind the applicant.

f. GHG Credit applications shall comply with provisions of 310 CMR 4.00 *et seq*. for fees and permit procedures as applicable.

g. Concurrent participation in other registries and certification programs.

i. If an applicant has submitted information relative to the emission reductions, avoided emissions, or sequestered emissions for which the applicant is seeking certification under 310 CMR 7.00: *Appendix B*(7) to any other certification system, registry or inventory, then the applicant shall submit a copy of such information with its application for certification of GHG Credit in Massachusetts. The applicant shall state the status of its submittal to such other certification system, registry or inventory.

ii. If an applicant for GHG Credit fails to comply with 310 CMR 7.00: *Appendix B*(7)(e)4.g.i., then the Department may deny any GHG Credit applied for and void any GHG Credits that may have been approved. GHG Credits shall be voided in cases where the GHG Credit is found to have been used for a purpose other than those specified in 310 CMR 7.00: *Appendix B*(7).

h. GHG Credit certification and verification applications shall contain a description of potential project leakage, and describe how such leakage was or will be monitored and avoided. The Department shall void GHG Credits to the extent of any leakage that has been identified.

i. GHG Credit applications shall document the negotiated or anticipated price per ton of GHG Credit applied for.

6. Conditions of GHG Credit Certification and Verification Approvals.

a. The Department may approve, approve with conditions, or deny GHG Credit applications.

b. The Department may require applicants to implement compliance assurance methods such as testing, monitoring, recordkeeping and reporting as part of the GHG Credit certification and verification approval.

c. The Department may consider scientific uncertainty and the extent to which a project may be harmful to the environment or public health when certifying or verifying GHG Credits.

(f) Public participation procedures for certification and verification applications pursuant to 310 CMR 7:00: *Appendix B*(7).

1. The Department shall publish, at the applicant's expense, a notice of public comment on a proposed approval, conditional approval, or disapproval. The Department will allow a 30-day public comment period following publication of the notice, and may hold a public hearing. After the close of the public comment period, the Department will issue a final decision.

2. 310 CMR 7.00: *Appendix B*(7)(f) shall apply to applications for certification and verification pursuant to 310 CMR 7.00: *Appendix B*(7), instead of the procedures under 310 CMR 7.00: *Appendix B*(6).

3. The public participation procedures of 310 CMR 7.00: *Appendix B*(7)(f) and 310 CMR 7.00: *Appendix B*(6) shall not apply to applications for use pursuant to 310 CMR 7.00: *Appendix B*(7)(I)5.

Appendix B: continued

(g) Use and Purchase of GHG Credits.

1. To the extent that affected facilities use GHG Credits to comply with 310 CMR 7.29(5)(a)5., only GHG Credits verified under 310 CMR 7.00: *Appendix B*(7) may be used.

2. GHG Credits that have been used to satisfy any GHG liability or requirement other than 310 CMR 7.29, with the exception of requirements to disclose environmental and other attributes of electricity generation, shall not be eligible for use to comply with the requirements of 310 CMR 7.29.

3. Any person who purchases a GHG Credit from any source shall report the price paid per GHG Credit to the Department within 30 days of purchase.

5. Nothing in 310 CMR 7.00: *Appendix B*(7) or 310 CMR 7.29(5)(a)5. shall be construed to limit the authority of the Department to terminate, void, or limit GHG Credits that have been certified or verified.

6. If the Department determines that any emission reductions, avoided emissions, or sequestered emissions used to generate GHG Credits are not real, additional, verifiable, permanent, or enforceable as defined in 310 CMR 7.00: *Appendix B*(7)(b), such GHG Credits shall become void.

7. Any affected facility using voided GHG Credits shall replace the voided GHG Credits with an equivalent amount of valid GHG Credits and shall demonstrate compliance with this provision within one year of the date that the Department determines that such GHG Credits are void.

8. Violations of the requirements, for purposes of 310 CMR 7.00: *Appendix B*(7), may be enforced against the affected facility, any person who applied for certification or verification of GHG Credits, or any combination thereof. Nothing in 310 CMR 7.00: *Appendix B*(7) shall limit the ability of the Department to take enforcement action for violations of 310 CMR 7.29 or 310 CMR 7.00: *Appendix B*(7).

(h) Exchange of GHG Credits for $CO_2$ Budget Trading Program $CO_2$ Allowances.

1. Eligibility. GHG Credits shall be eligible for exchange with $CO_2$ Budget Trading Program $CO_2$ Allowances provided:

a. The project from which the GHG Credits were derived is not an offset project type listed under 310 CMR 7.70(10)(c)1.a.

b. The GHG Credits were not created from allowances or credits from another carbon constraining program.

c. An administratively complete application for certification of GHG Credits was submitted to the Department no later than January 25, 2008. The Department shall have sole discretion to determine whether an application for certification of GHG Credits is administratively complete.

2. Verification Deadline. GHG Credits may be created for emissions reduced, avoided, or sequestered up to and including December 31, 2012, provided:

a. The GHG Credits meet the requirements of 310 CMR 7.00: *Appendix B*(7)(h)1.; and

b. An administratively complete application for verification is submitted to the Department no later than March 31, 2013. The Department shall have sole discretion to determine whether an application for verification of GHG Credits is administratively complete.

3. Exchange.

a. At any time after January 1, 2009 and prior to December 1, 2013, any person may apply to the Department for $CO_2$ Budget Trading Program $CO_2$ Allowances in exchange for GHG Credits that meet the requirements of 310 CMR 7.00: *Appendix B*(7)(h)1. and 2. and which have been verified by the Department pursuant to 310 CMR 7.00: *Appendix B*(7)(e) and (f).

b. The Department shall exchange one $CO_2$ Budget Trading Program $CO_2$ allowance set aside pursuant to 310 CMR 7.70(5)(c)1.a. for every two GHG Credits provided to the Department pursuant to 310 CMR 7.00: *Appendix B*(7)(h)3.a.

c. The Department shall retire all GHG Credits exchanged for $CO_2$ Budget Trading Program $CO_2$ Allowances.

(i) Procedures for Verification and Use of EU ETS Phase II Allowances and CDM CERs that are Eligible for Use Under Phase II of the EU ETS.

1. Eligibility. Provided the geographic scope is expanded beyond the United States and its coastal waters pursuant to 310 CMR 7.00: *Appendix B*(7)(d)4. or 6., the following are eligible to be used to demonstrate compliance with the $CO_2$ emissions standards of 310 CMR 7.29(5)(a)5. provided they have been verified.

Appendix B: continued

a. EU ETS Phase II allowances; and,
b. CDM CERs provided that:
i. The CDM CERs are acceptable and valid for use in Phase II of the European Union Emissions Trading Scheme at the time of application for verification;
ii. The CDM CERs were not created for a project type listed under 310 CMR 7.00: *Appendix B*(7)(d)2.; and
iii. The CDM CERs are permanent.

2. For purposes of 310 CMR 7.00: *Appendix B*(7), EU ETS Phase II Allowances and CDM CERs that are eligible for use under Phase II of the EU ETS are presumed to be certified GHG emission reductions, avoided emissions, or sequestered emissions.

3. Applications for verification shall be submitted in a form determined by the Department and shall include but not be limited to:
a. Name of the allowances and credits;
b. Name of the regulatory scheme and issuing body of the allowances or credits;
c. Where applicable, the type of project for which the CDM CERs were created;
d. Serial numbers of the allowances and credits;
e. Total tons of $CO_{2e}$ represented by the allowances and credits;
f. Demonstration that the CDM CERs are acceptable and valid for use with Phase II of the EU ETS at the time of application for verification;
g. Identification of the owner of the allowances and credits;
h. Certification by the relevant regulatory body that the allowances and credits have been issued;
i. The price paid, or to be paid, for such allowances or credits.

4. Applications for verification shall be for not less than 20,000 tons $CO_{2e}$, or 18,144 metric tons $CO_{2e}$.

5. Applications to use verified EU ETS Phase II Allowances and verified eligible CDM CERs for compliance with the $CO_2$ emission standards in 310 CMR 7.29(5)(a)5., shall be submitted in a form determined by the Department and shall include but not be limited to a demonstration and certification that the allowances or credits were cancelled to prevent their use for any other regulatory or voluntary purposes other than for compliance with 310 CMR 7.29(5)(a)5.
a. This demonstration shall include but not be limited to:
i. Evidence that the allowance or credit was actually purchased;
ii. A legal document or other written statement issued by the relevant regulatory body that the allowances and credits have been cancelled; and,
iii. Evidence that the allowance or credit has not and cannot be used for any other regulatory or voluntary program.
b. The certification statement shall be signed under the pains and penalties of perjury by a Responsible Official of the affected facility and the entity that cancelled the allowance or credit (if not the affected facility).

6. Application Deadlines.
a. Administratively complete applications submitted pursuant to 310 CMR 7.00: *Appendix B*(7)(i)3. shall be submitted to the Department no later than March 31, 2009.
b. Administratively complete applications submitted pursuant to 310 CMR 7.00: *Appendix B*(7)(i)5. shall be submitted to the Department no later than June 30, 2009.
c. The Department shall have sole discretion to determine whether applications submitted pursuant to 310 CMR 7.00: *Appendix B*(7)(i)3. or 5. are administratively complete.

7. The Department will make a finding regarding the administrative completeness for applications submitted pursuant to 310 CMR 7.00: *Appendix B*(7)(i) within 15 business days of submittal, and will make a consistency determination within 30 days of its finding that an application is administratively complete.

8. The Department may approve, approve with conditions, or deny applications submitted pursuant to 310 CMR 7.00: *Appendix B*(7)(i)3. or 5.

9. Verified cancelled allowances or credits are not GHG Credits under 310 CMR 7.00: *Appendix B*(7) and cannot be transferred, exchanged pursuant to 310 CMR 7.00: *Appendix B*(7)(h), or used for any purpose other than compliance with the $CO_2$ emissions standards of 310 CMR 7.29, or by any entity other than the affected facility that submitted an application pursuant to 310 CMR 7.00: *Appendix B*(7)(i)3. and 5.

NON-TEXT PAGE

## APPENDIX C: OPERATING PERMIT AND COMPLIANCE PROGRAM

(1) Definitions: Terms used in 310 CMR 7.00: *Appendix C* are defined at 310 CMR 7.00: *Definitions* or in 310 CMR 7.00: *Appendix C*. Where a term is defined in both 310 CMR 7.00: *Definitions* and in 310 CMR 7.00: *Appendix C*, the definition in 310 CMR 7.00: *Appendix C* is applicable.

Affected Source means a source that includes one or more affected units.

Affected State means any state:

(a) Whose air quality may be affected and is contiguous to Massachusetts; or

(b) Which is located within 50 miles of a facility subject to the operating permit and compliance program in Massachusetts.

Affected Unit means a fossil fuel fired combustion device subject to the emission reduction requirements or limitations under Title IV (Acid Rain) of 42 U.S.C. 7401.

Allowance means an authorization by the Administrator of the United States Environmental Protection Agency (EPA) under the Acid Rain Program, to emit up to one ton of sulfur dioxide during or after a specified calendar year.

Applicable Requirement means all of the following as they apply to emissions units or control equipment in a facility subject to the requirements of 310 CMR 7.00: *Appendix C*. This includes requirements that have been promulgated or approved by EPA through rule making at the time of issuance but have future-effective compliance dates:

(a) Any standard or other requirement provided for in the applicable implementation plan, contained at 310 CMR 7.00 approved or promulgated by EPA through rulemaking under 42 U.S.C. 7401, Title I that implements the relevant requirements of 42 U.S.C. 7401, including any revisions to that plan promulgated in 40 CFR Part 52;

(b) Any term or condition of any approval issued by the Department pursuant to any regulation under 310 CMR 7.00 which has been approved or promulgated through rulemaking under 42 U.S.C. 7401, Title I, including parts C or D (310 CMR 7.00: *Appendix A* or 40 CFR 52.21 PSD approvals), of 42 U.S.C. 7401;

(c) Any standard or other requirement under 42 U.S.C. 7401, The Clean Air Act, § 111, including § 111(d) (New Source Performance Standards (NSPS));

(d) Any standard or other requirement under 42 U.S.C. 7401, The Clean Air Act, § 112, including any requirement concerning accident prevention under 42 U.S.C. 7401, The Clean Air Act, § 112(r)(7) (National Emission Standard for Hazardous Air Pollutants (NESHAPS));

(e) Any standard or other requirement of the acid rain program under Title IV of 42 U.S.C. 7401 or the regulations promulgated thereunder;

(f) Any requirement(s) established pursuant to 42 U.S.C. 7401, § 504(b) (monitoring and analysis) or § 114(a)(3) (enhanced monitoring 40 CFR Part 64 regulations);

(g) Any standard or other requirement governing solid waste incineration, under 42 U.S.C. 7401, The Clean Air Act, § 129;

(h) Any standard or other requirement for consumer and commercial products, under 42 U.S.C. 7401, The Clean Air Act § 183(e);

(i) Any standard or other requirement for tank vessels under 42 U.S.C. 7401, The Clean Air Act, § 183(f);

(j) Any standard or other requirement of the program to control air pollution from outer continental shelf sources, under 42 U.S.C. 7401, § 328;

(k) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under 42 U.S.C. 7401, Title VI, unless the EPA has determined that such requirements need not be contained in an operating permit;

(l) Any national ambient air quality standard or increment or visibility requirement under 42 U.S.C. 7401, Title I, part C but only as it would apply to temporary sources permitted pursuant to 42 U.S.C. 7401, § 504(e); and

(m) Any other standard or requirement contained in 310 CMR 7.00 that has not been approved or promulgated by EPA through rulemaking under 42 U.S.C. 7401, Title I. These applicable requirements would be listed as a "state only" enforceable provision of an operating permit.

Appendix C: continued

Complete Application means an application, filed on form(s) specified by the Department, that is completed consistent with the criteria set forth in the instructions for the application form(s). To be deemed complete, an application must provide all information required pursuant to 310 CMR 7.00: *Appendix C*(5)b., except that applications for permit modifications or amendments need supply such information only if it is related to the proposed change. Information submitted must be sufficient to evaluate the subject source(s) and its application; and to determine all applicable requirements, and shall be submitted over the signature of a responsible official who certifies the submitted information is in accordance with 310 CMR 7.00: *Appendix C*(5)(b)9. and (5)(c). The source(s)' ability to operate without a permit, as set forth in 310 CMR 7.00: *Appendix C*(11) (application shield), shall be in effect from the date the application is determined or deemed to be complete until the final permit is issued, provided that the applicant submits any requested additional information by the deadline specified by the Department.

Designated Representative shall have the meaning given to it in 42 U.S.C. 7401, § 402(26) and the regulations promulgated thereunder.

Draft Permit means the version of an operating permit which is released for an opportunity for comment by the public, EPA or an affected state in compliance with 310 CMR 7.00: *Appendix C*(6)(a) prior to the Department's final decision on an operating permit application.

Emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, operator error or decision to keep operating despite knowledge of any of these things.

Emissions Unit(s) means any part or activity of a facility that emits or has the potential to emit any regulated air pollutant or any pollutant listed under 42 U.S.C. 7401, the Clean Air Act, § 112(b). This term is not meant to alter or affect the definition of the term "unit" for purposes of 42 U.S.C. 7401, Title IV (the acid rain provisions). Further clarification of the scope of "emission unit(s)" is provided by the Department by policy.

Emissions Allowable Under the Permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard), or a federally enforceable emissions cap.

Facility means any installation or establishment and associated equipment, located on the same, adjacent or contiguous property, capable of emissions and are under control of the same person.

Final Operating Permit means the version of an operating permit issued by the Department that has completed all review procedures required by 310 CMR 7.00: *Appendix C* including EPA review.

Fugitive Emissions are those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening.

General Operating Permit means a standardized operating permit that the Department may make applicable to numerous similar operation(s) or facilities under 310 CMR 7.00: *Appendix C*(15).

Hazardous Air Pollutant (HAP) means an air contaminant listed by EPA as a HAP, pursuant to 42 U.S.C. 7401, § 112. That list is incorporated by reference herein, together with all amendments and supplements thereto. A copy of the list is available from the Department.

Appendix C: continued

Laboratory Hoods means a boxlike non-production structure intended for placement on a table or bench; the bench and the hood may be one integral structure. The opening(s) is provided with a sash or sashes that move vertically or horizontally to close the opening(s). Provisions are made for exhausting air from the top or back of the hood, and adjustable internal baffles are provided to obtain air flow distribution across the open face(s). Laboratory hoods may include those used for special purposes such as, but not limited to, capturing gases from equipment such as atomic absorption, gas chromatograph, liquid pouring or mixing stations and heat sources. It may additionally include floor mounted hoods with sash and/or doors for closing the open face.

Major Source means any stationary source (or any group of stationary sources that are located on one or more contiguous or adjacent properties, and are under common control of the same person (or persons under common control)) belonging to a single major industrial grouping and that are described in 310 CMR 7.00: *Appendix C* Major Source. For the purpose of defining "major source," a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same Major Group (*i.e.*, all have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987. Notwithstanding the previous statement, for the purpose of determining major source under 42 U.S.C. 7412, The Clean Air Act, §112, all hazardous air pollutants as defined under 42 U.S.C. 7412, The Clean Air Act, § 112 shall be summed regardless of the SIC code classification of the process emitting said pollutant(s).

(a) A major source under 42 U.S.C. 7401, The Clean Air Act § 112 which is defined as:

1. For pollutants other than radionuclides, any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, ten tons per year (tpy) or more of any hazardous air pollutant which has been listed pursuant to 42 U.S.C. 7401, The Clean Air Act, § 112(b), 25 tpy or more of any combination of such hazardous air pollutants, or such lesser quantity as the Administrator may establish by rule. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or

2. For radionuclides, "major source" shall have the meaning specified by the Administrator by rule.

(b) A major stationary source of air pollutants, as defined in 42 U.S.C. 7602, The Clean Air Act, § 302, that directly emits or has the potential to emit, 100 tpy or more of any air pollutant (including any major source of fugitive emissions of any such pollutant, as determined by rule by the Administrator). The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of 42 U.S.C. 7602, The Clean Air Act, § 302(j), unless the source belongs to one of the following categories of stationary source:

1. Coal cleaning plants (with thermal dryers);
2. Kraft pulp mills;
3. Portland cement plants;
4. Primary zinc smelters;
5. Iron and steel mills;
6. Primary aluminum ore reduction plants;
7. Primary copper smelters;
8. Municipal incinerators capable of charging more than 250 tons of refuse per day;
9. Hydrofluoric, sulfuric, or nitric acid plants;
10. Petroleum refineries;
11. Lime plants;
12. Phosphate rock processing plants;
13. Coke oven batteries;
14. Sulfur recovery plants;
15. Carbon black plants (furnace process);
16. Primary lead smelters;
17. Fuel conversion plant;
18. Sintering plants;
19. Secondary metal production plants;

Appendix C: continued

20. Chemical process plants;
21. Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
22. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
23. Taconite ore processing plants;
24. Glass fiber processing plants;
25. Charcoal production plants;
26. Fossil-fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; or
27. All other stationary source categories regulated by a standard promulgated under 42 U.S.C. 7411 and 7412, The Clean Air Act, §§ 111 and 112.

(c) A major stationary source as defined in 42 U.S.C. 7401, Title I, part D, including:
1. For ozone non attainment areas, sources with the potential to emit 100 tpy or more of volatile organic compounds or oxides of nitrogen in areas classified as "marginal" or "moderate," 50 tpy or more in areas classified as "serious," 25 tpy or more in areas classified as "severe," and ten tpy or more in areas classified as "extreme"; except that the references in this paragraph to 100, 50, 25, and ten tpy of nitrogen oxides shall not apply with respect to any source for which the Administrator has made a finding, under 42 U.S.C. 7401, The Clean Air Act, § 182(f)(1) or (2), that requirements under 42 U.S.C. 7401, The Clean Air Act, § 182(f) do not apply;
2. For ozone transport regions established pursuant to 42 U.S.C. 7401, The Clean Air Act, § 184 sources with the potential to emit 50 tpy or more of volatile organic compounds;
3. For carbon monoxide non attainment areas:
   a. that are classified as "serious," and
   b. in which stationary sources contribute significantly to carbon monoxide levels as determined under rules issued by the Administrator, sources with the potential to emit 50 tpy or more of carbon monoxide; and
4. For particulate matter (PM-10) non attainment areas classified as "serious," sources with the potential to emit 70 tpy or more of PM-10.

Operating Permit means any permit or group of permits covering emission unit(s) at a facility subject to the permitting requirement of 310 CMR 7.00: *Appendix C* that is issued, renewed, amended or revised pursuant to 310 CMR 7.00: *Appendix C*.

Permit Modification means a revision to any operating permit issued under 310 CMR 7.00: *Appendix C* that does not meet the requirements for an administrative amendment.

Proposed Permit means the version of a permit that the Department proposes to issue and forwards to the EPA for review in compliance with 310 CMR 7.00: *Appendix C*(6) and 40 CFR 70.8.

Regulated Air Pollutant means the following:
(a) Nitrogen oxides or any volatile organic compound;
(b) Any pollutant for which a national ambient air quality standard has been promulgated;
(c) Any pollutant that is subject to any standard promulgated under 42 U.S.C. 7401, The Clean Air Act, § 111, New Source Performance Standard 40 CFR Part 60;
(d) Any Class I or II substance subject to a standard promulgated under or established by 42 U.S.C. 7401, Title VI; or
(e) Any pollutant subject to a standard promulgated under 42 U.S.C. 7401, The Clean Air Act, § 112, National Emissions Standards for Hazardous Air Pollutants, 40 CFR Part 61, or other requirements established under 42 U.S.C. 7401, The Clean Air Act, § 112, including §§ 112(g), (j), and (r), including the following:
1. Any pollutant subject to requirements under 42 U.S.C. 7401, § 112(j). If the EPA fails to promulgate a standard by the date established pursuant to 42 U.S.C. 7401, The Clean Air Act, § 112(e), any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established pursuant to 42 U.S.C. 7401, The Clean Air Act, § 112(e); and

Appendix C: continued

2. Any pollutant for which the requirements of 42 U.S.C. 7401, § 112(g)(2) have been met, but only with respect to the individual source subject to 42 U.S.C. 7401, § 112(g)(2) requirement.

Renewal means the process by which a permit can be reissued at the end of its term or earlier should the Department determine a modification meets the requirements of renewal.

Responsible official means one of the following:

(a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

1. the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

2. the delegation of authority to such representative is approved in advance in writing by the Department;

(b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

(c) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (*e.g.*, a Regional Administrator of EPA); or

(d) For affected sources:

1. The designated representative insofar as actions, standards, requirements, or prohibitions under 42 U.S.C. 7401, Title IV or the regulations promulgated thereunder are concerned; and

2. The designated representative for any other purposes under 310 CMR 7.00: *Appendix C*(4).

Section 502(b)(10) changes are changes that contravene an expressed operating permit term but would not violate any applicable requirement(s) or contravene federally enforceable permit term(s) and condition(s) that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements.

Stationary source means any building, structure, facility, or installation that emits or may emit any regulated air pollutant or any pollutant listed under 42 U.S.C. 7401, § 112(b). "Building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person.

Timely means, with respect to an application for an operating permit or permit revision, in accordance with a time frame as set forth in 310 CMR 4.00: *Timely Action Schedule and Fee Provisions*" and in 310 CMR 7.00: *Appendix C.*

(2) Applicability.

(a) 310 CMR 7.00: *Appendix C* applies to any facility which:

1. emits or has federal potential emissions, in the aggregate, of any regulated air pollutant in an amount which equals or exceeds: 50 tons per year of VOC or NOx, ten tons per year of any hazardous air pollutant (HAP) subject to 42 U.S.C. 7401, § 112, 25 tons per year of any combination of HAPs, or 100 tons per year of any other regulated air pollutant; or

2. is subject to a standard or other requirements under 42 U.S.C. 7401, § 112 (NESHAPS), except that a facility is not required to obtain a permit solely because it is subject to the regulation or requirements under 42 U.S.C. 7401, § 112(r) (accidental release); or

3. is subject to a New Source Performance Standard (NSPS), including an area source requirement, or other requirements under 42 U.S.C. 7401, § 111; or

Appendix C: continued

4. is an affected source as defined in 42 U.S.C. 7401, Title IV (acid rain provisions); or

5. Is in any other source category designated by the EPA pursuant to 40 CFR, § 70.3(a)(5) or pursuant to a rulemaking under 42 U.S.C. 7401, §§ 111 or 112 where EPA promulgates a standard for a source category and EPA determines not to exempt any or all non-major sources subject to that standard from the requirement to obtain an operating permit.

(b) Any non-major source for which an operating permit is required under 310 CMR 7.00: *Appendix C*(2)(a)2. through 3., which is not an affected source under 42 U.S.C. 7401, Title IV or a solid waste incineration unit required to obtain a permit pursuant to 42 U.S.C. 7401, § 129(e), is deferred from the obligation to obtain an operating permit until such time as the Department and EPA complete a rulemaking, including a rule making by EPA under 42 U.S.C. 7401, §§ 111 or 112, to determine how the operating permit program should be structured for non-major sources, and the appropriateness of any permanent exemptions. Notwithstanding the previous sentence, any non-major source which becomes subject to a rulemaking promulgated by EPA pursuant to 42 U.S.C. 7401 §§ 111 or 112 ("NSPS, NESHAPs or MACT") on or after July 21, 1992, where the rulemaking explicitly requires the source to obtain an operating permit, shall submit an operating permit application in accordance with the schedule established in that rulemaking. Where the rulemaking defers to the regulating authority, the application is due on the date that is one year after the date on which the source becomes subject to the rulemaking.

(c) Any source listed in 310 CMR 7.00: *Appendix C*(2)(b) deferred from the requirement to obtain a permit may elect to apply for an operating permit pursuant to 310 CMR 7.00: *Appendix C*.

(d) Notwithstanding 310 CMR 7.00: *Appendix C*(2)(a), a facility is not subject to this Appendix if the only applicable requirement which applies to the facility is:

1. A requirement pursuant to 40 CFR Part 60, Subpart AAA - Standards of Performance for New Residential Wood Heaters; or

2. A requirement pursuant to 40 CFR Part 61, Subpart M - National Emission Standard for Hazardous Air Pollutants for Asbestos, section 61.145, Standard for Demolition and Renovation.

(e) For the purpose of determining applicability under 310 CMR 7.00: *Appendix C*(2)(a), an owner or operator may elect to treat any part(s) of a facility used solely for research and development (R&D) operations, co-located with a major source, as a separate facility providing; 1) the SIC code for the R&D part of the facility differs from the rest of the facility; and 2) the relationship between the functions of the R&D part of the facility and the remainder of the facility does not involve support of the latter by the former.

(f) An owner or operator of a facility subject to 310 CMR 7.00: *Appendix C* may elect to be relieved from the requirement to obtain an operating permit under 310 CMR 7.00: *Appendix C*. To be eligible, one of the following must be complied with:

1. A source specific SIP revision which has been approved by EPA;

2. Restricted emission status issued pursuant to 310 CMR 7.02(9); or

3. A construction, substantial reconstruction or modification plan approval issued pursuant to 310 CMR 7.02(1) which limits the potential emissions of the total facility below the applicability thresholds stated at 310 CMR 7.00: *Appendix C(2)(a)*; or

4. Operating in accordance with the requirements of 310 CMR 7.02(11).

(3) General Provisions.

(a) 1. On or before June 30, 1996, person(s) owning or operating a facility subject to the requirements of 310 CMR 7.00: *Appendix C* based upon their operations in calendar years 1990, 1991, 1992 or 1993, and not electing to comply with a federally approved option listed at 310 CMR 7.00: *Appendix C(2)(f)* shall enroll with the Department.

Appendix C: continued

2. On or after July 1, 1996, any owner or operator of a facility shall automatically be enrolled when subject to 310 CMR 7.00: *Appendix C*.

(b) Any owner or operator of a facility subject to the requirements of 310 CMR 7.00: *Appendix C* shall submit a complete application for a permit according to time frames specified in 310 CMR 7.00: *Appendix C*(4)(a) and 310 CMR 4.00, and shall operate in compliance with the terms and conditions of a permit issued pursuant to 310 CMR 7.00: *Appendix C*.

(c) Permits shall be for a fixed term of five years in the case of affected sources, and for a term not to exceed five years in the case of all other facilities. Notwithstanding this requirement, permits for solid waste incineration units combusting municipal waste subject to standards under 42 U.S.C. 7401, § 129(e) shall be issued for a period not to exceed 12 years and reviewed by the Department at least every five years.

(d) No person shall cause, suffer, allow or permit the operation of any facility subject to 310 CMR 7.00: *Appendix C*:

1. Unless a timely and complete application for an operating permit or renewal has been submitted to the Department;

2. If the facility's operating permit has expired unless a timely and complete application pursuant to 310 CMR 7.00: *Appendix C*(4) has been submitted to the Department;

3. If the facility's operating permit has been revoked;

4. Unless all fees required pursuant to 310 CMR 4.00 have been remitted to the Department or waived by the Department in accordance with 310 CMR 4.00; and

5. If modified, unless the procedures in 310 CMR 7.00: *Appendix C*(7) and/or (8) as applicable, have been complied with.

(e) An initial operating permit, permit modification, or renewal may be issued only if all of the following conditions have been met:

1. A complete application for a permit, general permit, permit modification, or permit renewal has been received and reviewed by the Department;

2. Except for modifications qualifying for minor permit modification procedures under 310 CMR 7.00: *Appendix C*(8), the requirements for public participation contained in 310 CMR 7.00: *Appendix C*(6) have been complied with;

3. The requirements for notifying and responding to affected States under 310 CMR 7.00: *Appendix C*(6) has been complied with;

4. The conditions of the permit provide for compliance with all applicable requirements and the requirements of 310 CMR 7.00: *Appendix C*; and

5. The EPA has received a copy of the proposed permit and any notices required under 310 CMR 7.00: *Appendix C*(6), and has not objected to issuance of the permit within the time period specified therein.

(f) Any facility subject to 310 CMR 7.00: *Appendix C* and operating without an operating permit, or failing to comply with any of the terms of its operating permit; or any provision of 310 CMR 7.00: *Appendix C*; or any order issued by the Department pursuant to 310 CMR 7.00: *Appendix C*, shall be subject to enforcement pursuant to the Massachusetts General Laws and regulations promulgated thereunder.

(g) Each operating permit issued by the Department shall include provisions in accordance with the following:

1. Each operating permit shall include all applicable requirements, including any emissions limitations and standards and any operational requirements, and shall cite to the legal authority for each requirement. Each operating permit shall also identify any difference in form between the permit condition and the applicable requirement upon which the permit condition is based.

Appendix C: continued

2. The operating permit shall specify the expiration date of the permit in accordance with 310 CMR 7.00: *Appendix* C(3)(c).
3. The operating permit shall require emissions monitoring and analysis procedures or test methods in accordance with 310 CMR 7.00: *Appendix* C(9).
4. The operating permit shall require recordkeeping and reporting in accordance with 310 CMR 7.00: *Appendix* C(10). The operating permit shall specify the format and time frequency for reporting to the Department all monitoring data and related supporting information in accordance with 310 CMR 7.00: *Appendix* C(10).
5. For a permittee subject to EPA's acid rain deposition control program pursuant to Title IV, 42 U.S.C. § 7651 et seq., the operating permit shall include and be consistent with the regulations in Title IV.
6. The operating permit shall include a severability clause to ensure the continued validity of the various operating permit requirements in the event of a challenge to any portions of the operating permit.
7. The operating permit shall include the following statements:
   a. The permittee shall comply with all conditions of the operating permit including the approved compliance plan. Any noncompliance with a permit condition constitutes a violation of 310 CMR 7.00: *Appendix* C or 42 U.S.C. 7661 *et seq*., and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of an operating permit renewal application.
   b. A permittee in an enforcement action cannot use as a defense that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the operating permit.
   c. The operating permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for an operating permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any operating permit condition.
   d. The operating permit does not convey any property rights of any sort, or any exclusive privilege.
   e. All terms and conditions in an operating permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the EPA and citizens under 42 U.S.C. 7661 *et seq*. Notwithstanding the preceding sentence, the Department shall specifically designate in the operating permit any terms and conditions that are not federally enforceable because the terms and conditions are not required under 42 U.S.C. 7661 *et seq*. or under any of its applicable requirements.
8. The operating permit shall require the permittee to pay fees to the Department consistent with the fee schedule pursuant to 310 CMR 4.00.
9. The operating permit shall contain terms and conditions for reasonably anticipated alternative operating scenarios as approved by the Department.
10. The operating permit shall include a provision stating that no operating permit revision shall be required, under any approved economic incentives program, marketable permits program, emissions trading program and other similar programs or processes, for changes that are provided for in the operating permit.
11. If the permittee has authorization for intra-facility emissions trading, the operating permit shall state the terms and conditions for the trading of emissions increases and decreases within the permitted facility in accordance with the requirements of 310 CMR 7.00: *Appendix* C(7)(b) or 310 CMR 7.00: *Appendix* B.
12. The operating permit shall include a statement that upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department or an authorized representative to perform the following:
   a. Enter upon the permittee's premises where an operating permit facility is located or emissions-related activity is conducted, or where records must be kept under the conditions of the operating permit;
   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the operating permit;
   c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the operating permit; and

Appendix C: continued

d. As authorized by 42 U.S.C.7661 *et seq*., sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the operating permit or applicable requirements.

13. The operating permit shall include requirements for Compliance Certification consistent with 310 CMR 7.00: *Appendix* C(5)(b)(9).

14. The operating permit shall include a schedule of compliance and a schedule for the submittal of progress reports, both approved by the Department, consistent with 310 CMR 7.00: *Appendix* C(5)(b)(8).

15. The operating permit shall state whether a permit shield is applicable pursuant to 310 CMR 7.00: *Appendix* (C)(12).

16. The operating permit shall contain provisions for emergency conditions in accordance with in 310 CMR 7.00: *Appendix* C(16).

17. The operating permit may include other provisions as required by the Department.

(h) An operating permit does not convey any property right of any sort, or any exclusive privilege.

(i) An operating permit does not relieve any person from the obligation to comply with any other provision of 310 CMR 7.00 or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or local rules and regulations, not addressed in their operating permit.

(j) All information submitted to the Department pursuant to the requirements of 310 CMR 7.00: *Appendix C* shall be public information except for that which the Department has designated confidential pursuant to the provisions of M.G.L. c. 111, § 142B and 40 CFR 70.4(b)(3) published in the Federal Register July 21, 1992, incorporated herein by reference. No permit shall in any case be designated confidential.

(k) The Department may issue a single permit authorizing emissions from similar operations by the same owner or operator at multiple temporary locations provided:

1. The operation is temporary;
2. The operation involves at least one change of location during the term of the permit;
3. The temporary source is not an affected source; and
4. The conditions of approval for operation of the temporary source assure compliance with:
   a. All applicable requirements at all authorized locations;
   b. All other provisions of 310 CMR 7.00: *Appendix C*; and
   c. The requirement that the Department be notified at least ten days in advance of each change in location in writing.

(l) If an additional applicable requirement becomes applicable to the facility, or an applicable requirement which was previously applicable to the facility changes, the facility shall act to have the new applicable requirement or the change incorporated into the operating permit, in accordance with the procedures set forth in 310 CMR 7.00: *Appendix C*(14)(a).

(m) The Department may terminate an operating permit upon request of the responsible official of said facility.

(n) The Department hereby adopts and incorporates by reference the provisions of the acid rain program 40 CFR part 72, as in effect on January 11, 1993 and as amended March 23, 1993, October 24, 1997, and 40 CFR Part 76 as in effect on September 1, 1998, for purposes of implementing an acid rain program that meets the requirements of 42 U.S.C. 7401, Title IV. The term permitting authority shall mean the Department and the term Administrator shall mean the Administrator of the United States Environmental Protection Agency.

(o) If the provisions or requirements of 40 CFR part 72 conflict with or are not included in 310 CMR 7.00: *Appendix C*, the part 72 provisions and requirements shall apply and take precedence.

(4) Application Submittal Time Lines for Operating Permits.

(a) Schedule to submit an application for an operating permit.

1. On and after April 1, 1994 a complete operating permit application shall be submitted to the Department in accordance with the following schedule:

Appendix C: continued

a. For Restricted Emission Status (RES) pursuant to 310 CMR 7.02(12) and 310 CMR 7.00: *Appendix C*(2)(f): a Restricted Emission Status application must be submitted, reviewed, and approved no later than the published timeline for submittal of the original operating permit application, or a renewal application unless otherwise agreed to by the Department in writing.

b. For a Group A Source, any facility subject to 310 CMR 7.00: *Appendix C* and not submitting an application under 310 CMR 7.00: *Appendix C*(4)(a)1.a., with operations classified under the Standard Industrial Classification Codes (major group) 49 or 51: no later than November 15, 1994 nor before October 1, 1994;

c. For a Group B Source, any facility subject to 310 CMR 7.00: *Appendix C* and not submitting an application under 310 CMR 7.00: *Appendix C*(4)(a)1.a., with operations classified under the Standard Industrial Classification Codes (major group) 22, 23, 25, 26, 27, 28, 30, 31, 36, 38, 97 or 99: no later than September 1, 1995 nor before July 1, 1995;

d. For a Group C Source, any facility subject to 310 CMR 7.00: *Appendix C* and not submitting an application under 310 CMR 7.00: *Appendix C*(4)(a)1.a., with operations classified under the Standard Industrial Classification Codes (major group) 01, 14, 20, 24, 29, 32, 33, 34, 35, 37, 39, 45, 50, 56, 63, 65, 70, 72, 80, 82, 86, 95 or other stationary sources not classified in Groups A or B: no later than November 15, 1995 nor before September 15, 1995.

2. For a facility subject to the requirements of 310 CMR 7.00: *Appendix C* and in operation prior to the effective date of 310 CMR 7.00: *Appendix C*, an application for an operating permit pursuant to 310 CMR 7.00: *Appendix C* shall be submitted in accordance with the schedule detailed in 310 CMR 7.00: *Appendix C*(4)(a)1., or other schedule established in writing by the Department and the facility, but in no case later than one year after approval by EPA of 310 CMR 7.00: *Appendix C*, the operating permit program.

3. For operating permit applications submitted in accordance with 310 CMR 7.00: *Appendix C*(4)(a)1. or 2., the Department shall take final action on all applications no later than three years after approval by EPA of 310 CMR 7.00: *Appendix C*, the operating permit program.

4. Applications for initial phase II acid rain permits shall be submitted by January 1, 1996 for sulfur dioxide, and by January 1, 1998 for nitrogen oxides. Operating permit applications for these sources must be submitted in accordance with the schedule detailed in 310 CMR 7.00: *Appendix C*(4)(a)1..

5. For new construction subject to the requirements of 310 CMR 7.00: *Appendix C*, an application for an operating permit shall be submitted no later than one year after commencement of operation. Where an operating permit issued pursuant to 310 CMR 7.00: *Appendix C* would be modified or amended as a result of this construction, the owner or operator must follow the procedures of 310 CMR 7.00: *Appendix C*(8) and the time lines contained in 310 CMR 7.00: *Appendix C*(4)(b). (NB: New facilities are encouraged to submit applications pursuant to 310 CMR 7.00: *Appendix C* concurrent with 310 CMR 7.02 applications.)

6. For construction, substantial reconstruction or alteration of any facility, which results in the facility being subject to the requirements of 310 CMR 7.00: *Appendix C*, the application for an operating permit shall be submitted to the Department no later than one year after the commencement of operation of the portion of the facility which made the facility subject to the program. (NB. Owners and operators are encouraged to submit applications concurrent with 310 CMR 7.02 application)

7. For a facility operating under 310 CMR 7.02(9) or 310 CMR 7.02(11) status, an operating permit application shall be submitted within six months of becoming subject to 310 CMR 7.00: *Appendix C*.

(b) Schedule for submittal of applications to amend, modify or renew an operating permit:

1. For a significant modification to an operating permit, a timely application is one that is submitted at least nine months prior to the planned modification. For significant modifications which have been reviewed and approved under 310 CMR 7.00, the construction or modification that has been reviewed and approved may commence, but may not operate, prior to final approval of the modification to the operating permit.

2. For a minor modification to an operating permit, a timely application is one that is submitted concurrent with the planned modification.

Appendix C: continued

3. For an administrative amendment to an operating permit, a timely application is one that is submitted concurrent with initiation of the proposed change.

4. For a renewal of an operating permit, a timely application shall be submitted at least six months prior to the expiration of the operating permit.

(c) Except for as provided in 310 CMR 7.00: *Appendix C*(4)(a)3., final action by the Department shall be taken on each operating permit application within:

1. 18 months of receipt of a complete application for an operating permit for new construction submitted after November 15, 1995

2. nine months of receipt of a complete application for a significant modification to an operating permit.

3. 90 days of receipt of a minor modification application to an operating permit or 15 days after the end of the EPA's 45 day review period under 310 CMR 7.00: *Appendix C*(6), whichever is later.

4. 15 days of receipt of an administrative amendment to an operating permit.

5. nine months of receipt of a complete application for renewal of an operating permit.

6. 120 days for group processing of minor modifications or 15 days after the end of EPA's 45-day review period under 310 CMR 7.00: *Appendix C*(6), whichever is later.

7. nine months of receipt of a complete application for an early reduction demonstration (40 CFR Part 63) under 42 U.S.C. 7401, § 112(i)(5).

(d) Completeness etermination.

1. The Department shall notify the applicant within 60 days of its receipt of the application for an initial operating permit, a significant modification or renewal as to whether the application is complete.

2. To be deemed complete, an application shall include all the information required by 310 CMR 7.00: *Appendix C*(5) and payment of the applicable fee pursuant to 310 CMR 4.10. A completeness determination shall not be required for a minor permit modification or an administrative amendment.

3. If the Department fails to notify the applicant within 60 days of the Department's receipt of an application that more information is needed, then the application shall be deemed complete and the applicant shall be afforded the application shield described at 310 CMR 7.00: *Appendix C*(11).

4. If, after a completeness determination, the Department requires additional information, it shall request such information in writing and set a deadline for its submittal. Departmental requests for additional information made after the application is deemed complete shall not, by themselves, indicate that the application is not complete. If however, the applicant fails to submit the requested information by a reasonable deadline specified or as otherwise agreed in writing by the Department, the application shall be considered incomplete and the applicant shall not have the application shield provided for under 310 CMR 7.00: *Appendix C*(11).

(5) General Application Requirements.

(a) Applications for an operating permit or renewal of an operating permit pursuant to 310 CMR 7.00: *Appendix C*, and any additional information required by the Department shall be submitted to the Department and Region I EPA in a format prescribed by the Department. An applicant may not omit information needed to determine whether the facility is subject to any applicable requirement.

1. For any subject facility whose emissions exceed the thresholds of 310 CMR 7.00: *Appendix C*(2)(a), the application shall include all applicable requirements for all emissions units.

2. For any facility that contains an emission unit that causes the facility to be subject to 310 CMR 7.00: *Appendix C*(2)(b), the application shall include all applicable requirements for the emissions units that cause the facility to be subject to 310 CMR 7.00: *Appendix C*.

(b) Except as provided for in 310 CMR 7.00: *Appendix C*(5)(a)2. and (5)(i), the following information must be submitted for each emission unit associated with the facility. Fugitive emissions shall be included in the permit application in the same manner as stack emissions, regardless of whether the source category in question is included in the list of sources contained in the definition of major source. Applications shall contain at a minimum:

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1. Identifying information, including company name and address (or plant name and address if different from the company name); owner's name and telephone number; and name(s) and telephone number(s) of facility site manager/contact.
2. A description of the facility's processes and products (by Standard Industrial Classification Code) associated with each alternate scenario proposed in the application.
3. Except for insignificant activities listed in 310 CMR 7.00: *Appendix C*(5) the following emissions-related information:
   a. All emissions of regulated air pollutants for which the emissions unit has an applicable requirement.
   b. Identification and description of all points of emissions described in 310 CMR 7.00: *Appendix C*(5)(b)3.a. in sufficient detail to establish said applicable requirements.
   c. Emissions rates in tons per year and in such terms as are necessary to establish compliance consistent with the applicable EPA standard reference emissions test method.
   d. The following information to the extent it is needed to determine or regulate emissions: fuels, fuel use, raw materials, production rates, and operating schedules.
   e. Identification and description of air pollution control equipment and compliance monitoring devices or activities
   f. Limitations on source operation affecting emissions or any work practice standards, where applicable, for all regulated pollutants at the source.
   g. Other information required by any applicable requirement (including information related to stack height limitations developed pursuant to 42 U.S.C. 7401, The Clean Air Act, § 123).
   h. Calculations on which the information in 310 CMR 7.00: *Appendix C*(5)(b)3.a. through g. is based.
4. For activities proposed to be exempt pursuant to 310 CMR 7.00: *Appendix C*(5)(h), a list describing each activity and its emissions.
5. The following air pollution control requirements:
   a. Citation and description of all applicable requirements, and
   b. Description of or reference to any applicable test method for determining compliance with each applicable requirement.
6. Other specific information that may be necessary to implement and enforce 310 CMR 7.00: *Appendix C*(5)(b)2, (7) or other applicable requirements of 42 U.S.C. 7401 or to determine the applicability of such requirements including but not limited to terms and conditions for reasonably anticipated operating scenarios including:
   a. Establishing and maintaining, contemporaneously with making a change from one operating scenario to another, a record in a log at the facility as to which scenario it is operating under; and
   b. Documenting that the terms and conditions of each such alternative scenario meet all applicable requirements and the requirements of 310 CMR 7.00: *Appendix C*.

   The permit shield described in 310 CMR 7.00: *Appendix C*(12) shall apply to all terms and conditions under each such operating scenario.
7. An explanation of any proposed exemptions from otherwise applicable requirements.
8. A Compliance Plan that contains all the following:
   a. A description of the compliance status of the facility with respect to all applicable requirements.
   b. A description as follows:
      (i) For applicable requirements with which the facility is in compliance, a statement that the source will continue to comply with such requirements.
      (ii) For applicable requirements that will become effective during the permit term, a statement that the facility will meet such requirements on a timely basis.
      (iii) For requirements for which the source is not in compliance at the time of permit issuance, a narrative description of how the source will achieve compliance with such requirements.
   c. A compliance schedule as follows:
      (i) For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements.

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(ii) For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis. A statement that the source will meet in a timely manner applicable requirements that become effective during the permit term shall satisfy this provision, unless a more detailed schedule is expressly required by the applicable requirement.

(iii) A schedule of compliance for emissions units that are not in compliance with all applicable requirements at the time of permit issuance. Such a schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the facility will be in noncompliance at the time of permit issuance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the facility is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.

d. A schedule for submission of certified progress reports no less frequently than every six months for sources required to have a schedule of compliance to remedy a violation.

e. The compliance plan content requirements specified in 310 CMR 7.00: *Appendix C*(5)(b)8.e. shall apply and be included in the acid rain portion of a compliance plan for an affected source, except as specifically superseded by regulations promulgated under 42 U.S.C. 7401, Title IV with regard to the schedule and method(s) the source will use to achieve compliance with the acid rain emissions limitations.

9. Requirements for Compliance Certification, including the following:

a. A certification of compliance with all applicable requirements by a responsible official consistent with 310 CMR 7.00: *Appendix C*(5)(b)9.c. and 42 U.S.C. 7401, § 114(a)(3);

b. A statement of methods used for determining compliance, including a description of monitoring, record keeping, and reporting requirements and test methods;

c. A schedule for submission of compliance certifications during the permit term, to be submitted no less frequently than annually, or more frequently if specified by the underlying applicable requirement or by the Department;

d. A statement indicating the facility's compliance status with any applicable enhanced monitoring and compliance certification requirements of 42 U.S.C. 7401; and

e. A statement accepting the Department's authority to enter the premises of the permitted facility and perform reasonable inspections and sampling, as described in 310 CMR 7.00: *Appendix C*(3)(g).

10. The use of nationally-standardized forms for acid rain portions of permit application(s) and compliance plan(s), as required by regulations promulgated under 42 U.S.C. 7401, Title IV.

(c) Any application form, report, or compliance certification submitted pursuant to 310 CMR 7.00: *Appendix C* shall contain certification by a responsible official of truth, accuracy, and completeness in accordance with 310 CMR 7.01(2).

(d) Any application for an initial, or renewal of an operating permit submitted to the Department pursuant to 310 CMR 7.00: *Appendix C* shall include the following:

1. For initial operating permits, copies of any preconstruction, substantial reconstruction or alteration approvals issued by the Department under 310 CMR 7.02;

2. For renewals of operating permits, the last complete operating permit application supplemented with all new information pertinent to the provisions of 310 CMR 7.00: *Appendix C*(5), (6) and (7), including any operational changes made pursuant to operational flexibility section, and any other proposed operational scenarios.

(e) Any person who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit.

Appendix C: continued

(f) If any person fails to submit information requested by the Department within the deadlines provided, the Department may deny the application, and an application shield pursuant to 310 CMR 7.00: *Appendix C*(11) shall automatically terminate pursuant to 310 CMR 7.00: *Appendix C*(11)(f). Prior to denying the application, the Department shall provide 30 days written notice to the applicant, including a list of the required information. A person may reapply at any time after the application is denied. The re-application shall meet all requirements of a complete initial permit application, including any application fee.

(g) In the event that a discrepancy exists between the information in an application for an operating permit and the requirements of the permit, the conditions of the permit shall prevail.

(h) Exempt Activities. Except as provided in 310 CMR 7.00: *Appendix C*(5)(i), any facility subject to the requirements of 310 CMR 7.00: *Appendix C* may propose to exempt certain activities from the requirements of 310 CMR 7.00: *Appendix C*(5)(b). A list of proposed exemptions must be submitted as part of the application. The Department will exempt the emission unit(s) if it is of a size eligible to comply with 310 CMR 7.02(8)(i) or to be exempt from preconstruction review and approval pursuant to 310 CMR 7.02(2)(b)7., 310 CMR 7.02(2)(b)15., or 310 CMR 7.02(2)(b)29. and not otherwise subject to an applicable requirement.

(i) Insignificant Activities. Notwithstanding 310 CMR 7.00: *Appendix C*(5)(h) any emission unit(s) that is part of the following activities is exempt from the requirements of 310 CMR 7.00: *Appendix C*:

1. Open burning conducted in accordance with the requirements of 310 CMR 7.07(2), 7.07(3)(a) and 7.07(3)(e);
2. Office activities and the equipment and implements used therein, such as typewriters, printers, and pens;
3. Interior maintenance activities and the equipment and supplies used therein, such as janitorial cleaning products and air fresheners; this does not include any cleaning of production equipment or activities regulated by 310 CMR 7.18;
4. Bathroom and locker room ventilation and maintenance;
5. Copying and duplication activities for internal use and for support of office activities at the facility;
6. The activities not regulated by 310 CMR 7.18 in maintenance shops, such as welding, gluing, soldering;
7. First aid or emergency medical care provided at the facility, including related activities such as sterilization and medicine preparation;
8. Laundry operations that service uniforms or other clothing used at the facility that are not regulated by 310 CMR 7.18;
9. Architectural maintenance activities conducted to take care of the buildings and structures at the facility, including repainting, reroofing, and sandblasting;
10. Exterior maintenance activities conducted to take care of the grounds of the facility, including parking lots and lawn maintenance;
11. Food preparation to service facility cafeterias and dining rooms;
12. The use of portable space heaters which reasonably can be carried and relocated by an employee;
13. Liquid petroleum gas (LPG) or petroleum fuels used to power the facility's mobile equipment and not otherwise regulated by the Department;
14. Emergency vents not subject to the accidental release regulations.
15. surface coating and painting processes which exclusively use non-refillable aerosol cans;
16. vacuum cleaning systems used exclusively for commercial or residential house-keeping;
17. ventilating systems used exclusively for heating and cooling buildings, for the comfort of people living or working within the building serviced by said system, which EPA has determined need not be contained in an operating permit;
18. ventilating and exhaust systems for laboratory hoods used:
    a. by academic institutions for academic purposes.
    b. by hospitals and medical care facilities used for medical care purposes and medical research only.
    c. by laboratories which perform laboratory scale activities as defined by OSHA.
    d. by facilities for quality assurance and quality control testing and sampling activities.

Appendix C: continued

19. surface coating and printing processes used exclusively for educational purposes in educational institution excluding those emission units regulated by 310 CMR 7.18; and
20. kilns or ventilating hoods for art or ceramic curricula at colleges, primary or secondary schools.

(6) Permit Review by the Public, EPA and Affected States.

(a) A draft of an operating permit (draft permit) and a statement that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable regulatory provisions), shall be released to the public, EPA, the applicant and affected states by the Department for applications for an operating permit, a significant modification or renewal of an operating permit; and to EPA and affected states for minor permit modifications.

(b) Notice of the availability of a draft permit shall be given by publication:
1. In a newspaper of general circulation in the area where the facility is located.
2. In a state publication designed to give general public notice.
3. To persons on a mailing list developed by the Department.
4. To persons who request in writing to be on the mailing list; and
5. By any other means the Department finds necessary to assure adequate notice to the affected public.

(c) The notice shall identify:
1. The name and address of the facility;
2. The name and address of the permittee;
3. The name and address of the Department's regional office processing the permit;
4. The activity or activities included in the permit action;
5. The emissions change associated with any permit modification;
6. The name, address, and telephone number of a person from whom interested persons may obtain additional information, including copies of the draft permit, the application, all relevant supporting materials, and all other materials available that are relevant to the permit decision;
7. A brief description of the comment procedures required by 310 CMR 7.00: *Appendix C*(6); and the time and place of any hearing that may be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled).

(d) The Department, on or before the publication of the public notice of a draft permit, shall also give notice of its intent to issue a draft permit to the head of the environmental program of any affected state.

(e) The Department shall provide a comment period of no less than 30 calendar days and no more than 60 calendar days on draft permits for an initial permit, significant modifications and renewals of operating permits.

(f) The Department based upon material issues or at its own initiative may hold a public hearing on a draft permit. For an initial operating permit issuance, renewal or significant modification to an operating permit, any person may request before the expiration of the public comment period specified pursuant to 310 CMR 7.00: *Appendix C*(6)(a), that the Department hold a public hearing (if the Department has not already scheduled a public hearing) on a draft permit, by submitting a written request stating the nature of the issues to be raised at a public hearing. Notice of any public hearing shall be given at least 30 days in advance of the hearing and may be included in the notice issued pursuant to 310 CMR 7.00: *Appendix C*(6)(a) and by the procedures of 310 CMR 7.00: *Appendix C*(6)(b) and (c).

(g) Whenever the Department determines to hold a public hearing, the duration of the public comment period shall automatically extend to the close of the public hearing. The hearing officer may further extend the comment period by announcing the extension and its duration at the public hearing.

(h) At a public hearing, the Department may:
1. Establish reasonable limits upon the time allowed for oral statements; and
2. Require the submission of statements in writing.

(i) The Department shall keep records of the comments and also of the issues raised during the public participation process so that EPA may fulfill its obligation under 42 U.S.C. 7401, § 505(b)(2) to determine whether a citizen petition should be granted, and such records shall be available to the public.

Appendix C: continued

(j) After the close of the public comment period, the Department will forward to the EPA a proposed operating permit (proposed permit), together with other required supporting information pertaining to the proposed permit. NOTE: The Department as part of the submittal of the proposed permit to the EPA shall notify the EPA and any affected state in writing of any refusal by the Department to accept any recommendations on the draft permit that the affected state submitted during the draft permit review period. The notice shall include the Department's reason for not accepting any such recommendation; the Department is not required to accept recommendations that are not based on an applicable requirement or the requirements of 310 CMR 7.00: *Appendix C*.

(k) If EPA submits an objection to the proposed permit in writing, during the 45 day period following EPA's receipt of the proposed permit, the Department shall revise, and resubmit a proposed operating permit to the EPA. EPA shall send a copy of its objection to the applicant. The Department will not issue a final permit prior to the expiration of the 45-day period for EPA objection unless EPA notifies DEP of its intention not to object.

(l) If the Department fails, within 90 days after the receipt of an objection under 310 CMR 7.00: *Appendix C*(6)(k), to revise and submit a proposed permit in response to the objection, the EPA may issue or deny the permit in accordance with the requirements of the Federal Program promulgated under 42 U.S.C. 7401, Title V.

(m) If EPA does not object to the proposed permit, any person may petition the EPA during the 60 days after the expiration of the EPA's 45 day review period, and may request that EPA object.

1. The petition shall be based only on objections that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period.

2. If the EPA is convinced that such objection meets the criteria established in 310 CMR 7.00: *Appendix C*(6)(m)1., and objects, the Department shall not issue the operating permit until the EPA's objection is resolved.

3. If the Department has issued an operating permit prior to receipt of an EPA objection, the EPA may modify, terminate, or revoke the permit. The Department may thereafter issue only a revised permit that satisfies EPA's objection. In any case, the stationary source will not be in violation of the requirement to have submitted a timely and complete application.

(n) The Department shall transmit final operating permits to EPA.

(7) Operational Flexibility.

(a) Section 502(b)(10) changes

1. Any facility issued an operating permit may make Section 502(b)(10) changes through the procedures set forth in 310 CMR 7.00: *Appendix C*(7).

2. The Department shall attach the notice of the change to the operating permit, but shall not revise the operating permit until the next application for renewal.

3. If the requirements of 310 CMR 7.00: *Appendix C*(7) are met, the change may be made 15 days after receipt of the notice of the change by the Department or EPA whichever is later.

4. No change may be made pursuant to 310 CMR 7.00: *Appendix C*(7) if the change would:

a. violate an applicable requirement(s);

b. contravene a federally enforceable permit term(s) and condition(s) that is monitoring (including test methods), recordkeeping, reporting, or compliance certification;

c. is a modification under 42 U.S.C. 7401, Title I; or

d. is in excess of the emissions allowed under the operating permit (whether expressed therein as a rate of emissions or in terms of total emissions).

5. A responsible official must provide the Department and EPA with written notification at least 15 days in advance of the proposed changes. For each such change, the written notification required above shall include:

a. A brief description of the change within the permitted facility;

b. The date on which the change will occur;

c. Any change in emissions; and

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d. Any permit term or condition that is no longer applicable as a result of the change.

6. The permit shield provided for under 310 CMR 7.00: *Appendix C*(12) shall not apply to changes made under 310 CMR 7.00: *Appendix C*(7).

(b) Intra-facility Emissions Trading.

1. Pursuant to a request from a responsible official in an operating permit application, the Department shall issue an operating permit that contains terms and conditions that allow for the trading of emissions increases and decreases within the permitted facility. The Department shall not include in these trading provisions any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades.

2. Any requests made under 310 CMR 7.00: *Appendix C*(7) are solely for the purposes of complying with the federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirement(s).

3. Emission trades may be implemented provided the Department and EPA are notified at least 15 business days in advance of the proposed changes. For each change, the following must be provided:

a. A description of the change within the permitted facility;

b. The date on which the change will occur;

c. Any change in emissions;

d. How these increases and decreases in emissions will comply with the terms and conditions of the permit.

4. The 15 day notice shall commence upon the receipt by the Department or EPA whichever is later.

5. The permit shield provided for under 310 CMR 7.00: *Appendix C*(12) shall apply to the permit terms and conditions that allow such increases and decreases in emissions.

6. Any intra-facility change that does not qualify pursuant to 310 CMR 7.00: *Appendix C*(7)(b)2. is required to be submitted to the Department pursuant to 310 CMR 7.00: *Appendix B.*

(8) Administrative Amendments, Minor Modifications and Significant Modifications.

(a) The following changes shall require a revision to an operating permit:

1. An Administrative Amendment if the proposed change is:

a. A change in business name, division name, or facility name; mailing address; company stack designation; telephone number; or name of facility contact; or

b. A transfer of ownership of the facility for which an operating permit is in effect, where the Department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department; or

c. A change to monitoring, reporting, recordkeeping, or testing requirements that is more frequent than previously specified in the operating permit; or

d. The Department, EPA or permittee determines that the operating permit contains typographical errors.

2. A Minor Modification if the proposed change:

a. Does not violate any applicable requirements;

b. Does not involve a significant change to existing monitoring, reporting, or recordkeeping requirements in the permit;

c. Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;

d. Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the facility has assumed to avoid an applicable requirement to which the facility would otherwise be subject; and

e. Is not a modification under any provision of 42 U.S.C. 7401, Title I.

Appendix C: continued

3. A Significant Modification is a permit modification that does not qualify as a minor permit modification or as an administrative amendment, or is a significant change to any monitoring, reporting or recordkeeping requirements as required by any operating permit.

(b) Processing an Administrative Amendment. For an administrative amendment to an operating permit a timely and complete application is one filed on forms specified by the Department and in accordance with the timelines established at 310 CMR 7.00: *Appendix C*(4).

1. The Department shall take final action within 15 days of receipt of said application and may incorporate such changes without providing notice to the public or affected states. The Department shall submit a copy of the revised permit to EPA.

2. The source may make the change upon receipt by the Department of the proposed administrative amendment.

3. An administrative amendment for purposes of the acid rain portion of the operating permit shall be governed by 40 CFR part 72.

4. The permit shield provisions of 310 CMR 7.00: *Appendix C*(12) shall not apply to changes made under 310 CMR 7.00: *Appendix C*(8).

(c) Processing a Significant Modification. For a significant modification to an operating permit an application must be filed on forms specified by the Department and in accordance with the timelines established at 310 CMR 7.00: *Appendix C*(4), and shall:

1. Be subject to all of the same requirements as a new operating permit application including review by EPA, affected states and the public under 310 CMR 7.00: *Appendix C*; and

2. Focus on the proposed significant modifications to the issued operating permit only.

3. A significant modification for purposes of the acid rain portion of the operating permit shall be governed by 40 CFR part 72.

4. For significant modifications which have been reviewed and approved under 310 CMR 7.02(4) or (5), the construction, substantial reconstruction, or alteration may commence, but may not be operated, during the period after receipt of the required significant modification application by the Department, but before the Department revises the operating permit. The permit shield provided under 310 CMR 7.00: *Appendix C*(12) applies to any changes resulting from such significant modification.

(d) Processing a Minor Modification. For a minor modification to an operating permit an application must be filed on forms specified by the Department and in accordance with the timelines established at 310 CMR 7.00: *Appendix C*(4).

1. An application requesting the use of minor permit modifications procedures shall include the following:

a. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

b. The facility's suggested draft permit;

c. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

d. Completed forms for the Department to use to notify the EPA and affected states. Said notification shall be made within five business days of receipt by the Department of a complete permit modification application.

2. A minor modification for purposes of the acid rain portion of the operating permit shall be governed by 40 CFR part 72.

3. The source may make the change upon receipt by the Department of the proposed modification.

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4. The permit shield provisions of 310 CMR 7.00: *Appendix C*(12) shall not apply to changes made under 310 CMR 7.00: *Appendix C*(8).

(e) Revisions to Operating Permit Not Required. A revision to an operating permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain program under Title IV, provided that such increases do not require an operating permit revision under any other applicable requirement.

(9) Testing and Monitoring Requirements.

(a) Any facility, for which an operating permit specifies testing and monitoring requirements shall do so in a manner and time as specified in the operating permit.

(b) Each operating permit shall contain the following monitoring requirements:

1. The permittee shall comply with all emissions monitoring and analysis procedures or test methods required under the applicable requirements, including those promulgated pursuant to 42 U.S.C. 7401, The Clean Air Act, §§ 504(a) and 504(b) or 114(a)(3);
2. If the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), then the permittee shall perform periodic monitoring sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. Recordkeeping provisions may be sufficient to meet the requirements; and
3. The permittee shall comply with requirements concerning the use, maintenance and installation of monitoring equipment or methods as the Department deems appropriate.

(c) Any facility required to install a continuous emissions monitor (CEM) shall install, calibrate, operate, certify and maintain the CEM to continuously measure and continuously record the required emissions and other data as specified in the operating permit.

(d) Any person required to perform monitoring shall maintain records of and report to the Department in accordance with the requirements established in the facility operating permit and 310 CMR 7.00: *Appendix C*(10).

(10) Recordkeeping and Reporting Requirements.

(a) Upon the Department's request, any record relevant to the operating permit or to the emissions of any air contaminant from the facility shall be submitted to the Department within 30 days of the request by the Department or within a longer time period, if approved in writing by the Department, and shall be transmitted on paper, on computer disk, or electronically at the discretion of the Department.

(b) The permittee shall maintain records of all monitoring data and supporting information on-site for a period of at least five years from the date of the monitoring sample, measurement, report or initial operating permit application. Supporting information includes, at a minimum, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the operating permit, and any other information required to interpret the monitoring data. Records required to be maintained shall include, where applicable:

1. The date, place as defined in the permit, and time of sampling or measurements;
2. The date(s) analyses were performed;
3. The company or entity that performed the analyses;
4. The analytical techniques or methods used;
5. The results of such analyses; and
6. The operating conditions as existing at the time of sampling or measurement.

(c) The permittee shall report a summary of all monitoring data and related supporting information to the Department at least every six months in a format and time frequency specified by the Department.

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(d) Upon request, an owner or operator shall also furnish to the Department copies of records required to be kept by the operating permit or, for information claimed to be confidential, said person may furnish such records directly to the Department and EPA, along with a claim of confidentiality.

(e) The following shall be made readily available for inspection by the Department:

1. The operating permit together with any amendments thereto;

2. A diagram of the facility indicating the location of all equipment and control apparatus, any stack designation assigned by the Department, and any stack designation assigned by the facility;

3. Records documenting any and all use of any equipment, control apparatus, or other source operation including, but not limited to, the kind and amount of air contaminant emitted, rate of production and hours of operation, raw material throughput; and

4. Records documenting any construction, substantial reconstruction or alteration, including the dates thereof, of any equipment or control apparatus.

(f) The permittee shall promptly report to the Department all instances of deviations from permit requirements. This report shall include the deviation itself, including those attributable to upset conditions as defined in the permit, the probable cause of the deviation, and any corrective actions or preventive measures taken.

(g) For facilities permitted to operate under alternative operating scenarios, the permittee shall establish and maintain a log at the facility which indicates the scenario under which the facility is operating. The permittee shall record changes from one scenario to another contemporaneously with the change.

(h) All required reports must be certified by a responsible official consistent with 310 CMR 7.00: *Appendix C*(5)(c).

(11) Application Shield.

(a) An application shield provides that an owner or operator of a facility subject to 310 CMR 7.00: *Appendix C* shall not be subject to penalties for operating without an operating permit during the time the application shield is in effect.

(b) An application shield is in effect for an owner or operator of a facility subject to 310 CMR 7.00: *Appendix C* if:

1. A timely and complete application for an initial application or renewal of an operating permit has been submitted pursuant to 310 CMR 7.00: *Appendix C*(3)(a) (facility may continue to operate until the Department takes final action on the application); and

2. The applicant submits any information requested in writing by the Department within the timelines established.

(c) This application shield does not relieve an owner or operator of a facility subject to 310 CMR 7.00: *Appendix C* from complying with the terms and conditions of any operating permit or applicable requirement. For initial permit issuance, the application shield does not relieve an owner or operator of said facility from complying with any applicable state and federal laws and regulations.

(d) The submittal of a complete application shall not affect the requirement that any source have a preconstruction approval under 310 CMR 7.02 if applicable.

(e) In the event that the Department has not taken final action on an operating permit renewal application prior to an existing operating permit's expiration date, the permit shall remain in effect until the Department takes final action on the renewal application, provided that a timely and complete renewal application has been submitted in accordance with 310 CMR 7.00: *Appendix C*(13).

(f) An application shield terminates automatically upon either of the following:

1. The Department's final action on the application for the initial operating permit or for the renewal; or

2. Failure of the applicant to submit additional information requested by the Department in writing within the deadline established by the Department pursuant to 310 CMR 7.00: *Appendix C*(5)(f).

(g) An application shield terminated pursuant to 310 CMR 7.00: *Appendix C*(5)(f) will be reinstated upon receipt of a submittal meeting all the requirements of a complete initial permit application, including any application fee.

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(12) Permit Shield.

(a) An owner or operator of a facility subject to 310 CMR 7.00: *Appendix C* will not be subject to enforcement action for operating not in compliance with all applicable requirements provided said facility is in compliance with its permit terms and the Department expressly included in the facility's operating permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

1. Such applicable requirements are included and are specifically identified in the permit; or

2. The Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable and the permit includes the determination or a concise summary thereof.

(b) Nothing in 310 CMR 7.00: *Appendix C*(12)(a) or in any operating permit shall alter or affect the following:

1. The provisions of 42 U.S.C. 7401, § 303 (emergency orders), including the authority of the EPA under 42 U.S.C. 7401, § 303;

2. The liability of an owner or operator of a facility subject to 310 CMR 7.00: *Appendix C* for any violation of applicable requirements prior to or at the time of permit issuance;

3. The applicable requirements of the acid rain program, consistent with 42 U.S.C. 7401, § 408(a); or

4. The ability of EPA to obtain information from a source pursuant to 42 U.S.C. 7401, § 114.

(c) In the event that the Department has not taken final action on an operating permit renewal application prior to an existing operating permit's expiration date, the permit shall remain in effect until the Department takes final action on the renewal application, provided that a timely and complete renewal application has been submitted in accordance with 310 CMR 7.00: *Appendix C*(13).

(13) Renewals.

(a) The expiration of an operating permit terminates the right of the owners or operators of a facility subject to 310 CMR 7.00: *Appendix C* to operate any emission unit, control equipment or associated equipment covered by the permit unless a timely and complete renewal application is submitted pursuant to 310 CMR 7.00: *Appendix C*(4)(b)4.

(b) Applications for renewal of operating permits are subject to the same requirements for public participation and EPA and affected state(s) oversight that apply to initial permit applications (310 CMR 7.00: *Appendix C*(5)).

(c) An application for renewal of an operating permit shall include the results of such testing as is necessary, at the discretion of the Department, to verify that emissions from the equipment or control apparatus meet the compliance emission limitations established in an approval issued pursuant to 310 CMR 7.00 or an operating permit issued under 310 CMR 7.00: *Appendix C*. If such testing is required, the applicant shall comply with the procedures outlined in 310 CMR 7.00: *Appendix C*(9) testing and monitoring.

(d) Any owner or operator of a facility subject to 310 CMR 7.00: *Appendix C* filing a timely and complete application for renewal of an operating permit shall be provided with an Application shield as prescribed in 310 CMR 7.00: *Appendix C*(11).

(14) Reopenings for Cause.

(a) The Department shall reopen and amend a permit when:

1. Additional federal requirements (including but not limited to standards or requirements pursuant to 42 U.S.C. 7401, §§ 112(d), 112(g), 112(h) and 112(j)) become applicable to a facility with a remaining permit term of three or more years. Such a reopening and amendment shall be completed not later than 18 months after promulgation of the applicable federal requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire unless the original permit or any of its terms and conditions has been extended pursuant to 310 CMR 7.00: *Appendix C*(11)(e).

2. Additional requirements (including excess emission requirements) become applicable to an affected source under the acid rain program. Upon approval by the EPA, excess emissions offset plans shall be deemed to be incorporated into the permit.

Appendix C: continued

3. The Department or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards, limitations, or other terms or conditions of the permit.

4. The Department or EPA determines that the permit must be revised to assure compliance with the applicable requirements.

(b) Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the operating permit for which cause to reopen exists. Such reopenings shall be made as expeditiously as practicable.

(c) Reopening under 310 CMR 7.00: *Appendix C*(14)(a) shall not be initiated before a notice of such intent is provided to the facility by the Department at least 30 days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

(15) General Operating Permits.

(a) The Department may, after notice and opportunity for public comment provided at 310 CMR 7.00: *Appendix C*(6), issue a general operating permit applicable to numerous similar operations or facilities. Each general operating permit shall specify criteria by which facilities may qualify for the general operating permits. General operating permits shall contain as applicable, the requirements of 310 CMR 7.00: *Appendix C*(3)(g).

(b) Facilities subject to the requirements of 310 CMR 7.00: *Appendix C*(2) (Applicability) may seek a general operating permit previously issued by the Department, where appropriate, by applying to the Department under the requirements of 310 CMR 7.00: *Appendix C*(5). An application shield shall apply (310 CMR 7.00: *Appendix C*(11)).

(c) Affected units subject to the acid rain requirements of 42 U.S.C. 7401, Title IV are not eligible for general operating permits unless otherwise provided for under regulations promulgated by EPA under 42 U.S.C. 7401, Title IV.

(d) The approval of a facility's request for authorization to operate under a general operating permit shall not be a final permit action for the purpose of judicial review.

(e) Any permittee in possession of a general operating permit who proposes a modification to the equipment or control device which deviates from any term or condition of the general operating permit, shall apply for an individual operating permit consistent with the rules and procedures under 310 CMR 7.00: *Appendix C*.

(f) Notwithstanding the shield provisions of 310 CMR 7.00: *Appendix C*(12) the owner or operator of the facility shall be subject to enforcement action for operation without an operating permit if the facility is later determined not to qualify for the conditions and terms of the general permit.

(g) If a facility can no longer be covered under the general permit terms and conditions, the owner or operator of said facility must apply for an individual operating permit.

Appendix C: continued

(16) Emergency Conditions.

(a) The owner or operator of a facility subject to 310 CMR 7.00: *Appendix C* shall be shielded from enforcement action brought for non-compliance with technology-based emission limits specified in the operating permit as a result of an emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 310 CMR 7.00: *Appendix C*(16) are met. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An emergency occurred and that the cause(s) of the emergency can be identified;
2. The facility was at the time being properly operated;
3. During the period of the emergency all reasonable steps were taken as expeditiously as possible to minimize levels of emissions that exceeded the emission standards, or other requirements in the operating permit; and
4. Notice of the emergency was submitted to the Department within two business days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of 310 CMR 7.00: *Appendix C*(10). This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

NON-TEXT PAGE