Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

Final Amendments to 310 CMR 7.00
Air Pollution Control
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7.00 Definitions

CARBON DIOXIDE EQUIVALENT (CO_2e) means the amount of GHGs emitted, computed by multiplying the mass amount of emissions in tons per year for each of the greenhouse gases in the air contaminant GHGs, by each gas's associated global warming potential set forth in 40 CFR part 98 subpart A Table A-1 – Global Warming Potentials as in effect on January 1, 2015, and summing the resultant value for each gas to compute tons per year CO_2e.

CRITERIA AIR CONTAMINANT or CRITERIA POLLUTANT means ozone (O_3), ~~PM10~~particulate matter (PM), 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.

GREENHOUSE GASES (GHGs) means the air contaminant that is the aggregate group of six greenhouse gases: Carbon dioxide (CO_2), Methane (CH_4), Nitrous oxide (N_2O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulfur hexafluoride (SF_6). To represent an amount of GHGs emitted, the term Carbon Dioxide Equivalent (CO_2e) shall be used.

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) or FEDERAL AMBIENT AIR QUALITY STANDARDS means the ambient air quality standards for criteria pollutants adopted by the Administrator pursuant to the Clean Air Act §109 (42 U.S.C. §7410) and codified at 40 CFR Part 50 as in effect on November 17, 2016.

PM10 EMISSIONS means finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal ten micrometers, or condensable substance, other than uncombined water, emitted to the ambient air, as measured by an applicable reference method~~s~~, or an equivalent or alternative method~~s,~~ specified by DEP and approved by EPA.

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 federal reference method based on Appendix J of 40 CFR Part 50 ~~of CFR 40~~ and designated in accordance with 40 CFR Part 53 or by a~~n~~ federal equivalent method designated in accordance with 40 CFR Part 53.

$PM_{2.5}$ or PARTICULATE MATTER 2.5 means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a federal reference method based on Appendix L of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53 or by a federal equivalent method designated in accordance with 40 CFR Part 53.

$PM_{2.5}$ EMISSIONS means finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers, or condensable 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.

POLLUTION PREVENTION means, for the purpose of 310 CMR 7.02(8)(a)2.(b), using one or more materials (e.g., coatings, inks, solvents, etc.) formulations, processes, work practices, design features, equipment specifications or any combination thereof, which reduce air emissions to the extent feasible.

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 of actual emissions 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.

7.01: General Regulations to Prevent Air Pollution

(4) Computation of Time. Unless otherwise specifically provided by statute or 310 CMR 7.00, any time period prescribed or referred to in 310 CMR 7.00 or in any action taken pursuant to 310 CMR 7.00 shall begin with the first day following the act which initiates the running of the time period, and shall include every calendar day, including the last day of the time period so computed. If the last day is a Saturday, Sunday, legal holiday, or any other day on which the Department's offices are closed, the deadline shall run until the end of the next business day. If the time period described or referred to is seven days or less, only days when the offices of the Department are open shall be included in the computation. Where used, the term working days shall refer to any full day on which the Department office is open for public business.

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. Except as provided in 310 CMR 7.02(2), ~~A~~a plan approval is required prior to any construction, substantial reconstruction, alteration, or subsequent operation of a facility or emission unit that may emit air 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 in 310 CMR 7.02(4) and 310 CMR 7.02(5). For the air contaminant GHGs, the potential to emit shall be determined based

on tons per year CO_2e, and 310 CMR 7.02 shall be applicable to GHGs only if construction, substantial reconstruction or alteration of a facility or emission unit results in an increase in potential emissions equal to or greater than 75,000 tons per year CO_2e. If a plan approval is required due to potential emissions of GHGs, a comprehensive plan approval shall be required pursuant to 310 CMR 7.02(5).

(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.

(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 7.02 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.

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.

23. Ownership. A change in facility ownership. The new owner shall notify~~, 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~~ Ozone Season Program. Construction, 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~~ or 7.34. 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 7.02 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

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. is 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~~11.; or

3. would cause increases in aggregate emissions ~~above thresholds defined by~~pursuant to 310 CMR 7.02(6) that equal or exceed plan approval thresholds in 310 CMR 7.02(5)(a)(6); or

4. would cause or contribute to a condition of air pollution under 310 CMR 7.02(7); or

5. would cause a facility to become subject to 310 CMR 7.00: Appendix C.

(d) Record Keeping. The owner or operator of a facility or emission unit that is exempt from plan approval under 310 CMR 7.02(2)(b) 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).

(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.

(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~~ shall provide an opportunity for public comment ~~as specified in 40 CFR Part 51.161 prior to issuing an approval or denial~~

~~of~~in accordance with 310 CMR7.02(3)(i) on the Department's proposed decision to approve or deny a plan ~~approval~~ application required under:

1. 310 CMR 7.02(4) (LPA)~~or (5)~~ for any facility that meets or exceeds a~~n~~ MEPA Review threshold for stationary sources of criteria or hazardous air pollutants, contained at 301 CMR 11.03(8): *Air*; and

2. 310 CMR 7.02(5) (CPA).

(i) ~~Reserved~~Public Comment Procedures. For each plan application subject to 310 CMR 7.02(3)(h), the Department shall:

1. Provide a 30-day period for submittal of public comment;

2. Post on a public Web site identified by the Department (which may be the Department's Web site) the following:

a. A notice of availability of the Department's proposed decision to approve or deny the plan application and information on how to submit public comment;

b. The Department's proposed decision to approve or deny the plan application;

c. Information on how to access the administrative record for the Department's proposed decision to approve or deny the plan application.

3. Send a copy of the notice required in 310 CMR 7.02(3)(i)2.a. to EPA.

(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.

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.

5. 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.

6. 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.

~~(b) 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~~	~~Baseline Hg emissions (pounds) beginning~~
~~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.~~

~~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 ~~3~~40,000,000 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 tha~~t~~n 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 the terms and conditions in 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

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).

4. Applicability of Non-attainment, PSD, or MACT Review. Unless enforceable restrictions are established, ~~A~~any construction, substantial reconstruction, alteration or subsequent operation~~, unless enforceable restrictions are established~~ that 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~~.~~; or

d. 310 CMR 7.00: Appendix C.

(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~~310 CMR 7.00 *~~f~~Federal ~~p~~Potential to ~~e~~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.

(2) 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) and 310 CMR 7.02(1)(d) for GHGs. 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. ~~3~~40,000,000 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).

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 in 310 CMR 7.00, where the construction, substantial reconstruction or alteration would cause~~s~~ 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 a PSD Permit, a Non-attainment Review Plan Approval or a Case-by-case MACT. Any facility, where the construction, substantial reconstruction or alteration would violate a condition of a PSD Permit, a Non-attainment Review approval (310 CMR 7.00, Appendix A) or a 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; such a facility may require a revision to the existing permit regardless of whether a CPA is required.

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 major stationary sources of air contaminants and major modifications of existing major stationary sources (as those terms are defined in 40 CFR 52.21) 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.~~

(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 63.44. 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 63.44 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.

(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 level of control based on a combination of best management practices, pollution prevention, and a limitation on the hours of operation and/or raw material usage that minimizes emissions to the extent feasible. 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.

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.

8. Plan Approvals under 310 CMR 7.26(45) shall use the credits calculated by 7.26(45)(b)4 to subtract from the actual emissions in determining compliance with the established emission limits.

(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.

310 CMR 7.00 Appendix C(2)

(2) Applicability.

(a) 310 CMR 7.00: *Appendix C* applies to any facility which:

1. emits or has federal potential emissions, in the aggregate, including from exempt and insignificant activities, of any regulated air pollutant in an amount which equals or exceeds any one of the following: 50 tons per year of VOC; 50 tons per year of 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, excluding GHGs; ~~or as of August 16, 2013, 100,000 tons per year of CO e and 100 tons per year of GHG mass basis;~~ or

…

310 CMR 7.00 Appendix C(5)

(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)1, the application shall include all applicable requirements for all emissions units.

...

310 CMR 7.00 Appendix C(5)

(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*, except that emissions from these activities shall be included in determining federal potential to emit under 310 CMR 7.00: *Appendix C(2)*:

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. Non-process related 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 laboratories~~y~~, including 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~~that perform laboratory scale activities as defined by OSHA, excluding commercial laboratories that provide laboratory services for third parties.
    d. by facilities for quality assurance and quality control testing and sampling activities.
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.

7.12: U Source Registration

(1) Applicability.

(a) ~~Source Registration is required of~~310 CMR 7.12 applies to any ~~person~~ owner/~~ing,~~ operator~~ing~~ of ~~or controlling~~ a facility if ~~said~~such facility meets any of the criteria in 310 CMR 7.12(1)(a)1-11.~~:~~

1. Has a facility-wide maximum energy input capacity in BTU/hour from~~Is or contains a~~ fuel utilization facility~~ies 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~~
a. All Fuels	40,000,000;
b. Residual Fuel Oil	10,000,000;
c. Solid Fuel	3,000,000;
d. Used Oil Fuel	3,000,000; or
e. Landfill Gas	3,000,000~~;~~.

2. Has a maximum energy input capacity in Btu/hour from any fuel utilization facility emission unit that combusts natural gas, propane, butane, or distillate oil equal to or greater than the 10,000,000 Btu/hour.

~~2~~3. Has non-combustion federal potential[1] to emit (facility-wide) equal to or greater than:

~~Contaminant~~	~~Threshold~~
a. Particulate Matter	two tons per year;
b. Oxides of Sulfur	2.5 tons per year;
c. Organic Material	ten tons per year;
d. Nitrogen Dioxide	4.4 tons per year; or
~~Lead~~	~~five tons per year~~
e. Hazardous Air Pollutants	ten tons of any individual HAP per year or 25 tons of total HAPs per year.~~;~~

~~3~~4. Is or contains a hazardous waste incinerator, regardless of size.~~;~~

~~4~~5. Is or contains an incinerator with the capacity to reduce 50 pounds per hour or more of waste.~~;~~

~~5~~6. 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

[1] Non-combustion potential emissions excludes emissions from motor vehicles, incinerators and products of combustion from fuel utilization facilities.

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 per hour or greater (burning any fuel).;

7. Is required to filesubmit a 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 an annual sSource rRegistration report is no longer required to do so unless saidsuch facility meets one of the other conditions for registrationapplicability criteria in 310 CMR 7.12; or a more recent Department approval requires submittal of a Source Registration.;

8. WhoIs a facility for which the owner/operator has receiveds a request from the Department to submit a for Source Registration from the Department.; or

10. Any person owning, operating or controllingIs a facility subject to 310 CMR 7.00*: Appendix C* in the previous calendar year.

11. Had actual emissions equal to or greater than 0.5 tons of lead, 25 tons of NOx, or 25 tons of VOC in the previous calendar year.

(b) Any person owner/ing, operatoring of or controlling a facility that becomes subject to reporting310 CMR 7.12 by meeting one of the criteria in 310 CMR 7.12(1)(a) and that was not previously subject to 310 CMR 7.12Source Registration reporting shall contact notify the Department by January 31 of the calendar year immediately following the calendar year in which the facility became subject to 310 CMR 7.12.

(c) Any person owner/ing, operatoring, leasing or controlling of a facility subject to 310 CMR 7.26(20) – (29) shall report emissions in a manner described by that regulationneed not submit a Source Registration pursuant to 310 CMR 7.12 unless otherwise required to report pursuant to 310 CMR 7.12(1)(a)8. or such facility meets any of the applicability criteria in 310 CMR 7.12(2)(a)4(1)(a)(11).

(2) Schedule.

(a) By April 15th of each year,Source Registration shall be signed and submitted Except as provided in 310 CMR 7.12(2)(b), a Responsible Official of a facility shall sign and submit a Source Registration to the Department every year by the Responsible Official ofdate indicated below:

1. May 1 for Aa facility required to obtain an operating permit pursuantsubject to 310 CMR 7.00: *Appendix C* in the previous calendar year;
2. June 1 for Aa facility that:
   a. hasving an RES permit issued by the Department pursuant to 310 CMR 7.02(9);
   3. [Reserved];b. 4. A facility withhad actual emissions of lead equal to or greater than 0.5 tons in the previous calendar year, or actual emissions of NO_x or VOC equal to or greater than 25 tons per year in the previous calendar year;

c. ~~5. A facility that~~ emits an air contaminant subject to a NESHAP or is subject to a~~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~~

d. ~~6. A facility that~~ is required, as a condition of a plan approval issued by the Department since January 1, 1990, to ~~file~~submit a Source Registration annually.

(b) ~~Source Registration shall be submitted to the Department once every three years where~~If ~~the~~a facility is not subject to the annual reporting ~~requirements of~~schedule in 310 CMR 7.12(2)(a)~~.~~, a Responsible Official shall sign and submit a Source Registration ~~shall be due~~ to the Department by ~~April 15 or another date approved by the Department~~April 1 once every three years.

~~(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,~~in the Source Registration as ~~is~~ specified ~~in forms obtained from~~in a format provided by 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, and ~~a description of all~~ raw materials and fuels used at the facility. Once a facility is subject to 310 CMR 7.12~~Source Registration~~, all emission units and processes at the facility ~~must~~shall be included in the ~~submittal~~Source Registration even if, individually, certain emission units and processes may not meet the applicability thresholds of 310 CMR 7.00. Emission units ~~identified as~~that are "insignificant activities" under 310 CMR 7.00: *Appendix C*(5)(i) need not be included~~.~~;
2. Detailed emissions 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 capture 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~~Responsible Official signing the submittal pursuant to 310 CMR 7.01.

(b) Where such format is part of an electronic data system operated by the Department, the owner/operator shall submit the Source Registration using the electronic data system.

(c~~b~~) Copies of Source Registration and other information supplied to the Department, ~~to~~ 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.~~

Amend the follow definitions in 310 CMR 7.00 Definitions:

EMERGENCY OR STAND-BY 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.~~

…

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 defined under 40 CFR 1068.30~~pursuant to 42 U.S.C. 7543(e) and 42 U.S.C. 7547(e)~~ or is self-propelled.

Amend 310 CMR 7.02(2)(b)

(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:

…

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. An emergency or stand-by engine~~s~~ that ~~have received plan approval must~~ is approved under 310 CMR 7.02(5) shall comply with the terms and conditions of the plan approval.

…

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 that is operated as a nonroad engine as defined under 40 CFR 1068.30~~regulated by EPA as a nonroad 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 that is operated as a nonroad engine as defined under 40 CFR 1068.30~~regulated by EPA as a non-road engine pursuant to 40 CFR 89, 90, 91, and 92~~.

Amend 310 CMR 7.02(5)(a)3.

(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:
…

3. Internal Combustion Engines and Turbines.
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. On and after March 23, 2006 a non-emergency turbine with a rated output of less than one megawatt (MW) burning fuel oil, or greater than ten MW burning any fuel~~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 engine for which the owner/operator elects to apply for a plan approval pursuant to 310 CMR 7.02(5)(c) in lieu of complying with 310 CMR 7.26(42) or 310 CMR 7.26(43).
~~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.~~
d. A combined heat and power project (CHP) for which the owner/operator elects to apply for a plan approval pursuant to 310 CMR 7.02(5)(c) in lieu of complying with 310 CMR 7.26(45).

Amend 310 CMR 7.02(8)(a)

(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:
…

8. Plan Approvals under 310 CMR 7.26(45) shall use the credits calculated by 7.26(45)(b)4 to subtract from the actual emissions in determining compliance with the emission limits established under 310 CMR 7.26(43)(b).

Amend 310 CMR 7.02(8)(i)

(i) U Emergency or Standby Engine~~(s)~~.
1. Applicability.
a. On and after March 23, 2006, the construction, substantial reconstruction, or alteration of any emergency or standby engine greater than or equal to 37kW shall ~~be~~

governed bycomply with the requirements of 310 CMR 7.26(40) through (4442), *Engines and Combustion Turbines*.,

a.b. 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 (i)5.; or 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.

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

a1. The normal maintenance and testing procedure as recommended by the manufacturer, and For up to 100 hours per calendar year, or as otherwise approved by EPA, for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine;

2. As part of the 100 hours, for up to 50 hours per calendar year for non-emergency situations; and

b3. During pPeriods of electric power outage due to failure of the grideelectrical supply, in whole or in part, onsite disaster, local equipment failure, flood, fire or natural disaster, or when the imminent threat of a power outage is likely due to failure of the electrical supply. 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. Additional limitations and conditions may apply, including but not limited to 40 CFR Part 63, Subpart ZZZZ; 40 CFR Part 60, Subpart IIII; and 40 CFR Part 60, Subpart JJJJ.

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 operations, including date, time and duration of operation and reason for each start, ~~gallons of fuel used,~~ fuel type and ~~heating value~~supplier~~, 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.

~~c.~~d. A log of the conditions under which the engine operated pursuant to 310 CMR 7.02(8)(i)2.

4. Availability of Records. ~~Monthly l~~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)(c).

5. Fuel Requirements. ~~On and after July 1, 2007, n~~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 content limit~~s~~ for fuel in 310 CMR 7.05.~~pursuant to 40 CFR 80.29, 40 CFR 80.500, and 40 CFR 80.520(a) and (b) as in effect January 18, 2001.~~

Amend 310 CMR 7.03(10)

(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~~Operate only ~~during~~:

a. ~~The normal maintenance and testing procedure as recommended by the manufacturer; and~~ For up to 100 hours per calendar year, or as otherwise approved by EPA, for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine;

b. As part of the 100 hours, for up to 50 hours per calendar year for non-emergency situations; and

~~b~~c. During periods of electric power outage due to failure of the ~~grid~~electrical supply, in whole or in part, onsite disaster, local equipment failure, flood, fire or natural disaster~~, and~~or when the imminent threat of power outage is likely due to failure of the electrical supply.

~~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.~~

Additional limitations and conditions may apply, including but not limited to 40 CFR Part 63, Subpart ZZZZ; 40 CFR Part 60, Subpart IIII; and 40 CFR Part 60, Subpart JJJJ.

(b) ~~On and after July 1, 2007, n~~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~~ content limit for fuel in 310 CMR 7.05~~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.

Amend 310 CMR 7.26(40)-(45): Industry Performance Standards

~~(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.~~

(40) Engines and Combustion Turbines.

(a) Engines and Turbines. For engines and turbines installed on and after March 23, 2006, the owner/operator of:

1. An emergency engine or turbine shall comply with the requirements of 310 CMR 7.26(42).
2. Any other engine or turbine shall comply with the requirements of 310 CMR 7.26(43) or 7.02(5), except that an engine or turbine in a CHP operation may comply with 310 CMR 7.26(45) if it meets the requirements of 310 CMR 7.26(45).

(b) Exceptions. 310 CMR 7.26(40) through (45) shall not apply to:

1. An engine that is operated as a nonroad engine as defined under 40 CFR 1068.30.
2. Any construction or major modification that would be subject to Prevention of Significant Deterioration (PSD) review, or Emission offsets and Non-attainment Review at 310 CMR 7.00: *Appendix A*, with respect to the installation of the engine or turbine.

(41) Definitions. Terms used in 310 CMR 7.26(40) through (~~44~~45) 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.

Applicable Model Year means the model year that corresponds to the calendar year in which the engine is installed.

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.

Emergency means an electric power outage due to failure of the ~~grid~~electrical supply, 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.~~

Engine~~s~~ means spark ignition (SI) ~~and~~ or compression ignition (CI) stationary reciprocating internal combustion engine~~s~~.

Install or Installation as used in 310 CMR 7.26(42) and (43) means to set an emission unit in position for use. Relocating a previously approved engine or turbine within the same facility or to a contiguous property owned and operated by the same owner is not an installation.

Model Year means the calendar year in which the engine was originally produced, or the annual new model production period of the engine manufacturer if it is different than the calendar year. Model Year shall include January 1 of the calendar year for which the model year is named. Model Year shall not begin before January 2 of the previous calendar year, and it shall end by December 31 of the named calendar year. For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, Model Year means the calendar year or new model production period in which the engine was originally produced.

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 Emergency 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 37 kW ~~and~~or a ~~emergency~~ turbine~~s~~ with a rated power output less than one MW, that is~~are constructed, substantially reconstructed or altered~~ installed on and after March 23, 2006, if said engine or turbine complies with 310 CMR 7.26(42).

~~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~~ The owner/~~and~~ operator~~s~~ of an ~~emergency~~ engine~~s~~ or ~~and~~ turbine~~s~~ subject to 310 CMR 7.26(42) ~~must~~ shall comply with the emission limitations and documentation as follows: ~~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~~ Engines installed before [effective date of regulation], shall comply with the applicable model year emission limitations set by ~~the US~~ EPA for non-road compression ignition engines (40 CFR 89 as in effect October 23, 1998) at the time of the engine 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. Engines installed on and after [effective date of regulation] shall comply with the applicable model year emission limitations set by EPA in Standards of Performance for New Stationary Sources for emergency compression ignition reciprocating engines under 40 CFR 60 Subpart IIII.

3. The owner/operator of an engine subject to the requirements of 310 CMR 7.26(42)(b)1. and 2. shall obtain from the supplier a statement that a certificate of conformity has been obtained from the Administrator.

a. For an engine installed on or before [effective date] pursuant to 40 CFR 89.105 as in effect October 23, 1998, any engine certified under EPA nonroad standards is automatically certified to operate as an emergency engine pursuant to 310 CMR 7.26(42).

b. For a spark ignition engine, a letter or other documentation from the supplier stating that the engine meets the applicable emission limitation shall satisfy the certificate of conformity requirement in 310 CMR 7.26(42)(b)3.

~~2~~4. ~~All~~ A ~~emergency~~ turbine~~s~~ with a rated power output less than one MW shall comply with the emission limitations contained in 310 CMR 7.26(42): *Table 1*.

Table 1

Emission Limitations – Emergency Turbines

Rated Power Output	**Oxides of Nitrogen**
< 1 MW	0.60 pounds/MW~~—h~~

(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 distillate fuel that does not meet the ~~applicable U.S. Environmental Protection Agency~~ sulfur content limits for fuel in 310 CMR 7.05. ~~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 and Maintenance.

a. ~~The~~An engine ~~and~~or turbine ~~shall not be operated more than 300 hours during any rolling 12-month period.~~ shall ~~This operating restriction includes~~operate only:

1. ~~normal maintenance and testing procedures as recommended by the manufacturer.~~ for up to 100 hours per calendar year, or as otherwise approved by EPA, for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine~~.~~;

2. as part of the 100 hours, for up to 50 hours per calendar year for non-emergency situations; and

3. during an emergency.

b. Additional limitations and conditions may apply, including but not limited to 40 CFR Part 63, Subpart ZZZZ; 40 CFR Part 60, Subpart IIII; and 40 CFR Part 60, Subpart JJJ.

c. A non-turn-back 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~~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*.

~~4~~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)).

i. Exhaust stacks shall be configured to discharge the combustion gases vertically and shall not be equipped with any part or device that ~~restricts~~ impedes the vertical exhaust flow of the emitted combustion gases~~, including but not limited to rain protection devices "shanty caps" and "egg beaters"~~.

ii. 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~~1. Avoiding locations that may be subject to downwash of the exhaust; and

~~ii~~2. ~~I~~installing a stack~~(s)~~ of sufficient height in locations that will prevent and minimize flue gas impacts upon sensitive receptors.

b. An Engine~~s~~ or turbine~~s~~ with a rated power output equal to or greater than 300 ~~kw~~kW~~, but less than 1 MW,~~ shall have an exhaust stack with a minimum stack height of ten feet above the ~~facility~~ rooftop or the ~~emergency~~ engine or turbine enclosure, whichever is lower.

c. An Engine~~s~~ with a rated power output equal to or greater than one MW shall be equipped with an exhaust 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), the owner/operator shall submit documentation that the operation of the engine or turbine will not cause an exceedance of any National Ambient Air Quality Standard.~~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 Aambient Air Quality Standard.~~

5. Visible Emissions. ~~Emergency c~~Engines and turbines shall 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(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~~.~~ ~~;~~ An 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~~ shall 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 using liquid fuel shall be determined using Method 8178 D2 of the International Organization for Standardization.

~~c. Testing shall be conducted at full design load of the emergency engine or turbine.~~

~~d~~c.~~-~~ 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 operations, including date, time and duration of operation and reason for each start per 310 CMR 7.26(42)(d)1., fuel type and supplier ~~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 all 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 an engine~~s~~ with a rated power output equal to or greater than 50kW ~~and~~ or ~~to~~

a turbines with a rated power output less than or equal to ten MW ~~that are constructed, substantially reconstructed, or altered~~that is installed on or after March 23, 2006, except:~~.~~

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 an~~y~~ 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. The owner/operator of a turbine~~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. An owner/operator~~Owners and operators~~ of an engine~~s~~ or turbine~~s~~ 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*.~~*Tables 1, 2 and 3.*

~~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~~1

Installation Date	Emission Limitations – Oxides of Nitrogen	Engines Particulate Matter (Liquid Fuel Only)	Carbon Monoxide
On and after 3/23/06	0.6 lbs/megawatt-hour (MWh)	≤ 1MW 0.7lbs/MWh > 1 MW 0.09 lbs/MWh	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~~2

Rated Power Output	Emission Limitations – Oxides of Nitrogen	Turbines Ammonia	Carbon Monoxide
Less than 1 MW	0.47 lbs/MW-h~~r~~ Natural Gas	N/A	0.47 lbs/MW-h~~r~~ Natural Gas
1 to 10 MW	0.14 lbs/MW-h~~r~~ Natural Gas	2.0 ppm 15% O_2 Dry Basis	0.09 lbs/MW-h~~r~~ Natural Gas
	0.34 lbs/MW-h~~r~~ Oil		0.18 lbs/MW-h~~r~~ Oil

Table ~~4~~3

Emission Limitations – Installation Date	Engines and Turbines 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, n~~No person shall accept delivery for burning in any engine or turbine subject to 310 CMR 7.26(43) diesel or any other distillate fuel that does not meet the ~~applicable U.S. Environmental Protection Agency~~ sulfur content limit~~s~~ for fuel pursuant to 310 CMR 7.05. ~~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:

1. Operation and Maintenance. The engine~~(s)~~ ~~and~~or 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~~ An engine~~s~~ or turbine~~s~~ shall utilize an exhaust stack that discharges so as to not cause a condition of air pollution (310 CMR 7.01(1)). The ~~E~~exhaust stack~~s~~ shall be configured to discharge the combustion gases vertically and shall not be equipped with any part or device that impedes~~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 of 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. I~~i~~nstalling a stack~~(s)~~ of sufficient height in a location~~s~~ 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~~ 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.~~higher.

c. Engines and turbines with a rated power output equal to or greater than 300~~kw~~kW~~, 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~~higher.

d. Engines and turbines with a rated power output equal to or greater than one MW shall be equipped with an exhaust 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), the owner/operator shall submit documentation that the operation of the engine or turbine will not cause an exceedance of any National Ambient Air Quality Standard.~~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~~ shall 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. A one-time certification shall be submitted to the Department 30 days prior to commencement of operation. An 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(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 (ISO).

~~c. Testing shall be conducted at full design load of the engine or turbine.~~

~~d~~c. 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 3~~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 rated power output; ~~and~~

2. ~~A monthly log of hours of operation, gallons of fuel used,~~ Fuel type and supplier ~~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~~3. 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 as~~in~~ a non-emergency engine or turbine 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 shall~~must~~ be between 4.0 and 0.15.
2. The design system efficiency shall~~must~~ be at least 55%.
3. The CHP project shall~~must~~ comply with the requirements of 310 CMR 7.02(5)(c).
4. The engine shall have~~has~~ a rated power output equal to or greater than 50 kW or the turbine shall have~~has~~ a rated power output less than or equal to ten MW.

(b) Emission Credits. A CHP system that meets the~~se~~ requirements in 310 CMR 7.26(45)(a) 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) shall~~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	0.08 lbs/MMBtu
Carbon dioxide	117 lbs/MMbtu

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 measure~~e~~ably and enforceably reduced by the operation of the CHP system.
3. The emissions per MMBtu of thermal energy output shall~~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., shall~~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., shall~~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).~~

7.00: Definitions

HIGH PRECISION PRODUCTS means products for which contamination must be minimized in accordance with a customer or other specification including but not limited to:

(a) Products for use in extreme environments;

(b) Products covered by rigorous military or commercial specifications that require extremely accurate and quality controlled manufacturing; and

(c) Products with quality standards that do not allow for potential excess contamination.

7.18: U Volatile and Halogenated Organic Compounds

(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 any of 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~~.~~; and

~~c.~~d. cold cleaning degreasers used in the cleaning of high precision products for which the owner or operator has received Department and EPA approval.

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, which draining, the clean parts are enclosed for 15 seconds or until dripping ceases, whichever is longer;

c. Each cold cleaning degreaser is designed with:

i. emission control equipment design specifications; or

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

d. The covers of each cold 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
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

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. 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), or (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~~.~~, except for cleaning of high precision products, for which such person has received Department and EPA approval to use spray operations with non-continuous fluid stream or pressure greater than ten pounds per square inch, provided that such person shall:
   - i. Limit the amount of solvent consumed in such spray operations at the premises to less than 3,000 gallons in any 12-month period, excluding solvent captured and recycled on-site;
   - ii. Use a solvent with a VOC content less than 7.7 pounds per gallon in such operations; and
   - iii. Prepare and maintain records sufficient to demonstrate compliance with 310 CMR 7.18(8)(e)3.i. and ii. Records 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 compliance plan or upon request.

(f) Any person subject to 310 CMR 7.18(8)(a), (b), or (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~~ five 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.

(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.

TEXT deleted is ~~**struck out and bold**~~. Text added is **bold** and **single underlined (for text)** or **double underlined (for headers)**.

Amend 310 CMR Title page

7.03: U Plan Approval ~~**Application**~~ Exemption**:** Construction Requirements

Amend 310 CMR 7.00 Definitions by adding the following definitions in alphabetical order to the existing list of defined terms:

ADHESION PRIMER means a coating that is applied to a polyolefin part to promote the adhesion of a subsequent coating. An adhesion primer is clearly identified as an adhesion primer or adhesion promoter on its accompanying safety data sheet.

AIR-ASSISTED AIRLESS SPRAY means an airless spray with a compressed air jet at the nozzle opening to atomize a coating.

AIR-DRIED COATING for purposes of 310 CMR 7.18(11)(d)2.a. and b. means a coating that is cured at a temperature below 90°C (194°F).

AIR-DRIED COATING for purposes of 310 CMR 7.18(21) means a coating that is dried by the use of air or forced warm air at temperatures below 90°C (194°F).

AIRLESS SPRAY means a spray coating method in which the coating is atomized by forcing it through a small nozzle opening at high pressure. The coating is not mixed with air before exiting from the nozzle opening.

ALCOHOL SUBSTITUTE means non-alcohol fountain solution additives, including, but not limited to, glycol ethers or ethylene glycol.

ANTIFOULANT COATING means any coating applied to the underwater portion of a pleasure craft to prevent or reduce the attachment of biological organisms, and registered with the United States Environmental Protection Agency (EPA) as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code Section 136).

AUTOMOTIVE/TRANSPORTATION COATING means the coating of any plastic part that is or shall be assembled with other parts to form an automobile or truck.

BAKED COATING means a coating that is cured at a temperature that is at or above 90°C (194°F).

BLACK COATING means a coating which meets the following criteria:

1. Maximum lightness: 23 units.

2. Saturation: less than 2.8, where saturation equals the square root of $A^2 + B^2$.

These criteria are based on Cielab color space, 0/45 geometry. For spherical geometry, specular included, maximum lightness is 33 units.

BUSINESS MACHINE means a device that uses electronic or mechanical methods to process information, perform calculations, print or copy information, or convert sound into electrical

impulses for transmission, including devices listed in North American Industry Classification System (NAICS) numbers 333318, 334112, 334118, 334210, and photocopy machines, a subcategory of products classified under NAICS code 333316.

BUSINESS MACHINE COATING means the coating of any plastic part that is or shall be assembled with other parts to form a business machine.

CAMOUFLAGE COATING means a coating used, principally by the military, to conceal equipment from detection.

COATING for purposes of 310 CMR 7.18(14) means materials applied onto or impregnated into a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, solvent-borne coatings, waterborne coatings, adhesives, wax coatings, wax laminations, extrusion coatings, extrusion laminations, 100% solid adhesives, UV cured coatings, electron beam cured coatings, hot melt coatings, and cold seal coatings. Materials used to form unsupported substrates, such as calendaring of vinyl, blown film, cast film, extruded film, and co-extruded film, are not defined as coatings.

COATING LINE for purposes of 310 CMR 7.18(14) means a series of coating applicators, flash-off areas, and any associated curing/drying equipment between one or more unwind/feed stations and one or more rewind/cutting stations.

DIGITAL PRINTING means a method of printing in which an electronic output device transfers variable data, in the form of an image, from a computer to a variety of substrates.

DIP COATING means a method of applying coatings to a substrate by submersion into and removal from a coating bath.

DRUM means any cylindrical metal shipping container larger than 12 gallons capacity but no larger than 110 gallons capacity.

ELECTRIC DISSIPATING COATING means a coating that rapidly dissipates a high voltage electric charge.

ELECTRICAL AND ELECTRONIC COMPONENTS for purposes of 310 CMR 7.18(31) means components and assemblies of components that generate, convert, transmit, or modify electrical energy. Electrical and electronic components include, but are not limited to, wires, windings, stators, rotors, magnets, contacts, relays, printed circuit boards, printed wire assemblies, wiring boards, integrated circuits, resistors, capacitors, and transistors. Cabinets in which electrical and electronic components are housed are not considered electrical and electronic components.

ELECTRIC-INSULATING AND THERMAL-CONDUCTING COATING means a coating that displays an electrical insulation of at least 1000 volts DC per mil on a flat test plate and an average thermal conductivity of at least 0.27 BTU per hour-foot-°F.

ELECTRIC-INSULATING VARNISH means a non-convertible-type coating applied to electric motors, components of electric motors, or power transformers, to provide electrical, mechanical, and environmental protection or resistance.

ELECTRODEPOSITION means a specialized form of dip coating where opposite electric charges are applied to the coating and the part.

ELECTROSTATIC PREPARATION COATING means a coating that is applied to a plastic part solely to provide conductivity for the subsequent application of a primer, a topcoat, or other coating through the use of electrostatic application methods. An electrostatic preparation coating is clearly identified as an electrostatic preparation coating on its accompanying safety data sheet.

EMI/RFI SHIELDING COATING means a coating used on electrical or electronic equipment to provide shielding against electromagnetic interference (EMI), radio frequency interference (RFI), or static discharge.

ETCHING FILLER means a coating that contains less than 23% solids by weight and at least ½% acid by weight, and is used instead of applying a pretreatment coating followed by a primer.

EXTREME HIGH-GLOSS COATING for purposes of 310 CMR 7.18(11)(d)2.a. and b. means a coating which, when tested by ASTM standard D523-14, shows a reflectance of 75% or more on a 60° meter.

EXTREME HIGH-GLOSS COATING for purposes of 310 CMR 7.18(11)(b)4. and (d)2.c. means a coating which, when tested by ASTM standard D523-14, shows a reflectance of 90% or more on a 60° meter.

EXTREME PERFORMANCE COATING for purposes of 310 CMR 7.18(11)(d)2.a. and b. means a coating used on a metal or plastic surface where the coated surface is, in its intended use, exposed to extreme environmental conditions such as those listed in (a) through (c). The term includes, but is not limited to, coatings applied to locomotives, railroad cars, farm machinery, and heavy duty trucks. Extreme environmental conditions include, but are not limited to, any of the following:

(a) Chronic exposure to corrosive, caustic, or acidic agents, chemicals, chemical fumes, chemical mixtures, or solutions;

(b) Repeated exposure to temperatures in excess of 121°C (250°F); or

(c) Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers, or scouring agents.

FINISH PRIMER/SURFACER means a coating applied with a wet film thickness of less than ten mils prior to the application of a topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promotion of a uniform surface necessary for filling in surface imperfections.

FLEXIBLE COATING means any coating that is required to comply with engineering specifications for impact resistance, mandrel bend, or elongation as defined by the original equipment manufacturer.

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.

FOG COATING means a coating that is applied to a plastic part for the purpose of color matching without masking a molded-in texture.

GLOSS REDUCER means a coating that is applied to a plastic part solely to reduce the shine of the part. A gloss reducer shall not be applied at a thickness of more than 0.5 mils of coating solids.

HEAT-RESISTANT COATING means a coating intended to withstand a temperature of at least 204°C (400°F), during normal use.

HEATSET PRINTING means a process that requires heat to set or dry the ink.

HIGH BAKE coating means a coating which is designed to cure only at temperatures of more than 90°C (194°F).

HIGH BUILD PRIMER/SURFACER means a coating applied with a wet film thickness of ten mils or more prior to the application of a topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, or a moisture barrier, or promoting a uniform surface necessary for filling in surface imperfections.

HIGH GLOSS COATING means any coating which achieves at least 85% reflectance on a 60° meter when tested by ASTM D 523-14.

HIGH-PERFORMANCE ARCHITECTURAL COATING means a coating used to protect architectural subsections and which meets the requirements of the American Architectural Manufacturers Association's publication number AAMA 2604-17 (Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels) or 2605-17 (Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels).

HIGH-PRECISION OPTICS for purposes of 310 CMR 7.18(31) means the optical elements used in electro-optical devices that are designed to sense, detect, or transmit light energy, including specific wavelengths of light energy and changes of light energy levels.

HIGH-TEMPERATURE COATING means a coating that is certified to withstand a temperature of 1000°F for 24 hours.

INDUSTRIAL CLEANING SOLVENT for purposes of 310 CMR 7.18(31) means liquid used to clean parts, products, tools, machinery, equipment, and general work areas, including cleanup solutions and degreasing agents. Industrial cleaning solvent does not include janitorial supplies used for cleaning offices, bathrooms or other similar areas. Industrial cleaning solvent does not include solvent used in cold cleaning degreasing, vapor degreasing, or conveyorized degreasing at a facility subject to 310 CMR 7.18(8).

LETTERPRESS PRINTING means a method where the image area is raised relative to the non-image area and the ink is transferred to the substrate directly from the image surface.

MASK COATING means thin film coating applied through a template to coat a small portion of a substrate.

MEDICAL DEVICE for purposes of 310 CMR 7.18(31) means an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar article, including any component or accessory that is:

1. intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of diseases;

2. intended to affect the structure or any function of the body; or

3. defined in the National Formulary or the United States Pharmacopoeia or any supplement to it.

METALLIC COATING means a coating that contains more than 5 grams total of pure elemental metal or a combination of elemental metals per liter of coating as applied.

MILITARY SPECIFICATION COATING means a coating that has a formulation approved by a United States military agency for use on military equipment.

MOLD-SEAL COATING means the initial coating applied to a new mold or a repaired mold to provide a smooth surface which, when coated with a mold release coating, prevents products from sticking to the mold.

MOTOR VEHICLE BEDLINER means a multi-component coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to a cargo bed after the application of topcoat to provide additional durability and chip resistance.

MOTOR VEHICLE CAVITY WAX means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied into the cavities of the vehicle primarily for the purpose of enhancing corrosion protection.

MOTOR VEHICLE DEADENER means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to selected vehicle surfaces primarily for the purpose of reducing the sound of road noise in the passenger compartment.

MOTOR VEHICLE GASKET/SEALING MATERIAL means a fluid, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to coat a gasket or replace and perform the same function as a gasket. Automobile and light-duty truck gasket/gasket sealing material includes room temperature vulcanization (RTV) seal material.

MOTOR VEHICLE LUBRICATING WAX/COMPOUND means a protective lubricating material, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to vehicle hubs and hinges.

MOTOR VEHICLE SEALER means a high viscosity material, used at a facility that is not an automobile or light-duty truck assembly coating facility, generally, but not always, applied in the paint shop after the body has received an electrodeposition primer coating and before the application of subsequent coatings (e.g., primer-surfacer). The primary purpose of automobile and light-duty truck sealer is to fill body joints completely so that there is no intrusion of water, gases or corrosive materials into the passenger area of the body compartment. Such materials are also referred to as sealant, sealant primer, or caulk.

MOTOR VEHICLE TRUNK INTERIOR COATING means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to the trunk interior to provide chip protection.

MOTOR VEHICLE UNDERBODY COATING means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to the undercarriage or firewall to prevent corrosion and/or provide chip protection.

MULTI-COLORED COATING means a coating which exhibits more than one color when applied, and is packaged in a single container and applied in a single coat.

MULTI-COMPONENT COATING means a coating requiring the addition, before application, of a separate reactive resin, commonly known as a catalyst or hardener, in order to form an acceptable dry film.

ONE-COMPONENT COATING means a coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner, necessary to reduce the viscosity, is not considered a component.

OPTICAL COATING means a coating applied to an optical lens.

PAN-BACKING COATING means a coating applied to the surface of pots, pans, or other cooking implements that are exposed directly to a flame or other heating elements.

PETROLEUM HEATSET INK means an ink that is not a water-based, UV-cured, or electron beam-cured ink.

PLEASURE CRAFT means a vessel which is manufactured or operated primarily for recreational purposes, or leased, rented, or chartered to a person or business for recreational purposes. The owner or operator of such vessels shall be responsible for certifying that the intended use is for recreational purposes.

PLEASURE CRAFT SURFACE COATING means any marine coating, except unsaturated polyester resin (fiberglass) coatings, applied by brush, spray, roller, or other means to a pleasure craft.

PREFABRICATED ARCHITECTURAL COMPONENT COATINGS means coatings applied to metal parts and products that are to be used as an architectural structure.

PRESSURE SENSITIVE TAPE means a flexible backing material with a pressure-sensitive adhesive coating on one or both sides of the backing. Examples include, but are not limited to, duct/duct insulation tape and medical tape.

PRETREATMENT COATING means a coating which contains no more than 12% solids, by weight, and at least ½% acid, by weight; is used to provide surface etching; and is applied directly to metal surfaces to provide corrosion resistance, adhesion, and ease of stripping.

PRETREATMENT WASH PRIMER for purposes of 310 CMR 7.18(11) and (21) means a coating which contains no more than 12% solids, by weight, and at least ½% acids, by weight; is used to provide surface etching; and is applied directly to fiberglass and metal surfaces to provide corrosion resistance and adhesion of subsequent coatings.

RADIATION EFFECT COATING for purposes of 310 CMR 7.18(31) means a material that prevents radar detection.

RED COATING means a coating which meets all of the following criteria:

1. Yellow limit: the hue of hostaperm scarlet.
2. Blue limit: the hue of monastral red-violet.
3. Lightness limit for metallics: 35% aluminum flake.

4. Lightness limit for solids: 50% titanium dioxide white.
5. Solid reds: hue angle of -11 to 38 degrees and maximum lightness of 23 to 45 units.
6. Metallic reds: hue angle of -16 to 35 degrees and maximum lightness of 28 to 45 units.
These criteria are based on Cielab color space, 0/45 geometry. For spherical geometry, specular included, the upper limit is 49 units. The maximum lightness varies as the hue moves from violet to orange. This is a natural consequence of the strength of the colorants, and real colors show this effect.

REPAIR COATING means a coating used to re-coat portions of a previously coated product which had sustained mechanical damage to the coating.

RESIST COAT means a coating that is applied to a plastic part before metallic plating to prevent deposits of metal on portions of the plastic part.

SAFETY-INDICATING COATING means a coating that changes physical characteristics, such as color, to indicate unsafe conditions.

SHOCK-FREE COATING means a coating applied to electrical components to protect the user from electric shock. The coating has characteristics of being of low capacitance and high resistance, and having resistance to breaking down under high voltage.

SILICONE-RELEASE COATING means any coating which contains silicone resin and is intended to prevent food from sticking to metal surfaces such as baking pans.

SOLAR-ABSORBENT COATING means a coating which has as its prime purpose the absorption of solar radiation.

SOLID-FILM LUBRICANT means a very thin coating consisting of a binder system containing as its chief pigment material one or more of molybdenum disulfide, graphite, polytetrafluoroethylene (PTFE), or other solids that act as a dry lubricant between faying surfaces.

STENCIL COATING for purposes of 310 CMR 7.18(11)(b)2. and (21)(b)1. means an ink or a pigmented coating which is rolled or brushed onto a template or stamp in order to add identifying letters, symbols, and/or numbers.

STENCIL COATING for purposes of 310 CMR 7.18(21)(b)2. means a coating that is applied over a stencil to a plastic part at a thickness of 1 mil or less of coating solids. Stencil coatings are most frequently letters, numbers, or decorative designs.

TEXTURE COATING means a coating that is applied to a plastic part which, in its finished form, consists of discrete raised spots of the coating.

TOUCH-UP COATING for purposes of 310 CMR 7.18(11) and (21) means a coating used to cover minor coating imperfections that appear after the main coating operation is completed.

TRANSLUCENT COATING means a coating which contains binders and pigment, and is formulated to form a colored, but not opaque, film.

VACUUM METALLIZING means a process whereby metal is vaporized and deposited on a substrate in a vacuum chamber.

VACUUM-METALLIZING COATING means:(a) the undercoat applied to a substrate on which the metal is deposited; or (b) the overcoat applied directly to the metal film.

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.

Amend 310 CMR 7.00 Definitions by deleting the following definitions:

~~**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.**~~

~~**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.**~~

~~**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.**~~

Amend 310 CMR 7.00 Definitions by amending the following definitions:

CLASS II HARDBOARD PANELING FINISH means a finish that meets the **class II** specifications of **ANSI A135.5-2012**~~**Voluntary Product Standard PS-59-73**~~ as approved by the American National Standards Institute (ANSI).

NON-HEATSET OFFSET LITHOGRAPHIC PRINTING means **an** offset lithographic process that does not require heat to set or dry the ink. **UV-cured and electron beam-cured inks are considered non-heatset.**

PACKAGING ROTOGRAVURE PRINTING **OR PACKAGING FLEXOGRAPHIC PRINTING** means rotogravure **or flexographic** 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.

PAPER**, FILM, AND FOIL** 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. **Coating performed on or in-line with any offset lithographic, screen, letterpress, flexographic, rotogravure, or digital printing press is part of a printing process and is not part of the paper, film, and foil surface coating category.**

PUBLICATION ROTOGRAVURE PRINTING **OR PUBLICATION FLEXOGRAPHIC PRINTING** ~~**M**~~**m**eans rotogravure **or flexographic** printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.

SPECIALTY PRINTING means all gravure and flexographic operations which print a design or image, excluding packaging rotogravure printing**, packaging flexographic printing,** ~~**and**~~ publication

rotogravure printing**, and publication flexographic printing**. Specialty printing operations include, but are not limited to, printing on paper cups and plates, patterned gift wrap, wall paper, and floor coverings.

VOLATILE ORGANIC COMPOUND **(VOC)** ~~**is**~~ **means** 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**~~**VOC** includes all organic compounds except the following:

CAS Number	Chemical Name
67641	acetone,
124685	**AMP (2-amino-2-methyl-1-propanol),**
506876	ammonium carbonate,
540885	**t-butyl acetate**
630080	carbon monoxide,
…	
~~**75467**~~	~~**FC-23 (trifluoromethane),**~~
…	
507551	HCFC-225cb (1,3-dichloro-1,1,2,2,3-pentafluropropane),
75467	**HFC-23 (trifluoromethane),**
75105	HFC-32 (difluoromethane),
…	
138495428	HFC 43-10mee (1,1,1,2,3,4,4,5,5,5-decafluoropentane),
1691174	**HFE-134 (HCF_2OCF_2H),**
78522471	**HFE-236cal2 ($HCF_2OCF_2OCF_2H$),**
188690780	**HFE-338pcc13 ($HCF_2OCF_2CF_2OCF_2H$),**
188690779	**H-Galden 1040X or H-Galden ZT 130 (or 150 or 180), ($HCF_2OCF_2OCF_2CF_2OCF_2H$),**
75031	HFE-7000 or n-C3F7OCH3 (1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane),
...	
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),
754121	**HFO-1234yf (2,3,3,3-tetrafluoropropene),**
29118249	**HFO-1234ze (trans-1,3,3,3-tetrafluoropropene),**
N/A	Cyclic, branched, or linear, completely fluorinated alkanes,
…	
N/A	Cyclic, branched, or linear, completely methylated siloxanes,
102687650	**Solstice™ 1233zd(E) (trans-1-chloro-3,3,3-trifluoroprop-1-ene),**
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**~~

Amend 310 CMR 7.03, as follows:

(1) General.

(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**, including, but not limited to, applicable 310 CMR 7.18 and 7.19 Reasonably Available Control Technology (RACT) requirements that come into effect after a person constructs, substantially reconstructs or alters, or operates an emission unit under 310 CMR 7.03**.

…

(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, **adhesives,** 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. **and in 310 CMR 7.03(15)(d) and (f), and to the recordkeeping requirements in 310 CMR 7.03(15)(e).**

…

(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 **as applied** specifications:

1. **[Reserved.]**~~**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. **[Reserved.]**~~**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**~~ **weight** or less of alcohol; or
   b. The fountain solution shall be maintained at 5% by ~~**volume**~~ **weight** or less of alcohol and the fountain solution refrigerated to a temperature of less than 60°F.
5. **[Reserved.]**~~**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**~~ **weight** or less of alcohol.
7. For newspaper printing, the fountain shall contain 0% alcohol.
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**~~ **weight**.

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

1. Cleanup solution as used at the press shall either:

a. not exceed ~~30~~**70**% by weight VOC; or
b. have a VOC composite partial pressure of 10 mmHg or less at 20°C (68°F).

…

(d) Adhesives shall meet a VOC content limit of 300 grams VOC per liter of product as applied (2.5 pounds per gallon), less water.

(**e**~~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 **five**~~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**, including fountain solution alcohol substitute**;
   d. **Fountain solution concentrate;**
   e. Printing Ink;
   f~~e~~. Cleanup solution; ~~and~~
   g~~f~~. **Adhesives; and**
   h~~g~~. Overprint coatings.
2. The percent by ~~volume~~ **weight** of alcohol in the fountain solution as ~~measured~~ **determined** each time alcohol or alcohol mix is added to the system ~~but no less than once per day~~;
3. The ~~volume~~ **weight** percent of VOC-containing fountain additives other than alcohol in the fountain solution;

…

(f) Any person who complies with 310 CMR 7.03(15) in *lieu* of obtaining a plan approval for a press under 310 CMR 7.02 shall comply with applicable RACT requirements of 310 CMR 7.18(25) when such requirements become more stringent than those in 310 CMR 7.03(15).

(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) through (l) shall be subject to the requirements in **310 CMR 7.03(16)(m) and** either 310 CMR 7.03(16)(a)1. or (a)2.

…

(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;
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., a~~A**ll 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. …

…

(m) Any person who complies with 310 CMR 7.03(16) in *lieu* of obtaining a plan approval for a spray booth under 310 CMR 7.02 shall comply with applicable RACT requirements of 310 CMR 7.18(3) through (6), (10), (11), (21) through (24), and (28) when such requirements become more stringent than those in 310 CMR 7.03(16).

…

(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 **that is** not subject to 310 CMR 7.26(20) through (29), **but that is** 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. **and shall also be subject to the requirements in 310 CMR 7.03(19)(c) and to the recordkeeping requirements in 310 CMR 7.03(19)(b).**

(a) 1. The total facility, including **but not limited to** 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~~the total facility** 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**~~.~~; or**

2. The total facility, including **but not limited to** 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~~the total facility** 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 **are** 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 **five ~~three~~** years and shall be made available to representatives of the Department upon request.

(c) Any person who complies with 310 CMR 7.03(19) in lieu of obtaining a plan approval for a press under 310 CMR 7.02 shall comply with applicable RACT requirements of 310 CMR 7.18(12) and (25) and 310 CMR 7.26(20) through (29) when such requirements become more stringent than those in 310 CMR 7.03(19).

Amend 310 CMR 7.18, as follows:

Add new subsection 310 CMR 7.18 (1)(g) as follows:

(1) U Applicability and Handling Requirements.
...
(g) Any person who complies with 310 CMR 7.03 in lieu of obtaining a plan approval for an emission unit under 310 CMR 7.02 shall comply with applicable RACT requirements of 310 CMR 7.18 when such requirements become more stringent than those in 310 CMR 7.03.
(h) Any person who complies with 310 CMR 7.26 shall comply with applicable RACT requirements of 310 CMR 7.18 when such requirements become more stringent than those in 310 CMR 7.26.
…

Amend Subsection 310 CMR 7.18(2) as follows:

(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**~~ **is** based on the control method selected to meet the applicable emission limitations **specified in 310 CMR 7.18,** 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 **or Control** Method	EPA Reference Test Method **(or other as indicated)**	Test Method **Sampling Duration** ~~**Averaging Time**~~
Volatile organic compound leak detection	**21**	**as specified in Test Method**
Coating**s, Inks and Related Materials** ~~**Ref**~~**F**ormulation	24**[1], 24A**	instantaneous **grab sample**
~~**Solvent destruction or solvent recovery**~~ **Exhaust measurement** except carbon adsorption	**18**	**as specified in Test Method**
	25**, 25A, 25B**, **California Air Resources Board (CARB) Method 100**	~~**3**~~**three** hours **(as three one-hour runs)**
Carbon adsorption	**18**	**as specified in Test Method**
	25 or other as appropriate	the length on the adsorption cycle or 24-hours, whichever is less.

~~**[1] Reference Method 24 shall use a 60 minute bake time at 110°C ± 5°C.**~~

(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(3) through (7), (10) through (12), (14) through (16), and (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(3) through (7), (10) through (12), (14) through (16), and (21) through (24).**~~

Any person **proposing to** comply~~**ing**~~ 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).

…

(e) Any person owning, leasing, operating, or controlling a facility **using air pollution capture and control equipment to comply with** ~~**subject to**~~ 310 CMR 7.18~~**(3) through (7), (10) through (12), (14) through (16), or (30)**~~ shall ~~**demonstrate compliance with the requirements for emissions capture and control equipment by**~~ continuously monitor~~**ing**~~ and maintain~~**ing**~~ records on the following parameters:

...

Amend subsection 310 CMR 7.18(3) as follows:

(3) U Metal Furniture Surface Coating.

(a) **Applicability.**

1. On or after January 1, 1980, **and prior to March 9, 2020,** no person who owns, leases, operates, or controls a metal furniture **surface** 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 ~~**there from**~~ in excess of ~~**5.1 pounds of VOC per gallon of solids applied**~~ **the requirements of 310 CMR 7.18(3)(d)1. Such person shall also comply with 310 CMR 7.18(3)(g) through (i)**.

2. On or after March 9, 2020, any person who owns, leases, operates, or controls metal furniture surface coating operations and related cleaning operations which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period shall comply with 310 CMR 7.18(3)(c), (d)2., (e), and (g) through (i).

3. On or after March 9, 2018, any person who owns, leases, operates, or controls metal furniture surface coating operations and related cleaning operations which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three3 tons of VOC per rolling 12 month period shall comply with the work practices of 310 CMR 7.18(3)(f) for coating and cleaning operations.

(b) Exemptions.

1. The requirements of 310 CMR 7.18(3)(d)2. and 3. do not apply to:

a. stencil coatings;

b. safety-indicating coatings;

c. solid-film lubricants;

d. electric-insulating and thermal-conducting coatings;

e. touch-up coatings;

f. repair coatings; or

g. coating application utilizing hand-held aerosol cans.

2. The requirements of 310 CMR 7.18(3)(e) do not apply to:

a. touch-up coatings;

b. repair coatings; or

c. coating application utilizing hand-held aerosol cans.

(c) Extensions. Any person subject to 310 CMR 7.18(3)(a)2. may apply in writing to the Department for a non-renewable extension of the implementation deadline in 310 CMR 7.18(3)(a)2. by complying with 310 CMR 7.18(3)(g). The Department will consider a non-renewable extension of

the deadline in 310 CMR 7.18(3)(a)2. for persons applying under 310 CMR 7.18(3)(c) until no later than March 9, 2021, 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):

1. a Toxics Use Reduction Plan or a Resource Conservation Plan completed for the facility in accordance with 310 CMR 50.40 through 50.48 is submitted as part of the emission control plan;

2. the Toxics Use Reduction Plan or Resource Conservation Plan was certified by a Toxics Use Reduction Planner certified under M.G.L. c. 21I and 310 CMR 50.50 through 50.63;

3. the emission control plan proposes to reduce emissions or natural asset use, from the process or elsewhere in the facility, more than otherwise required pursuant to an applicable regulation or approval of the Department, through toxics use reduction techniques or resource conservation actions as defined in M.G.L. c. 21I; and

4. implementation of the emission control plan meets the emission limitations of 310 CMR 7.18(3)(d).

(d) Reasonably Available Control Technology Requirements.

1. Any person subject to 310 CMR 7.18(3)(a)1. shall not exceed a limitation of 5.1 pounds of VOC per gallon of solids applied.

2. Any person subject to 310 CMR 7.18(3)(a)2. shall limit VOC emissions by using only coatings having a VOC content no greater than the emission limitations listed in Tables 310 CMR 7.18(3)(d)2.a. or b. or by complying with the requirement in 310 CMR 7.18(3)(d)3. If a coating can be classified in more than one coating category in 310 CMR 7.18(3)(d)2., then the least stringent coating category limitation shall apply.

Table 310 CMR 7.18(3)(d)2.a.
RACT Emission Limitations for Metal Furniture Surface Coating

	Mass of VOC per volume of coating less water and exempt compounds, as applied			
	Baked		Air - Dried	
Coating Category	kg/l coating	lb/gal coating	kg/l coating	lb/gal coating
General, One Component	0.275	2.3	0.275	2.3
General, Multi-Component	0.275	2.3	0.340	2.8
Extreme High Gloss	0.360	3.0	0.340	2.8
Extreme Performance	0.360	3.0	0.420	3.5
Heat Resistant	0.360	3.0	0.420	3.5
Metallic	0.420	3.5	0.420	3.5
Pretreatment Coatings	0.420	3.5	0.420	3.5
Solar Absorbent	0.360	3.0	0.420	3.5

Table 310 CMR 7.18(3)(d)2.b. RACT Emission Limitations for Metal Furniture Surface Coating				
	Mass of VOC per volume of coating solids, as applied			
	Baked		Air - Dried	
Coating Category	kg/l solids	lb/gal solids	kg/l solids	lb/gal solids
General, One Component	0.40	3.3	0.40	3.3
General, Multi-Component	0.40	3.3	0.55	4.5
Extreme High Gloss	0.61	5.1	0.55	4.5
Extreme Performance	0.61	5.1	0.80	6.7
Heat Resistant	0.61	5.1	0.80	6.7
Metallic	0.80	6.7	0.80	6.7
Pretreatment Coatings	0.80	6.7	0.80	6.7
Solar Absorbent	0.61	5.1	0.80	6.7

3. Any person may achieve an overall VOC control efficiency of at least 90% by weight using add-on air pollution capture and control equipment instead of complying with the requirements of 310 CMR 7.18(3)(d)2.

(e) Application Methods. Unless complying with 310 CMR 7.18(3)(a)2. by means of 310 CMR 7.18(3)(d)3., all coatings shall be applied using one or more of the following:

1. electrostatic spray application;
2. HVLP spray;
3. flow coat;
4. roller coat;
5. dip coat, including electrodeposition;
6. airless spray;
7. air-assisted airless spray; or
8. a coating application method capable of achieving a transfer efficiency equivalent to or greater than that achieved by HVLP, as approved by EPA.

(f) Work Practices for Coating and Cleaning Operations. Any person subject to 310 CMR 7.18(3) shall comply with the work practices of 310 CMR 7.18(31)(e).

(g) Plan and Extension Submittal Requirements.

1. Any person subject to 310 CMR 7.18(3)(a)1. or 2. who chooses to install add-on air pollution capture and control equipment to comply with 310 CMR 7.18(3)(d) shall submit an emission control plan in accordance with 310 CMR 7.18(20).

2. Any person subject to 310 CMR 7.18(3)(a)2. who chooses to apply for an extension under 310 CMR 7.18(3)(c) shall comply with 310 CMR 7.18(20).

~~**(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**~~**h**) **Recordkeeping Requirements.** 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**~~**five** 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**, if necessary to determine emissions**; **and**
6. any other requirements specified by the Department in any approval(s) ~~**and/**~~or order(s) issued to the person.

(~~**d**~~**i**) **Testing Requirements. Any** ~~**P**~~**p**erson~~**s**~~ subject to 310 CMR 7.18(3)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance **with 310 CMR 7.18(3)**. 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. **EPA Method 25A shall be used when:**

1. an exhaust concentration of less than or equal to 50 parts per million volume (ppmv) as carbon is required to comply with the applicable limitation;
2. the inlet concentration and the required level of control results in an exhaust concentration of less than or equal to 50 ppmv as carbon; or
3. the high efficiency of the control device alone results in an exhaust concentration of less than or equal to 50 ppmv as carbon.

…

Amend subsection 310 CMR 7.18(5) as follows:

(5) U Large Appliance Surface Coating.

(a) **Applicability.**

1. On or after January 1, 1980, **and prior to March 9, 2020,** no person who owns, leases, operates, or controls a large appliance **surface** 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 ~~**there from**~~ in excess of ~~**4.5 pounds of volatile organic compounds per gallon of solids applied**~~ **the requirements of 310 CMR 7.18(5)(d)1. Such person shall also comply with 310 CMR 7.18(5)(g) through (i)**.

2. On or after March 9, 2020, any person who owns, leases, operates, or controls large appliance surface coating operations and related cleaning operations which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period shall comply with 310 CMR 7.18(5)(c), (d)2., (e), and (g) through (i).

3. On or after March 9, 2018, any person who owns, leases, operates, or controls large appliance surface coating operations and related cleaning operations which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period shall comply with the work practices of 310 CMR 7.18(5)(f) for coating and cleaning operations.

(b) Exemptions.

1. The requirements of 310 CMR 7.18(5)(d)2. and 3. do not apply to:
a. stencil coatings;
b. safety-indicating coatings;
c. solid-film lubricants;
d. electric-insulating and thermal-conducting coatings;
e. touch-up coatings;
f. repair coatings; or
g. coating application utilizing hand-held aerosol cans.

2. The requirements of 310 CMR 7.18(5)(e) do not apply to:
a. touch-up coatings;
b. repair coatings; or

c. coating application utilizing hand-held aerosol cans.

(c) Extensions. Any person subject to 310 CMR 7.18(5)(a)2. may apply in writing to the Department for a non-renewable extension of the implementation deadline in 310 CMR 7.18(5)(a)2. by complying with 310 CMR 7.18(5)(g). The Department will consider a non-renewable extension of the deadline in 310 CMR 7.18(5)(a)2. for persons applying under 310 CMR 7.18(5)(c) until no later than March 9, 2021, 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):

1. a Toxics Use Reduction Plan or a Resource Conservation Plan completed for the facility in accordance with 310 CMR 50.40 through 50.48 is submitted as part of the emission control plan;

2. the Toxics Use Reduction Plan or Resource Conservation Plan was certified by a Toxics Use Reduction Planner certified under M.G.L. c. 21I and 310 CMR 50.50 through 50.63;

3. the emission control plan proposes to reduce emissions or natural asset use, from the process or elsewhere in the facility, more than otherwise required pursuant to an applicable regulation or approval of the Department, through toxics use reduction techniques or resource conservation actions as defined in M.G.L. c. 21I; and

4. implementation of the emission control plan meets the emission limitations of 310 CMR 7.18(5)(d).

(d) Reasonably Available Control Technology Requirements.

1. Any person subject to 310 CMR 7.18(5)(a)1. shall not exceed a limitation of 4.5 pounds of VOC per gallon of solids applied.

2. Any person subject to 310 CMR 7.18(5)(a)2. shall limit VOC emissions by using only coatings having a VOC content no greater than the emission limitations listed in Tables 310 CMR 7.18(5)(d)2.a. or b. or by complying with the requirement in 310 CMR 7.18(5)(d)3. If a coating can be classified in more than one coating category in 310 CMR 7.18(5)(d)2., then the least stringent coating category limitation shall apply.

Table 310 CMR 7.18(5)(d)2.a.
RACT Emission Limitations for Large Appliance Surface Coating

	Mass of VOC per volume of coating less water and exempt compounds, as applied			
	Baked		Air - Dried	
Coating Category	kg/l coating	lb/gal coating	kg/l coating	lb/gal coating
General, One Component	0.275	2.3	0.275	2.3
General, Multi-Component	0.275	2.3	0.340	2.8
Extreme High Gloss	0.360	3.0	0.340	2.8
Extreme Performance	0.360	3.0	0.420	3.5
Heat Resistant	0.360	3.0	0.420	3.5
Metallic	0.420	3.5	0.420	3.5
Pretreatment Coatings	0.420	3.5	0.420	3.5
Solar Absorbent	0.360	3.0	0.420	3.5

Table 310 CMR 7.18(5)(d)2.b. RACT Emission Limitations for Large Appliance Surface Coating				
	Mass of VOC per volume of coating solids, as applied			
	Baked		Air - Dried	
Coating Category	kg/l solids	lb/gal solids	kg/l solids	lb/gal solids
General, One Component	0.40	3.3	0.40	3.3
General, Multi-Component	0.40	3.3	0.55	4.5
Extreme High Gloss	0.61	5.1	0.55	4.5
Extreme Performance	0.61	5.1	0.80	6.7
Heat Resistant	0.61	5.1	0.80	6.7
Metallic	0.80	6.7	0.80	6.7
Pretreatment Coatings	0.80	6.7	0.80	6.7
Solar Absorbent	0.61	5.1	0.80	6.7

3. Any person may achieve an overall VOC control efficiency of at least 90% by weight using add-on air pollution capture and control equipment instead of complying with the requirements of 310 CMR 7.18(5)(d)2.

(e) Application Methods. Unless complying with 310 CMR 7.18(5)(a)2. by means of 310 CMR 7.18(5)(d)3., all coatings shall be applied using one or more of the following:

1. electrostatic spray application;
2. HVLP spray;
3. flow coat;
4. roller coat;
5. dip coat, including electrodeposition;
6. airless spray;
7. air-assisted airless spray; or
8. a coating application method capable of achieving a transfer efficiency equivalent to or greater than that achieved by HVLP, as approved by EPA.

(f) Work Practices for Coating and Cleaning Operations. Any person subject to 310 CMR 7.18(5) shall comply with the work practices of 310 CMR 7.18(31)(e).

(g) Plan and Extension Submittal Requirements.

1. Any person subject to 310 CMR 7.18(5)(a)1. or 2. who chooses to install add-on air pollution capture and control equipment to comply with 310 CMR 7.18(5)(d) shall submit an emission control plan in accordance with 310 CMR 7.18(20).

2. Any person subject to 310 CMR 7.18(5)(a)2. who chooses to apply for an extension under 310 CMR 7.18(5)(c) shall comply with 310 CMR 7.18(20).

~~**(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**~~**h**) **Recordkeeping Requirements.** 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**~~ **five** 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**, if necessary to determine emissions**; **and**
6. any other requirements specified by the Department in any approval(s) ~~**and/**~~or order(s) issued to the person.

(~~**d**~~**i**) **Testing Requirements. Any** ~~**P**~~**p**erson~~**s**~~ subject to 310 CMR 7.18(5)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance **with 310 CMR 7.18(5)**. 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. **EPA Method 25A shall be used when:**

1. an exhaust concentration of less than or equal to 50 parts per million volume (ppmv) as carbon is required to comply with the applicable limitation;
2. the inlet concentration and the required level of control results in an exhaust concentration of less than or equal to 50 ppmv as carbon; or
3. the high efficiency of the control device alone results in an exhaust concentration of less than or equal to 50 ppmv as carbon.

…

Delete subsection 310 CMR 7.18(7) and reserve it for future use:

(7) **(Reserved)**~~**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.~~

~~(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.~~

…

Amend subsection 310 CMR 7.18(11) as follows:

(11) U Surface Coating of Miscellaneous Metal Parts and Products.

(a) **Applicability.**

1. 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 **surface** coating lines, which has the potential to emit equal to or greater than ten tons per year of volatile organic compounds **(VOC)**, 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~~**d**)**1**. **Such person shall also comply with 310 CMR 7.18(11)(g) through (i)**.

2. On or after March 9, 2020, any person who owns, leases, operates, or controls miscellaneous metal parts and products surface coating operations and related cleaning operations which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period shall comply with 310 CMR 7.18(11)(c), (d)2. and 3., (e), and (g) through (i).

3. On or after March 9, 2020, any person who owns, leases, operates, or controls plastic parts surface coating operations and miscellaneous metal parts and products surface coating operations and related cleaning operations within the same facility, which in total emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period shall comply with 310 CMR 7.18(11)(c), (d)2. and 3., (e), and (g) through (i). The plastic parts surface coating operations are subject to 310 CMR 7.18(21).

4. On or after March 9, 2018, any person who owns, leases, operates, or controls plastic parts surface coating operations and miscellaneous metal parts and products surface coating operations and related cleaning operations which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period

shall comply with the work practices of 310 CMR 7.18(11)(f) for coating and cleaning operations.

(b) **Exemptions.**

~~**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.**~~

1~~**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**~~**d)1**.

~~**3. Any facility subject to 310 CMR 7.18(11) as of July 1, 1991, which was not subject to 310 CMR7.18(11) prior to July 1, 1991, shall achieve compliance with the applicable sections of 310 CMR 7.18(11) by July 1, 1992.**~~

2. The miscellaneous metal parts and products coatings requirements of 310 CMR 7.18(11)(d)2. and 3. and (e) do not apply to:

a. stencil coatings;

b. safety-indicating coatings;

c. solid-film lubricants;

d. electric-insulating and thermal-conducting coatings;

e. magnetic data storage disk coatings;

f. plastic extruded onto metal parts to form a coating;

g. powder coating; or

h. coating application utilizing hand-held aerosol cans.

3. The requirements of 310 CMR 7.18(11)(e) do not apply to:

a. touch-up coatings;

b. repair coatings; or

c. texture coatings.

4. The requirements of 310 CMR 7.18(11)(e) do not apply to pleasure craft surface coating operations when applying extreme high-gloss coatings.

(c) Extensions. Any person subject to 310 CMR 7.18(11)(a)2. or 3. may apply in writing to the Department for a non-renewable extension of the implementation deadline in 310 CMR 7.18(11)(a)2. or 3. by complying with 310 CMR 7.18(11)(g). The Department will consider a non-renewable extension of the deadline in 310 CMR 7.18(11)(a)2. or 3. for persons applying under 310 CMR 7.18(11)(c) until no later than March 9, 2021, 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):

1. a Toxics Use Reduction Plan or a Resource Conservation Plan completed for the facility in accordance with 310 CMR 50.40 through 50.48 is submitted as part of the emission control plan;

2. the Toxics Use Reduction Plan or Resource Conservation Plan was certified by a Toxics Use Reduction Planner certified under M.G.L. c. 21I and 310 CMR 50.50 through 50.63;

3. the emission control plan proposes to reduce emissions or natural asset use, from the process or elsewhere in the facility, more than otherwise required pursuant to an applicable regulation or approval of the Department, through toxics use reduction techniques or resource conservation actions as defined in M.G.L. c. 21I; and

4. implementation of the emission control plan meets the emission limitations of 310 CMR 7.18(11)(d).

(~~**b**~~**d**) **Reasonably Available Control Technology Requirements.**

1. If more than one emission limitation applies to any specific coating, then the coating shall comply with the least stringent.

Table 310 CMR 7.18(11)(d)1. 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.

2. Any person subject to 310 CMR 7.18(11)(a)2. or 3. shall limit VOC emissions by using only coatings having a VOC content no greater than the emission limitations listed in Tables 310 CMR 7.18(11)(d)2.a. through d. or by complying with the requirement in 310 CMR 7.18(11)(d)3. If a coating can be classified in more than one coating category in 310 CMR 7.18(11)(d), then the least stringent coating category limitation shall apply.

Table 310 CMR 7.18(11)(d)2.a. RACT Emission Limitations for Surface Coating of Miscellaneous Metal Parts and Products				
	Mass of VOC per volume of coating less water and exempt compounds, as applied			
	Air-Dried		Baked	
Coating Category	**kg/l coating**	**lb/gal coating**	**kg/l coating**	**lb/gal coating**
General, One-Component	**0.34**	**2.8**	**0.28**	**2.3**
General, Multi-Component	**0.34**	**2.8**	**0.28**	**2.3**
Camouflage	**0.42**	**3.5**	**0.42**	**3.5**
Electric Insulating Varnish	**0.42**	**3.5**	**0.42**	**3.5**
Etching Filler	**0.42**	**3.5**	**0.42**	**3.5**
Extreme High-Gloss	**0.42**	**3.5**	**0.36**	**3.0**
Extreme Performance	**0.42**	**3.5**	**0.36**	**3.0**
Heat-Resistant	**0.42**	**3.5**	**0.36**	**3.0**
High Performance Architectural	**0.74**	**6.2**	**0.74**	**6.2**
High Temperature	**0.42**	**3.5**	**0.42**	**3.5**
Metallic	**0.42**	**3.5**	**0.42**	**3.5**
Military Specification	**0.34**	**2.8**	**0.28**	**2.3**
Mold-Seal	**0.42**	**3.5**	**0.42**	**3.5**
Pan Backing	**0.42**	**3.5**	**0.42**	**3.5**
Prefabricated Architectural One & Multi-Component	**0.42**	**3.5**	**0.28**	**2.3**
Pretreatment Coatings	**0.42**	**3.5**	**0.42**	**3.5**
Repair and Touch-Up	**0.42**	**3.5**	**0.36**	**3.0**
Silicone-Release	**0.42**	**3.5**	**0.42**	**3.5**
Solar-Absorbent	**0.42**	**3.5**	**0.36**	**3.0**
Vacuum-Metallizing	**0.42**	**3.5**	**0.42**	**3.5**
Drum Coating - New - Exterior	**0.34**	**2.8**	**0.34**	**2.8**
Drum Coating - New - Interior	**0.42**	**3.5**	**0.42**	**3.5**
Drum Coating - Reconditioned - Exterior	**0.42**	**3.5**	**0.42**	**3.5**
Drum Coating - Reconditioned - Interior	**0.50**	**4.2**	**0.50**	**4.2**

Table 310 CMR 7.18(11)(d)2.b. RACT Emission Limitations for Surface Coating of Miscellaneous Metal Parts and Products				
	Mass of VOC per volume of coating solids, as applied			
	Air-Dried		Baked	
Coating Category	**kg/l solids**	**lb/gal solids**	**kg/l solids**	**lb/gal solids**
General, One-Component	**0.54**	**4.52**	**0.40**	**3.35**
General, Multi-Component	**0.54**	**4.52**	**0.40**	**3.35**
Camouflage	**0.80**	**6.67**	**0.80**	**6.67**
Electric Insulating Varnish	**0.80**	**6.67**	**0.80**	**6.67**
Etching Filler	**0.80**	**6.67**	**0.80**	**6.67**
Extreme High-Gloss	**0.80**	**6.67**	**0.61**	**5.06**
Extreme Performance	**0.80**	**6.67**	**0.61**	**5.06**
Heat-Resistant	**0.80**	**6.67**	**0.61**	**5.06**
High Performance Architectural	**4.56**	**38.0**	**4.56**	**38.0**
High Temperature	**0.80**	**6.67**	**0.80**	**6.67**
Metallic	**0.80**	**6.67**	**0.80**	**6.67**
Military Specification	**0.54**	**4.52**	**0.40**	**3.35**
Mold-Seal	**0.80**	**6.67**	**0.80**	**6.67**
Pan Backing	**0.80**	**6.67**	**0.80**	**6.67**
Prefabricated Architectural One & Multi-Component	**0.80**	**6.67**	**0.40**	**3.35**
Pretreatment Coatings	**0.80**	**6.67**	**0.80**	**6.67**
Repair and Touch-Up	**0.80**	**6.67**	**0.80**	**6.67**
Silicone-Release	**0.80**	**6.67**	**0.80**	**6.67**
Solar-Absorbent	**0.80**	**6.67**	**0.61**	**5.06**
Vacuum-Metallizing	**0.80**	**6.67**	**0.80**	**6.67**
Drum Coating - New - Exterior	**0.54**	**4.52**	**0.54**	**4.52**
Drum Coating - New - Interior	**0.80**	**6.67**	**0.80**	**6.67**
Drum Coating - Reconditioned - Exterior	**0.80**	**6.67**	**0.80**	**6.67**
Drum Coating - Reconditioned - Interior	**1.17**	**9.78**	**1.17**	**9.78**

Table 310 CMR 7.18(11)(d)2.c. RACT Emission Limitations for Pleasure Craft Surface Coatings				
	Mass of VOC per volume of coating less water and exempt compounds, as applied		Mass of VOC per volume of coating solids, as applied	
Coating Category	**kg/l coating**	**lb/gal coating**	**kg/l solids**	**lb/gal solids**
Extreme High Gloss Topcoat	**0.60**	**5.0**	**1.87**	**15.6**
High Gloss Topcoat	**0.42**	**3.5**	**0.80**	**6.7**
Pretreatment Wash Primers	**0.78**	**6.5**	**6.67**	**55.6**
Finish Primer/Surfacer	**0.42**	**3.5**	**0.80**	**6.7**
High Build Primer Surfacer	**0.34**	**2.8**	**0.55**	**4.6**
Aluminum Substrate Antifoulant Coating	**0.56**	**4.7**	**1.53**	**12.8**
Antifouling Sealer/Tie Coat	**0.42**	**3.5**	**0.80**	**6.7**
Other Substrate Antifoulant Coating	**0.40**	**3.4**	**0.75**	**6.3**
All other pleasure craft surface coatings for metal or plastic	**0.42**	**3.5**	**0.80**	**6.7**

Table 310 CMR 7.18(11)(d)2.d. RACT Emission Limitations for Motor Vehicle Materials		
	Mass of VOC per volume of coating less water and exempt compounds, as applied	
Coating Category	**kg/l coating**	**lb/gal coating**
Motor vehicle cavity wax; Motor vehicle sealer; Motor vehicle deadener; Motor vehicle underbody coating; Motor vehicle trunk interior coating	**0.65**	**5.4**
Motor vehicle bedliner; Motor vehicle gasket/gasket sealing material	**0.20**	**1.7**
Motor vehicle lubricating wax/compound	**0.70**	**5.8**

3. Any person may achieve an overall VOC control efficiency of at least 90% by weight using add-on air pollution capture and control equipment instead of complying with the requirements of 310 CMR 7.18(11)(d)2.

(e) Application Methods. Unless complying with 310 CMR 7.18(11)(a)2. or 3. by means of 310 CMR 7.18(11)(d)3., all coatings shall be applied using one or more of the following:

1. electrostatic spray application;
2. HVLP spray;
3. flow coat;
4. roller coat;
5. dip coat, including electrodeposition;
6. airless spray;
7. air-assisted airless spray; or
8. a coating application method capable of achieving a transfer efficiency equivalent to or greater than that achieved by HVLP, as approved by EPA.

(f) Work Practices for Coating and Cleaning Operations. Any person subject to 310 CMR 7.18(11) shall comply with the work practices of 310 CMR 7.18(31)(e).

(g) Plan and Extension Submittal Requirements.

1. Any person subject to 310 CMR 7.18(11)(a)1., 2., or 3. who chooses to install add-on air pollution capture and control equipment to comply with 310 CMR 7.18(11)(d) shall submit an emission control plan in accordance with 310 CMR 7.18(20).

2. Any person subject to 310 CMR 7.18(11)(a)2. or 3. who chooses to apply for an extension under 310 CMR 7.18(11)(c) shall comply with 310 CMR 7.18(20).

~~(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~~h**) **Recordkeeping Requirements.** 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~~ five** 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**, if necessary to determine emissions**; and
6. any other requirements specified by the Department in any approval(s) **~~and/~~**or order(s) issued to the person.

(**~~e~~i**) **Testing Requirements. Any ~~P~~p**erson**~~s~~** subject to 310 CMR 7.18(11)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance **with 310 CMR 7.18(11)**. 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. **If acceptable to the Department and EPA, manufacturer's formulation data may be used to demonstrate compliance with coating VOC content limitations. In the case of a dispute, the VOC content determined using the EPA Method shall prevail, unless a person is able to demonstrate to the Department and EPA that the manufacturer's formulation data are correct. EPA Method 25A shall be used when:**

1. an exhaust concentration of less than or equal to 50 parts per million volume (ppmv) as carbon is required to comply with the applicable limitation;

2. the inlet concentration and the required level of control results in an exhaust concentration of less than or equal to 50 ppmv as carbon; or

3. the high efficiency of the control device alone results in an exhaust concentration of less than or equal to 50 ppmv as carbon.

Amend subsection 310 CMR 7.18(12) as follows:

(12) U **Packaging Rotogravure and Packaging Flexographic Printing~~Graphic Arts~~**.

(a) **Applicability.**

1. On or after January 1, 1994, **and before March 9, 2020,** 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 **volatile organic compounds (**VOC**)** shall cause, suffer, allow or permit the operation of said lines unless**~~:~~ the requirements of 310 CMR 7.18(12)(d)1. and (f) through (h) are met.**

2. On or after March 9, 2020, any person who owns, leases, operates or controls a packaging rotogravure printing line or packaging flexographic printing line, which has the potential to emit, before any application of add-on air pollution capture and control equipment, equal to or

greater than 25 tons per rolling 12 month period of VOC shall comply with 310 CMR 7.18(12)(c), (d)2., and (f) through (h) at that printing line.

3. On or after March 9, 2018, any person who owns, leases, operates, or controls packaging rotogravure printing operations or packaging flexographic printing operations and related cleaning operations which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period shall comply with 310 CMR 7.18(12)(e), (g) and (h).

(b) Exemptions. The requirements of 310 CMR 7.18(12)(a)2. do not apply provided the person obtains and complies with a federally enforceable emission limitation which restricts the potential emissions of the printing line to below 25 tons per year.

(c) Extensions.

1. Any person subject to 310 CMR 7.18(12)(a)2. may apply in writing to the Department for a non-renewable extension of the implementation deadline in 310 CMR 7.18(12)(a)2. by complying with 310 CMR 7.18(12)(f). The Department will consider a non-renewable extension of the deadline in 310 CMR 7.18(12)(a)2. for persons applying under 310 CMR 7.18(12)(c) until no later than March 9, 2021, 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. a Toxics Use Reduction Plan or a Resource Conservation Plan completed for the facility in accordance with 310 CMR 50.40 through 50.48 is submitted as part of the emission control plan;

b. the Toxics Use Reduction Plan or Resource Conservation Plan was certified by a Toxics Use Reduction Planner certified under M.G.L. c. 21I and 310 CMR 50.50 through 50.63;

c. the emission control plan proposes to reduce emissions or natural asset use, from the process or elsewhere in the facility, more than otherwise required pursuant to an applicable regulation or approval of the Department, through toxics use reduction techniques or resource conservation actions as defined in M.G.L. c. 21I; and

d. implementation of the emission control plan meets the emission limitations of 310 CMR 7.18(12)(d).

(d) Reasonably Available Control Technology Requirements.

1. Packaging Rotogravure Printing Lines.

~~1~~**a**. 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~~**b**. The ink (less water) as it is applied to the substrate contains 60.0% by volume or more non-volatile materials; or,

~~3~~**c**. The owner or operator installs and operates:

~~a~~**i**. A carbon adsorption system which reduces the volatile organic emissions by at least 90.0% by weight; or,

~~b~~**ii**. an incinerator system which oxidizes at least 90.0% by weight of the volatile organic compounds emitted; or,

~~c~~**iii**. an alternative volatile organic compound emission reduction system demonstrated to have at least 90.0% reduction efficiency by weight; and,

~~d~~**iv**. A capture system must be used in conjunction with any emission control systems installed pursuant to 310 CMR 7.18(12)(~~a~~**d**)**1.c.i.**~~3.a.~~ through **iii.**~~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.

2. Packaging Rotogravure and Packaging Flexographic Printing Lines. Any person subject to 310 CMR 7.18(12)(a)2. shall limit VOC emissions by complying with one or more of 310 CMR 7.18(12)(d)2.a. or b.

a. Capture and Control Requirements.

i. A press first installed prior to March 14, 1995 and controlled by an add-on air pollution control device whose first installation date was prior to March 9, 2019 shall achieve at least 65.0% overall control by weight of the VOC emitted.

ii. A press first installed prior to March 14, 1995 and controlled by an add-on air pollution control device whose first installation date was on or after March 9, 2019 shall achieve at least 70.0% overall control by weight of the VOC emitted.

iii. A press first installed on or after March 14, 1995 and controlled by an add-on air pollution control device whose first installation date was prior to March 9, 2019 shall achieve at least 75.0% overall control by weight of the VOC emitted.

iv. A press first installed on or after March 14, 1995 and controlled by an add-on air pollution control device whose first installation date was on or after March 9, 2019 shall achieve at least 80.0% overall control by weight of the VOC emitted.

b. VOC Content Limit. The volatile portion of inks, coatings and adhesives shall contain no more than either 0.8 kg VOC/kg solids applied or 0.16 kg VOC/kg material applied. The VOC content limitations may be met by averaging the VOC content of materials used on a single press (i.e., within a line).

(e) Work Practices and Emission Limitations for Printing and Cleaning Operations.

1. Any person subject to 310 CMR 7.18(12) shall comply with the work practices of 310 CMR 7.18(31)(e).

2. Any person subject to 310 CMR 7.18(12) shall only use cleanup solutions that have a VOC composite partial pressure equal to or less than 25 mm Hg at 20°C (68°F).

(f) Plan and Extension Submittal Requirements.

1. Any person subject to 310 CMR 7.18(12)(a)1. or 2. who chooses to install add-on air pollution capture and control equipment to comply with 310 CMR 7.18(12)(d) shall submit an emission control plan in accordance with 310 CMR 7.18(20).

2. Any person subject to 310 CMR 7.18(12)(a)2. who chooses to apply for an extension under 310 CMR 7.18(12)(c) shall comply with 310 CMR 7.18(20).

(**g**~~e~~) **Recordkeeping Requirements.** 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**~~**five** 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)**, coating(s) and adhesive(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)**, coating(s) and adhesive(s)** used;
4. actual operational and emissions characteristics of the ~~**co**~~**printing** line and any appurtenant emissions capture and control equipment;
5. quantity of product processed**, if necessary to determine emissions**; and
6. any other requirements specified by the Department in any approval(s) ~~**and/**~~or order(s) issued to the person.

(**h**~~d~~) **Testing Requirements. Any p**~~**P**~~**person**~~**s**~~ subject to 310 CMR 7.18(12)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance **with 310 CMR 7.18(12)**. Testing shall be conducted in accordance with EPA Method 24, Method 24A ~~**and/**~~or Method 25 as described in CFR Title 40 Part 60, **EPA Methods 204 and 204A through F of CFR Title 40 Part 51 Appendix M** or by other methods approved by the Department and EPA. **EPA Method 25A shall be used when:**

1. an exhaust concentration of less than or equal to 50 parts per million volume (ppmv) as carbon is required to comply with the applicable limitation;

2. the inlet concentration and the required level of control results in an exhaust concentration of less than or equal to 50 ppmv as carbon; or

3. the high efficiency of the control device alone results in an exhaust concentration of less than or equal to 50 ppmv as carbon.

~~(c) 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.~~

Amend subsection 310 CMR 7.18(14) as follows:

(14) U Paper**, Film, and Foil** Surface Coating.

(a) **Applicability.**

1. 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**, film, or foil** surface 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 **~~4.8 pounds of volatile organic compounds per gallon of solids applied~~ the requirements of 310 CMR 7.18(14)(d)1**. **Such person shall also comply with 310 CMR 7.18(14)(f) through (h)**.

2. On or after March 9, 2020, any person who owns, leases, operates, or controls a paper, film, or foil surface coating line, which has the potential to emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 25 tons per rolling 12 month period of VOC shall comply with 310 CMR 7.18(14)(c), (d)2., and (f) through (h) at that coating line.

3. On or after March 9, 2018, any person who owns, leases, operates, or controls paper, film, or foil surface coating operations and related cleaning operations which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period shall comply with the work practices of 310 CMR 7.18(14)(e) for coating and cleaning operations.

4. 310 CMR 7.18(14) does not apply to coating application on or in-line with any offset lithographic, screen, letterpress, flexographic, rotogravure, or digital printing press.

~~(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.~~

(b) Exemptions. The requirements of 310 CMR 7.18(14)(a)2. do not apply provided the person obtains and complies with a federally enforceable emission limitation which restricts the potential emissions of the coating line to below 25 tons per year.

(c) Extensions. Any person subject to 310 CMR 7.18(14)(a)2. may apply in writing to the Department for a non-renewable extension of the implementation deadline in 310 CMR 7.18(14)(a)2. by complying with 310 CMR 7.18(14)(f). The Department will consider a non-renewable extension of the deadline in 310 CMR 7.18(14)(a)2. for persons applying under 310 CMR 7.18(14)(c) until no later than March 9, 2021, 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):

1. a Toxics Use Reduction Plan or a Resource Conservation Plan completed for the facility in accordance with 310 CMR 50.40 through 50.48 is submitted as part of the emission control plan;

2. the Toxics Use Reduction Plan or Resource Conservation Plan was certified by a Toxics Use Reduction Planner certified under M.G.L. c. 21I and 310 CMR 50.50 through 50.63;

3. the emission control plan proposes to reduce emissions or natural asset use, from the process or elsewhere in the facility, more than otherwise required pursuant to an applicable regulation or approval of the Department, through toxics use reduction techniques or resource conservation actions as defined in M.G.L. c. 21I; and

4. implementation of the emission control plan meets the emission limitations of 310 CMR 7.18(14)(d).

(d) Reasonably Available Control Technology Requirements.

1. Any person subject to 310 CMR 7.18(14)(a)1. shall not exceed a limitation of 4.8 pounds of VOC per gallon of solids applied.

2. Any person subject to 310 CMR 7.18(14)(a)2. shall limit VOC emissions by complying with one or more of 310 CMR 7.18(14)(d)2.a., b., or c.

a. Achieve an overall VOC control efficiency of at least 90% by weight using add-on air pollution capture and control equipment at that coating line.

b. A paper, film, or foil coating line that is not a pressure sensitive tape and label coating line shall comply with:

i. a VOC content of no greater than 0.40 pounds of VOC per pound of solids applied at that coating line; or

ii. a VOC content of no greater than 0.08 pounds of VOC per pound of coating at that coating line; or

iii. a combination of VOC content and add-on air pollution capture and control equipment to achieve an overall VOC control efficiency of at least 90% by weight; or

iv. within line averaging to achieve compliance with 310 CMR 7.18(14)(d)2.b.i. or ii.

c. A paper, film, or foil coating line that is a pressure sensitive tape and label coating line shall comply with:

i. a VOC content of no greater than 0.20 pounds of VOC per pound of solids applied at that coating line; or

ii. a VOC content of no greater than 0.067 pounds of VOC per pound of coating at that coating line; or

iii. a combination of VOC content and add-on air pollution capture and control equipment to achieve an overall VOC control efficiency of at least 90% by weight; or

iv. within line averaging to achieve compliance with 310 CMR 7.18(14)(d)2.c.i. or ii.

(e) Work Practices for Coating and Cleaning Operations. Any person subject to 310 CMR 7.18(14) shall comply with the work practices of 310 CMR 7.18(31)(e).

(f) Plan and Extension Submittal Requirements.

1. Any person subject to 310 CMR 7.18(14)(a)1. or 2. who chooses to install add-on air pollution capture and control equipment to comply with 310 CMR 7.18(14)(d) shall submit an emission control plan in accordance with 310 CMR 7.18(20).

2. Any person subject to 310 CMR 7.18(14)(a)2. who chooses to apply for an extension under 310 CMR 7.18(14)(c) shall comply with 310 CMR 7.18(20).

(g) Recordkeeping Requirements. 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 **five** ~~**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**, if necessary to determine emissions**; and

6. any other requirements specified by the Department in any approval(s) ~~and/~~or order(s) issued to the person.

(~~d~~h) **Testing Requirements. Any p~~P~~**ersons~~s~~ subject to 310 CMR 7.18(14)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance **with 310 CMR 7.18(14)**. 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. **EPA Method 25A shall be used when:**

1. an exhaust concentration of less than or equal to 50 parts per million volume (ppmv) as carbon is required to comply with the applicable limitation;

2. the inlet concentration and the required level of control results in an exhaust concentration of less than or equal to 50 ppmv as carbon; or

3. the high efficiency of the control device alone results in an exhaust concentration of less than or equal to 50 ppmv as carbon.

Amend subsection 310 CMR 7.18(20) as follows:

(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 that becomes subject to 310 CMR 7.18 **and who is required to submit an emission control plan pursuant to 310 CMR 7.18~~(2)(b), (2)(c), (2)(g), (2)(h), (17), (21) through (27), (28)(e), (29), or (30)(c)7.~~** 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. **In addition, a~~A~~**n emission control plan is required to amend an emissions averaging plan issued pursuant to 310 CMR 7.18(2)(b) or 310 CMR 7.18(2)(g), or an approval issued under 310 CMR 7.18(2)(h).

1. The emission control 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.~~**:**

a. are installed in accordance with:

i. a plan approval issued pursuant to 310 CMR 7.02(4) or (5) that meets the standards/limits of 310 CMR 7.18;

ii. the requirements contained in 310 CMR 7.03; or

iii. the requirements of 310 CMR 7.26, or

b. are exempt from filing for plan approval pursuant to 310 CMR 7.02(2)(b) except for 310 CMR 7.02(2)(b)32. This exemption does not apply to construction, substantial reconstruction, or alteration required to comply with the requirements of 310 CMR 7.18.

Amend subsection 310 CMR 7.18(21) as follows:

(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.**~~

1. On or after March 9, 2020, any person who owns, leases, operates, or controls plastic parts surface coating operations and related cleaning operations which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of volatile organic compounds (VOC) per day or, in the alternative, equal to or greater than three

tons of VOC per rolling 12 month period shall comply with 310 CMR 7.18(21)(c) through (e) and (g) through (i).

2. On or after March 9, 2020, any person who owns, leases, operates, or controls plastic parts surface coating operations and miscellaneous metal parts and products surface coating operations and related cleaning operations within the same facility, which in total emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period shall comply with 310 CMR 7.18(21)(c) through (e) and (g) through (i). The miscellaneous metal parts and products surface coating operations are subject to 310 CMR 7.18(11).

3. On or after March 9, 2018, any person who owns, leases, operates, or controls plastic parts surface coating operations and miscellaneous metal parts and products surface coating operations and related cleaning operations which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period shall comply with the work practices of 310 CMR 7.18(21)(f) for coating and cleaning operations.

~~**(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**~~**b**) 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.**~~

1. The plastic parts coatings requirements of 310 CMR 7.18(21)(d)1. and 2. do not apply to:

a. touch-up and repair coatings;

b. stencil coatings applied on clear or transparent substrates;

c. clear or translucent coatings;

d. coatings applied at a paint manufacturing facility while conducting performance tests on the coatings;

e. reflective coating applied to highway cones;

f. mask coatings that are less than 0.5 millimeter thick (dried) and the area coated is less than 25 square inches;

g. EMI/RFI shielding coatings; or

h. heparin-benzalkonium chloride (HBAC)-containing coatings applied to medical devices, provided that the total usage of all such coatings does not exceed 100 gallons per rolling 12 month period, per facility.

2. The automotive/transportation coatings requirements of 310 CMR 7.18(21)(d)1.b. and 2., and the business machine coatings requirements of 310 CMR 7.18(21)(d)1.c. and 2., do not apply to:

a. texture coatings;

b. vacuum metallizing coatings;

c. gloss reducers;

d. texture topcoats;

e. adhesion primers;
f. electrostatic preparation coatings;
g. resist coatings; or
h. stencil coatings.

3. The requirements of 310 CMR 7.18(21)(e) do not apply to airbrush operations using five gallons or less per rolling 12 month period of coating at a plastic parts coating operation.

4. The requirements of 310 CMR 7.18(21)(e) do not apply to pleasure craft surface coating operations when applying extreme high-gloss coatings.

5. The requirements of 310 CMR 7.18(21)(d) and (e) do not apply to powder coatings or coating application utilizing hand-held aerosol cans.

(**~~d~~c**) Extensions.**~~1.~~** Any person subject to 310 CMR 7.18(21)(**~~b~~a)1. or 2.** may apply in writing to the Department for a non-renewable extension of the implementation deadline in 310 CMR 7.18(21)(**~~b~~a)1**. **or 2. by complying with 310 CMR 7.18(21)(g)~~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~~a**)**1. or 2. for persons applying under 310 CMR 7.18(21)(c)** until no later than **March 9, 2021~~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.~~

1. a Toxics Use Reduction Plan or a Resource Conservation Plan completed for the facility in accordance with 310 CMR 50.40 through 50.48 is submitted as part of the emission control plan;

2. the Toxics Use Reduction Plan or Resource Conservation Plan was certified by a Toxics Use Reduction Planner certified under M.G.L. c. 21I and 310 CMR 50.50 through 50.63;

3. the emission control plan proposes to reduce emissions or natural asset use, from the process or elsewhere in the facility, more than otherwise required pursuant to an applicable regulation or approval of the Department, through toxics use reduction techniques or resource conservation actions as defined in M.G.L. c. 21I; and

4. implementation of the emission control plan meets the emission limitations of 310 CMR 7.18(21)(d).

(**~~e~~d**) 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 CMR7.18(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.~~

~~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 anyone coating, then that coating must comply with the least stringent emission limitation.~~

~~Table 310 CMR 7.18(21)(e)2. RACT Emission Limitation 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 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~~

1. Any person subject to 310 CMR 7.18(21)(a)1. or 2. shall limit VOC emissions by using only coatings having a VOC content no greater than the emission limitations listed in Tables 310 CMR 7.18(21)(d)1.a. through e. or by complying with the requirement in 310 CMR

7.18(21)(d)2. If a coating can be classified in more than one coating category in 310 CMR 7.18(21)(d), then the least stringent coating category limitation shall apply.

Table 310 CMR 7.18(21)(d)1.a. RACT Emission Limitations for Surface Coating of Miscellaneous Plastic Parts				
	Mass of VOC per volume of coating less water and exempt compounds, as applied		Mass of VOC per volume of coating solids, as applied	
Coating Category	**kg/l coating**	**lb/gal coating**	**kg/l solids**	**lb/gal solids**
General, One Component	0.28	2.3	0.40	3.35
General, Multi-Component	0.42	3.5	0.80	6.67
Electric Dissipating Coatings and Shock-Free Coatings	0.80	6.7	8.96	74.7
Extreme Performance (2-pack)	0.42	3.5	0.80	6.67
Military Specification (1-pack)	0.34	2.8	0.54	4.52
Military Specification (2-pack)	0.42	3.5	0.80	6.67
Metallic	0.42	3.5	0.80	6.67
Mold-Seal	0.76	6.3	5.24	43.7
Multi-Colored Coatings	0.68	5.7	3.04	25.3
Optical Coatings	0.80	6.7	8.96	74.7
Vacuum-Metallizing	0.80	6.7	8.96	74.7

Table 310 CMR 7.18(21)(d)1.b. RACT Emission Limitations for Automotive/Transportation Coatings[1]				
	Mass of VOC per volume of coating less water and exempt compounds, as applied		Mass of VOC per volume of coating solids, as applied	
Coating Category	**kg/l coating**	**lb/gal coating**	**kg/l solids**	**lb/gal solids**
High Bake Coatings - Interior and Exterior Parts				
Flexible Primer	0.54	4.5	1.39	11.58
Non-Flexible Primer	0.42	3.5	0.80	6.67
Basecoat	0.52	4.3	1.24	10.34
Clear Coat	0.48	4.0	1.05	8.76
Non-Basecoat/Clear Coat	0.52	4.3	1.24	10.34
Low Bake/Air-Dried Coatings-Exterior Parts				
Primers	0.58	4.8	1.66	13.80
Basecoat	0.60	5.0	1.87	15.59
Clear Coat	0.54	4.5	1.39	11.58
Non-Basecoat/Clear Coat	0.60	5.0	1.87	15.59
Low Bake/Air-Dried Coatings - Interior Parts	0.60	5.0	1.87	15.59
Touchup and Repair Coatings	0.62	5.2	2.13	17.72

[1]For automotive coatings which are red, yellow, and black, except touch-up and repair coatings, the limitation is determined by multiplying the appropriate limitation in Table 310 CMR 7.18(21)(d)1.b. by 1.15.

Table 310 CMR 7.18(21)(d)1.c. RACT Emission Limitations for Business Machine Coatings				
	Mass of VOC per volume of coating less water and exempt compounds, as applied		Mass of VOC per volume of coating solids, as applied	
Coating Category	**kg/l coating**	**lb/gal coating**	**kg/l solids**	**lb/gal solids**
Primers	**0.35**	**2.9**	**0.57**	**4.80**
Topcoat	**0.35**	**2.9**	**0.57**	**4.80**
Texture Coat	**0.35**	**2.9**	**0.57**	**4.80**
Fog Coat[1]	**0.26**	**2.2**	**0.38**	**3.14**
Touchup and Repair	**0.35**	**2.9**	**0.57**	**4.80**

[1] A fog coat shall not be applied at a thickness of more than 0.5 mils of coating solids.

Table 310 CMR 7.18(21)(d)1.d. RACT Emission Limitations for Pleasure Craft Surface Coatings				
	Mass of VOC per volume of coating less water and exempt compounds, as applied		Mass of VOC per volume of coating solids, as applied	
Coating Category	**kg/l coating**	**lb/gal coating**	**kg/l solids**	**lb/gal solids**
Extreme High Gloss Topcoat	**0.60**	**5.0**	**1.87**	**15.6**
High Gloss Topcoat	**0.42**	**3.5**	**0.80**	**6.7**
Pretreatment Wash Primers	**0.78**	**6.5**	**6.67**	**55.6**
Finish Primer/Surfacer	**0.42**	**3.5**	**0.80**	**6.7**
High Build Primer Surfacer	**0.34**	**2.8**	**0.55**	**4.6**
Aluminum Substrate Antifoulant Coating	**0.56**	**4.7**	**1.53**	**12.8**
Antifouling Sealer/Tie Coat	**0.42**	**3.5**	**0.80**	**6.7**
Other Substrate Antifoulant Coating	**0.40**	**3.4**	**0.75**	**6.3**
All other pleasure craft surface coatings for metal or plastic	**0.42**	**3.5**	**0.80**	**6.7**

Table 310 CMR 7.18(21)(d)1.e. RACT Emission Limitations for Motor Vehicle Materials		
	Mass of VOC per volume of coating less water and exempt compounds, as applied	
Coating Category	**kg/l coating**	**lb/gal coating**
Motor vehicle cavity wax; Motor vehicle sealer; Motor vehicle deadener; Motor vehicle underbody coating; Motor vehicle trunk interior coating	**0.65**	**5.4**
Motor vehicle bedliner; Motor vehicle gasket/gasket sealing material	**0.20**	**1.7**
Motor vehicle lubricating wax/compound	**0.70**	**5.8**

2. Any person may achieve an overall VOC control efficiency of at least 90% by weight using add-on air pollution capture and control equipment instead of complying with the requirements of 310 CMR 7.18(21)(d)1.

(e) Application Methods. Unless complying with 310 CMR 7.18(21)(a)1. or 2. by means of 310 CMR 7.18(21)(d)2., all coatings shall be applied using one or more of the following:

1. electrostatic spray application;
2. HVLP spray;
3. flow coat;
4. roller coat;
5. dip coat, including electrodeposition;
6. airless spray;
7. air-assisted airless spray; or
8. a coating application method capable of achieving a transfer efficiency equivalent to or greater than that achieved by HVLP, as approved by EPA.

(f) Work Practices for Coating and Cleaning Operations. Any person subject to 310 CMR 7.18(21) shall comply with the work practices of 310 CMR 7.18(31)(e).

~~(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) Plan and Extension Submittal Requirements.

1. Any person subject to 310 CMR 7.18(21)(a)1. or 2. who chooses to install add-on air pollution capture and control equipment to comply with 310 CMR 7.18(21)(d) shall submit an emission control plan in accordance with 310 CMR 7.18(20).
2. Any person subject to 310 CMR 7.18(21)(a)1. or 2. who chooses to apply for an extension under 310 CMR 7.18(21)(c) shall comply with 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 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**, if necessary to determine emissions**; **and**
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. **If acceptable to the Department and EPA, manufacturer's formulation data may be used to demonstrate compliance with coating VOC content limitations. In the case of a dispute, the VOC content determined using the EPA Method shall prevail, unless a person is able to**

demonstrate to the satisfaction of the Department and EPA that the manufacturer's formulation data are correct. EPA Method 25A shall be used when:

1. an exhaust concentration of less than or equal to 50 parts per million volume (ppmv) as carbon is required to comply with the applicable limitation;

2. the inlet concentration and the required level of control results in an exhaust concentration of less than or equal to 50 ppmv as carbon; or

3. the high efficiency of the control device alone results in an exhaust concentration of less than or equal to 50 ppmv as carbon.

Amend subsection 310 CMR 7.18(24) as follows:

(24) Flat Wood Paneling Surface Coating.

(a) Applicability.

1. On or after January 1, 1994, and prior to March 9, 2020, 310 CMR 7.18(24)**(d)1. and (f) through (h)** appl**y~~ies 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 **(VOC)**.

2. On and after March 9, 2020, any person who owns, leases, operates, or controls flat wood paneling surface coating operations and related cleaning operations which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period shall comply with 310 CMR 7.18(24)(c), (d)2., and (f) through (h).

3. On or after March 9, 2018, any person who owns, leases, operates, or controls flat wood paneling surface coating operations and related cleaning operations which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period shall comply with the work practices of 310 CMR 7.18(24)(e) for coating and cleaning operations.

~~(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~~b**) Exemptions.

1. The requirements of 310 CMR 7.18(24)(**~~b~~d**)**1.** do not apply to:

~~1.~~ a. any person subject to 310 CMR 7.18(24)(a)**1.** 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 **the requirements** of 310 CMR 7.18(24)(**~~i~~h**).

2. **The requirements of 310 CMR 7.18(24) do not apply to** any person subject to 310 CMR 7.18(24)(a)**1.** who, according to the Department, has complied with 310 CMR 7.18(17) prior to January 1, 1993.

(**~~d~~c**) Extensions.

~~1. Any person subject to 310 CMR7.18(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 January1, 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)**~~.

Any person subject to 310 CMR 7.18(24)(a)2. may apply in writing to the Department for a non-renewable extension of the implementation deadline in 310 CMR 7.18(24)(a)2. by complying with 310 CMR 7.18(24)(f). The Department will consider a non-renewable extension of the deadline in 310 CMR 7.18(24)(a)2. for persons applying under 310 CMR 7.18(24)(c) until no later than March 9, 2021, 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):

1. a Toxics Use Reduction Plan or a Resource Conservation Plan completed for the facility in accordance with 310 CMR 50.40 through 50.48 is submitted as part of the emission control plan;

2. the Toxics Use Reduction Plan or Resource Conservation Plan was certified by a Toxics Use Reduction Planner certified under M.G.L. c. 21I and 310 CMR 50.50 through 50.63;

3. the emission control plan proposes to reduce emissions or natural asset use, from the process or elsewhere in the facility, more than otherwise required pursuant to an applicable regulation or approval of the Department, through toxics use reduction techniques or resource conservation actions as defined in M.G.L. c. 21I; and

4. implementation of the emission control plan meets the emission limitations of 310 CMR 7.18(24)(d).

(**ed**) Reasonably Available Control Technology Requirements.

1. Any person subject to 310 CMR 7.18(24)(**~~b~~a**)**1**. shall comply with the emissions limits in Table 310 CMR 7.18(24)(**ed**)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)(**ed**)1.
RACT Emission Limitations for **Flat Wood Paneling** 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

2. Any person subject to 310 CMR 7.18(24)(a)2. shall limit VOC emissions by using only coatings having a VOC content no greater than the emission limitations in Table 310 CMR 7.18(24)(d)2. or by complying with the requirement in 310 CMR 7.18(24)(d)3.

Table 310 CMR 7.18(24)(d)2. RACT Emission Limitations for Flat Wood Paneling Surface Coating				
Surface Coatings Applied to the Following Flat Wood Paneling Categories	**Mass of VOC per volume of coating less water and exempt compounds, as applied**		**Mass of VOC per volume of coating solids, as applied**	
	lb/gal coating	**grams/l coating**	**lb/gal solids**	**grams/l solids**
Printed interior panels made of hardwood, plywood, or thin particleboard; Natural finish hardwood plywood panels; Class II finish on hardboard panels; Tileboard; Exterior siding	**2.1**	**250**	**2.9**	**350**

3. Any person may achieve an overall VOC control efficiency of at least 90% by weight using add-on air pollution capture and control equipment instead of complying with the requirements of 310 CMR 7.18(24)(d)2.

(e) Work Practices for Coating and Cleaning Operations. Any person subject to 310 CMR 7.18(24) shall comply with the work practices of 310 CMR 7.18(31)(e).

(f) Plan and Extension Submittal Requirements.

1. Any person subject to 310 CMR 7.18(24)(a)1. or 2. who chooses to install add-on air pollution capture and control equipment to comply with 310 CMR 7.18(24)(d) shall submit an emission control plan in accordance with 310 CMR 7.18(20).

2. Any person subject to 310 CMR 7.18(24)(a)2. who chooses to apply for an extension under 310 CMR 7.18(24)(c) shall comply with 310 CMR 7.18(20).

~~**(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.**~~

(~~**hg**~~) 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 ~~**(pursuant to**~~ 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**, if necessary to determine emissions**; **and**

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~~h**) 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. **EPA Method 25A shall be used when:**

1. an exhaust concentration of less than or equal to 50 parts per million volume (ppmv) as carbon is required to comply with the applicable limitation;

2. the inlet concentration and the required level of control results in an exhaust concentration of less than or equal to 50 ppmv as carbon; or

3. the high efficiency of the control device alone results in an exhaust concentration of less than or equal to 50 ppmv as carbon.

Amend subsection 310 CMR 7.18(25) as follows:

(25) Offset Lithographic Printing **and Letterpress Printing**.

(a) Applicability.

1. On or after January 1, 1994, ~~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 **(VOC) shall comply with 310 CMR 7.18(25)(d) through (k) and (m) through (p)**. **On or after March 9, 2020 any person subject to 310 CMR 7.18(25)(a)1. shall comply with 310 CMR 7.18(25)(l) and is no longer subject to 310 CMR 7.18(25)(e) or (f). ~~Facilities subject to 310 CMR 7.26(20) are not subject to 310 CMR 7.18(25)~~**

2. On or after March 9, 2020, any person who owns, leases, operates or controls a heatset web offset lithographic printing press or a heatset web letterpress printing press, which has the potential to emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 25 tons per rolling 12 month period of VOC from petroleum heatset inks, shall comply with 310 CMR 7.18(25)(d), (l) and (n) through (p).

3. On or after March 9, 2020, any person who owns, leases, operates or controls offset lithographic printing operations and related cleaning operations, which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period shall comply with 310 CMR 7.18(25)(d), (g) through (k), (o), and (p).

4. On or after March 9, 2018, any person who owns, leases, operates or controls offset lithographic printing operations and related cleaning operations, or letterpress printing operations and related cleaning operations, which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period shall comply with 310 CMR 7.18(25)(m).

(b) Reasonably Available Control Technology Requirements. **[Reserved.]~~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.

1. The requirements of 310 CMR 7.18(25)(**~~a~~b**)**1., with the exception of 310 CMR 7.18(25)(l),** do not apply to:

~~a~~1. **~~i~~a**. any person subject to 310 CMR 7.18(25)(a)**1.** 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

ii~~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,

iii~~c~~. provided the person complies with 310 CMR 7.18(25)(k), (**m~~l~~**), and (p).

b~~2~~. any person subject to 310 CMR 7.18(25) (**a~~b~~)1.** who, according to the Department, has complied with 310 CMR 7.18(17) prior to January 1, 1993.

2. The requirements of 310 CMR 7.18(25)(a)2. do not apply provided:

a. the person obtains and complies with a federally enforceable emission limitation which restricts the potential emissions of the heatset press to below 25 tons per year;

b. the person is using the heatset press for book printing; or

c. the person is using a heatset press with a maximum web width of 22 inches or less.

3. The requirements of 310 CMR 7.18(25)(a)3. do not apply provided:

a. the person is using a press that has a total fountain solution reservoir of less than one gallon; or

b. the person is using a press that is sheet-fed and has a maximum sheet size of 11 by 17 inches or smaller.

4. Any person subject to 310 CMR 7.18(25)(a)1. or 4. may use up to 110 gallons per rolling 12 month period of cleaning materials that do not meet 310 CMR 7.18(25)(m)2.

(d) Extensions.

1. Any person subject to 310 CMR 7.18(25)(a)**2. or 3.** may apply in writing to the Department for a non-renewable extension of the implementation deadline in 310 CMR 7.18(25)(a)**2. or 3**. **by complying with 310 CMR 7.18(25)(n).** **~~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)**2. or 3. for persons applying under 310 CMR 7.18(25)(d)** until **~~January 1, 1995~~ no later than March 9, 2021**, 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. Toxics Use Reduction Plan or a Resource Conservation Plan completed for the facility in accordance with 310 CMR 50.40 through 50.48 is submitted as part of the emission control plan;

b. the Toxics Use Reduction Plan or Resource Conservation Plan was certified by a Toxics Use Reduction Planner certified under M.G.L. c. 21I and 310 CMR 50.50 through 50.63;

c. the emission control plan proposes to reduce emissions **or natural asset use, from the process or elsewhere in the facility, more than otherwise required pursuant to an applicable regulation or approval of the Department,** through toxics use reduction techniques **or resource conservation actions** as defined in M.G.L. c. 21I; and,

~~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~~d. implementation of the **emission control** plan **~~must~~** meet**s** the emission limitations of 310 CMR 7.18(25)**(l) for persons subject to 310 CMR 7.18(25)(a)2. and 310 CMR 7.18(25)(g) through (k) for persons subject to 310 CMR 7.18(25)(a)3(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)**1.** 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)**1.** 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)**1. or 3.** who owns, leases, operates, or controls a sheet-fed offset lithographic press, and who uses **alcoh~~propan~~**ol 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) **Heatset** Web-fed Offset Lithographic Requirements. Any person subject to 310 CMR 7.18(25)(a)**1. or 3.**, who owns, leases, operates, or controls a **heatset** web-fed offset lithographic press which uses **alcoh~~propan~~**ol 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)**1. or 3.**, who owns, leases, operates, or controls a non-heatset web-fed offset lithographic printing press, shall use zero per cent **alcoh~~propan~~**ol in the fountain solution, and shall maintain a total VOC concentration in the fountain solution of 2.5% **~~cent~~** or less by weight.

(j) **Alcoh~~Propan~~**ol Substitute Requirements. Any person subject to 310 CMR 7.18(25)(a)**1. or 3.**, who owns, leases, operates, or controls an offset lithographic press with fountain solution with **alcoh~~propan~~**ol 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).

(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) Heatset Web Offset Lithographic Printing Press and Heatset Web Letterpress Printing Press Requirements. Any person subject to 310 CMR 7.18(25)(a)2. who owns, leases, operates, or controls a heatset web offset lithographic printing press or a heatset web letterpress printing press, shall comply with 310 CMR 7.18(25)(l)1.a. or b. or 310 CMR 7.18(25)(l)2.

1. Press control requirements.

a. A heatset dryer controlled by an air pollution control device whose first installation date was prior to March 9, 2020 shall achieve at least 90% VOC control efficiency by weight.

b. A heatset dryer controlled by an air pollution control device whose first installation date was on or after March 9, 2020 shall achieve at least 95% VOC control efficiency by weight.

2. The maximum control device exhaust VOC concentration shall be 20 parts per million by volume dry basis (ppmvd) of VOC as hexane.

(**m~~l~~**) **Work Practices and Emission Limitations for Printing and Cleaning Operations ~~Cleaning Solution Requirements~~**. Any person subject to 310 CMR 7.18(25)**~~(a)~~**, who owns, leases, operates, or controls an offset lithographic press **or letterpress printing press**, and who uses cleaning solutions containing VOC to wash ink from the blanket **~~and~~or** other accessible press components shall meet the following criteria:

1. **Any person subject to 310 CMR 7.18(25) shall comply with the work practices of 310 CMR 7.18(31)(e).~~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.~~ Any person subject to 310 CMR 7.18(25) shall only use c~~Cleanup solution**s** ~~as used at the press shall~~ **that** either**~~;~~:**

a.~~(i)~~ do not exceed **~~30~~70**% by weight VOC; or

b.~~(ii)~~ have a VOC composite partial pressure of 10 mmHg or less at 20°C (68°F).

(**n~~m~~**) Plan **and Extension** Submittal Requirement**s**.

1. Any person subject to 310 CMR 7.18(25)(a)**1., 2. or 3. who chooses to install add-on air pollution capture and control equipment to comply with 310 CMR 7.18(25)(e), (f), or (l) shall submit an emission control plan in accordance with ~~must submit an emission control plan, and have the plan approved by the Department under~~** 310 CMR 7.18(20).

2. Any person subject to 310 CMR 7.18(25)(a)2. or 3. who chooses to apply for an extension under 310 CMR 7.18(25)(d) shall comply with 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 **prepare and** maintain **~~daily~~** records sufficient to demonstrate compliance **with 310 CMR 7.18(2)**. Records kept to demonstrate compliance shall be kept onsite 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)**, density,** and quantity for each VOC containing material used, including but not limited to:
   a. **alcoh~~Propan~~**ol;
   b. **alcoh~~Propan~~**ol substitutes;
   c. **~~F~~f**ountain concentrate;
   d. **~~P~~p**rinting Ink; **and**
   e. **~~C~~c**leaning Solution.
2. For heatset offset lithographic printing presses **and heatset offset letterpress 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, **alcoh~~propan~~**ol 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~~g**) 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 **all** 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. **EPA Method 25A shall be used when:**

1. An exhaust concentration of less than or equal to 50 parts per million by volume (ppmv) as carbon is required to comply with the applicable limitation;

2. The inlet concentration and the required level of control results in an exhaust concentration of less than or equal to 50 ppmv as carbon; or

3. The high efficiency of the control device alone results in an exhaust concentration of less than or equal to 50 ppmv as carbon.

Amend subsection 310 CMR 7.18(30) as follows:

(30) Adhesives and Sealants

(a) Applicability

…

4. 310 CMR 7.18(30) shall not apply to the manufacture, sale, supplying, offering for sale, or the use or application of the following:

a. adhesives, sealants, adhesive primers, and sealant primers that are subject to 310 CMR 7.25(12), Consumer Products;

b. adhesives and sealants that contain less than 20 grams of VOC per liter of adhesive, or sealant, less water and less exempt compounds, as applied; ~~and~~

c. adhesives used in tire repair operations, provided the label of the adhesive states: "For Tire Repair Only"; **and**

d. adhesives and adhesive primers, used in printing operations that are subject to 310 CMR 7.03(15), Non-heatset Offset Lithographic Printing; 310 CMR 7.03(19), Flexographic, Gravure, Letterpress and Screen Printing; 310 CMR 7.18(12), Packaging Rotogravure and Packaging Flexographic Printing; 310 CMR 7.18(25), Offset Lithographic Printing and Letterpress Printing; and 310 CMR 7.26(20) through (29), Environmental Results Program: Lithographic, Gravure, Letterpress, Flexographic and Screen Printing.

Add a new subsection 310 CMR 7.18(31) as follows:

(31) U Industrial Cleaning Solvents

(a) Applicability.

1. On or after March 9, 2020, any person who owns, leases, operates or controls a facility which emits, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of volatile organic compounds (VOC) per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period from industrial cleaning solvents shall comply with 310 CMR 7.18(31)(c), (d), and (f) through (h).

2. On or after March 9, 2018, any person who owns, leases, operates, or controls a facility which emits, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period from industrial cleaning solvents shall comply with the work practices of 310 CMR 7.18(31)(e) for cleaning operations.

(b) Exemptions.

1. The requirements of 310 CMR 7.18(31)(d) do not apply to:

a. industrial cleaning solvent usage otherwise subject to an emission limitation in 310 CMR 7.03, 7.18, 7.25 or 7.26;

b. stripping of cured coatings, cured ink, or cured adhesives;

c. cleaning of the following:

i. solar cells;

ii. laser hardware;
iii. scientific instruments;
iv. high-precision optics; and
v. digital printing operations.

d. cleaning conducted as part of the following:
i. performance laboratory tests on coatings, adhesives, or inks;
ii. research and development programs; and
iii. laboratory tests in quality assurance laboratories, excluding commercial laboratories that provide laboratory services for third parties;

e. cleaning of paper-based gaskets and clutch assemblies where the rubber is bonded to metal by means of an adhesive;
f. cleaning operations in printing pre-press areas, including the cleaning of film processors, color scanners, plate processors, film cleaning, and plate cleaning;
g. medical device and pharmaceutical manufacturing operations;
h. cleaning of application equipment used to apply coatings on satellites and radiation effect coatings;
i. touch-up cleaning performed on printed circuit boards where surface mounted devices have already been attached;
j. cleaning of ultraviolet or electron beam adhesive application; and
k. coating, ink, resin, and adhesive manufacturing.

2. The work practice in 310 CMR 7.18(31)(e)5. does not apply to the cleaning of the nozzle tips of automated spray equipment systems.

(c) Extensions. Any person subject to 310 CMR 7.18(31)(a)1. may apply in writing to the Department for a non-renewable extension of the implementation deadline in 310 CMR 7.18(31)(a)1. by complying with 310 CMR 7.18(31)(f). The Department will consider a non-renewable extension of the deadline in 310 CMR 7.18(31)(a)1. for persons applying under 310 CMR 7.18(31)(c) until no later than March 9, 2021, 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):

1. a Toxics Use Reduction Plan or a Resource Conservation Plan completed for the facility in accordance with 310 CMR 50.40 through 310 CMR 50.48 is submitted as part of the emission control plan;
2. the Toxics Use Reduction Plan or Resource Conservation Plan was certified by a Toxics Use Reduction Planner certified under M.G.L. c. 21I and 310 CMR 50.50 through 50.63;
3. the emission control plan proposes to reduce emissions or natural asset use, from the process or elsewhere in the facility, more than otherwise required pursuant to an applicable regulation or approval of the Department, through toxics use reduction techniques or resource conservation actions as defined in M.G.L. c. 21I; and
4. implementation of the emission control plan meets the emission limitations of 310 CMR 7.18(31)(d).

(d) Reasonably Available Control Technology Requirements.
Any person subject to 310 CMR 7.18(31) shall limit VOC emissions by complying with one or more of the requirements in 310 CMR 7.18(31)(d)1., 2., or 3.

1. VOC Content Limitation. Use industrial cleaning solvents that have a VOC content no greater than the emission limitations listed in Table 310 CMR 7.18(31)(d)1. If an operation can be classified in more than one industrial cleaning solvent operation category in Table 310 CMR 7.18(31)(d)1., then the least stringent category limitation shall apply.

Table 310 CMR 7.18(31)(d)1. RACT Emission Limitations for Industrial Cleaning Solvent Operations		
	VOC content limitation as applied	
Industrial Cleaning Solvent Operation Category	pounds/gallon	grams/liter
Electrical and electronic components	0.83	100
Electronic or electrical cables	3.32	400
Product cleaning during manufacturing process, or repair and maintenance cleaning	0.42	50
Surface preparation for coating or ink application		
Cleaning not otherwise specified		

2. Vapor Pressure Limitation. Use industrial cleaning solvents that have a VOC composite partial pressure equal to or less than eight mm Hg at 20°C (68°F).

3. Add-on Air Pollution Capture and Control Equipment. Achieve an overall VOC control efficiency of at least 85% by weight using add-on air pollution capture and control equipment.

(e) Work Practices for Cleaning Operations. Any person subject to 310 CMR 7.18(31) shall minimize VOC emissions of industrial cleaning solvents in accordance with, but not limited to, the following practices:

1. covering any container containing solvent or solvent-contaminated material;

2. storing any solvent-contaminated material (such as cleaning rags) or equipment (such as used applicators) in closed containers;

3. cleaning spray guns in an enclosed system or manually cleaning and flushing spray guns without atomizing the cleaning solvent;

4. collecting and storing used solvent in a closed container;

5. not atomizing any cleaning solvent unless the emissions are vented to add-on air pollution capture and control equipment that meets the requirement of 310 CMR 7.18(31)(d)3.;

6. conveying solvent in closed containers or pipes;

7. maintaining cleaning equipment and solvent containers, including repairing solvent leaks;

8. cleaning up any spills immediately; and

9. properly disposing of any solvent and solvent-contaminated waste.

In addition, any person who is directed to comply with 310 CMR 7.18(31)(e) by any other subsection of 310 CMR 7.18, shall utilize the work practices outlined in 310 CMR 7.18(31)(e) to minimize VOC emissions.

(f) Plan and Extension Submittal Requirements.

1. Any person subject to 310 CMR 7.18(31)(a)1. who chooses to install add-on air pollution capture and control equipment to comply with 310 CMR 7.18(31)(d) shall submit an emission control plan in accordance with 310 CMR 7.18(20).

2. Any person subject to 310 CMR 7.18(31)(a)1. who chooses to apply for an extension under 310 CMR 7.18(31)(c) shall comply with 310 CMR 7.18(20).

(g) Recordkeeping Requirements. Any person subject to 310 CMR 7.18(31)(a) shall prepare and maintain records sufficient to demonstrate compliance consistent with 310 CMR 7.18(2). 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 or upon request. Such records shall include, but are not limited to:

1. name, identification, quantity, formulation and density of industrial cleaning solvent(s) used;

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;

3. when complying through 310 CMR 7.18(31)(d)1., the associated category from Table 310 CMR 7.18(31)(d)1. and the VOC content of each industrial cleaning solvent, in pounds per gallon or grams per liter, as applied;
4. when complying through 310 CMR 7.18(31)(d)2., the VOC composite partial pressure of each industrial cleaning solvent used in the industrial cleaning operation; and
5. when complying through 310 CMR 7.18(31)(d)3., all records required by 310 CMR 7.18(2)(e) necessary to demonstrate the VOC control efficiency.

(h) Testing Requirements. Any person subject to 310 CMR 7.18(31)(a) shall, upon request of the Department, perform or have performed tests to demonstrate compliance with 310 CMR 7.18(31). Testing shall be conducted in accordance with EPA Methods 24, 25, 25A or 25B as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA. EPA Method 25A shall be used when:

1. an exhaust concentration of less than or equal to 50 parts per million volume (ppmv) as carbon is required to comply with the applicable limitation;
2. the inlet concentration and the required level of control results in an exhaust concentration of less than or equal to 50 ppmv as carbon; or
3. the high efficiency of the control device alone results in an exhaust concentration of less than or equal to 50 ppmv as carbon.

Add a new subsection 310 CMR 7.18(32) as follows:

(32) Fiberglass Boat Manufacturing.

(a) Applicability.

1. On or after March 9, 2020, any person who owns, leases, operates, or controls a fiberglass boat manufacturing facility and related cleaning operations which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of volatile organic compounds (VOC) per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period shall comply with 310 CMR 7.18(32)(b), (d), (e), (f), (g)3. and 4. and (h) through (j).
2. On or after March 9, 2018, any person who owns, leases, operates, or controls a fiberglass boat manufacturing facility and related cleaning operations which emit, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period shall comply with the work practices of 310 CMR 7.18(32)(g)1. and 2. for manufacturing and cleaning operations.
3. 310 CMR 7.18(32) does not apply to the following activities:
a. surface coatings applied to fiberglass boats and metal recreational boats or pleasure crafts;
b. closed molding operations; and
c. industrial adhesives used in the assembly of fiberglass boats, with the exception of polyester resin putties used to assemble fiberglass parts, which are not considered adhesives for the purpose of this regulation.

(b) Definitions. The definitions found in 310 CMR 7.00 apply to 310 CMR 7.18(32). The following words and phrases shall have the following meanings as they appear in 310 CMR 7.18(32). Where a term is defined in both 310 CMR 7.00: *Definitions* and 310 CMR 7.18(32), the definition in 310 CMR 7.18(32) shall apply.

CLOSED MOLDING means a fiberglass boat manufacturing process by which pressure is used to distribute a resin through reinforcing fabric placed between two mold surfaces to either saturate the fabric or fill the mold cavity. The term includes, but is not limited to, compression molding with

sheet molding compound, infusion molding, resin injection molding, vacuum-assisted resin transfer molding, resin transfer molding, and vacuum-assisted compression molding. The term does not include any processes in which a closed mold is used only to compact saturated fabric or remove air or excess resin from the fabric, such as in vacuum bagging.

FIBERGLASS means a material consisting of extremely fine glass fibers.

FIBERGLASS BOAT MANUFACTURING FACILITY means any facility that manufactures hulls, decks, or boats from fiberglass, or builds molds to make fiberglass boat hulls or decks. A facility is not considered a fiberglass boat manufacturing facility if the facility solely manufactures:

1. parts of boats, such as hatches, seats, or lockers; or
2. boat trailers.

FILLED RESIN means a resin to which fillers have been added to achieve certain physical properties, particularly for building fiberglass boat molds.

GEL COAT means a clear or pigmented polyester resin that, when mixed with a hardening catalyst, is applied so that it becomes the outer surface of the finished part or mold.

MONOMER means a VOC that partially combines with itself, or with other similar compounds, by a cross-linking reaction to become a part of the cured resin.

OPEN MOLDING means a family of techniques for composite fabrication which make use of single-cavity molds and require little or no external pressure.

PRODUCTION RESIN OR GEL COAT means a resin or gel coat that is used to fabricate fiberglass boat hulls or decks.

ROLL-OUT means the process of using rollers, squeegees, or similar tools to compact reinforcing materials saturated with resin to remove trapped air or excess resin.

SKIN COAT means the first layer of resin applied to the gel coat.

TOOLING RESIN OR TOOLING GEL COAT means a resin or gel coat used to build molds and which is normally harder, more heat-resistant, and more dimensionally stable than production materials.

VACUUM BAGGING means any molding technique in which the reinforcing fabric is saturated with resin and then covered with a flexible sheet that is sealed to the edge of the mold and where a vacuum is applied under the sheet to compress the laminate, remove excess resin, or remove trapped air from the laminate during curing. Vacuum bagging does not include processes that meet the definition of closed molding.

VINYLESTER RESIN means a thermosetting resin containing esters of acrylic or methacrylic acids and having double-bond and ester linkage sites only at the ends of the resin molecules.

(c) Exemptions. The requirements in 310 CMR 7.18(32)(e) shall not apply to the following:

1. production resins, including skin coat resins, applied with non-atomizing resin application equipment, that must meet specifications under 46 CFR chapter I subchapter Q (Equipment, Construction and Materials: Specifications and Approval) or 46 CFR chapter I subchapter T (Small Passenger Vessels (Under 100 Gross Tons));
2. production and tooling resins, and pigmented, clear, and tooling gel coats used for part or mold repair and touch-up not exceeding one percent by weight of all resins and gel coats used at a fiberglass boat manufacturing facility during any consecutive 12-month period; or
3. 100-percent vinylester skin coat resins, applied with non-atomizing resin application equipment, that do not exceed five percent by weight of all resins and gel coats used at a fiberglass boat manufacturing facility during any consecutive 12-month period.

(d) Extensions. Any person subject to 310 CMR 7.18(32)(e) may apply in writing to the Department for a non-renewable extension of the implementation deadline in 310 CMR 7.18(32)(a)1. by complying with 310 CMR 7.18(32)(h). The Department will consider a non-renewable extension of the deadline in 310 CMR 7.18(32)(a)1. for persons applying under 310 CMR 7.18(32)(d) until no later than March 9, 2021, 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):
1. a Toxics Use Reduction Plan or a Resource Conservation Plan completed for the facility in accordance with 310 CMR 50.40 through 50.48 is submitted as part of the emission control plan;
2. the Toxics Use Reduction Plan or Resource Conservation Plan was certified by a Toxics Use Reduction Planner certified under M.G.L. c. 21I and 310 CMR 50.50 through 50.63;
3. the emission control plan proposes to reduce emissions or natural asset use, from the process or elsewhere in the facility, more than otherwise required pursuant to an applicable regulation or approval of the Department, through toxics use reduction techniques or resource conservation actions as defined in M.G.L. c. 21I; and
4. implementation of the emission control plan meets the emission limitations of 310 CMR 7.18(32)(e).

(e) Reasonably Available Control Technology Emission Limitations for Resins and Gel Coats. Any person subject to 310 CMR 7.18(32) shall limit VOC emissions by complying with one or more of the requirements in 310 CMR 7.18(32)(e)1. through 4., and complying with 310 CMR 7.18(32)(e)5. and 6. as applicable.
1. Monomer VOC Content Limitations. Use only materials having a VOC content no greater than the limitations in Table 310 CMR 7.18(32)(e)1.

Table 310 CMR 7.18(32)(e)1.
Compliant Materials Monomer VOC Content Limitations for Open Molding Resins and Gel Coats

Material Used	Application Method	Monomer VOC Content Limitation (weight percent, as applied)
Production Resin	Atomized (spray)	28
Production Resin	Non-atomized	35
Pigmented gel coat	Any method	33
Clear gel coat	Any method	48
Tooling resin	Atomized	30
Tooling resin	Non-atomized	39
Tooling gel coat	Any method	40

2. Weighted-Average Monomer VOC Content. Emit no more, in a consecutive 12-month period, than the applicable monomer VOC content limitation for a specific category and application method in Table 310 CMR 7.18(32)(e)1. determined using Equation 1:

Equation 1:

$$\text{Weighted-average monomer VOC content} = \sum_{i=1}^{n} (M_i\ VOC_i) / \sum_{i=1}^{n} (M_i)$$

where:

M_i = the mass of open molding resin or gel coat i used in an operation in the past consecutive 12-month period, in megagrams;

VOC_i = monomer VOC content, by weight percent, of open molding resin or gel coat i used in an operation in the past consecutive 12-month period; and

n = the number of different open molding resins or gel coats used in an operation in the past consecutive 12-month period.

3. Material Emissions Average. Any person subject to 310 CMR 7.18(32) may calculate the weighted-average emission rate that is equivalent to the use of compliant resin and gel coat materials contained in Table 310 CMR 7.18(32)(e)1. For a particular consecutive 12-month period, the actual monomer VOC emissions calculated in Equation 3 shall not exceed the allowable monomer VOC emissions calculated in Equation 2. The allowable monomer VOC emission limitation and the actual monomer VOC emissions shall be re-calculated monthly using the current month's and previous 11 months' actual monomer usage. For each consecutive 12-month period:

a. identify each resin and gel coat material to be included in the calculation;
b. use Equation 2 to determine the allowable monomer VOC emissions limitation;
c. use Equation 3 to determine the actual monomer VOC emissions; and
d. use Equation 4 to determine the weighted-average monomer VOC emission rate (PV_{op}) for each resin and gel coat material operation for the consecutive 12-month period in Equation 3.

Equation 2:

$$\text{Allowable Monomer VOC Limitation} = 46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})$$

The numerical coefficients of Equation 2 are the allowable monomer VOC emission rates for the particular materials in units of kg/Mg of material used.

where:

M_R = the mass of production resin used in the past consecutive 12-month period, excluding any materials that are exempt, in megagrams;

M_{PG} = the mass of pigmented gel coat used in the past consecutive 12-month period, excluding any materials that are exempt, in megagrams;

M_{CG} = the mass of clear gel coat used in the past consecutive 12-month period, excluding any materials that are exempt, in megagrams;

M_{TR} = the mass of tooling resin used in the past consecutive 12-month period, excluding any materials that are exempt, in megagrams; and

M_{TG} = the mass of tooling gel coat used in the past consecutive 12-month period, excluding any materials that are exempt, in megagrams.

Equation 3:

Actual Monomer VOC emissions =

$$(PV_R)(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG}) + (PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})$$

where:

PV_R = the weighted-average monomer VOC emission rate for production resin used in the past consecutive 12-month period, in kilograms per megagram as calculated using Equation 4;

M_R = the mass of production resin used in the past consecutive 12-month period, in megagrams;

PV_{PG} the weighted-average monomer VOC emission rate for pigmented gel coat used in the past

= consecutive 12-month period, in kilograms per megagram as calculated using Equation 4;
M_{PG} = the mass of pigmented gel coat used in the past consecutive 12-month period, in megagrams;
PV_{CG} = the weighted-average monomer VOC emission rate for clear gel coat used in the past consecutive 12-month period, in kilograms per megagram as calculated using Equation 4;
M_{CG} = the mass of clear gel coat used in the past consecutive 12-month period, in megagrams;
PV_{TR} = the weighted-average monomer VOC emission rate for tooling resin used in the past consecutive 12-month period, in kilograms per megagram as calculated using Equation 4;
M_{TR} = the mass of tooling resin used in the past consecutive 12-month period, in megagrams;
PV_{TG} = the weighted-average monomer VOC emission rate for tooling gel coat used in the past consecutive 12-month period, in kilograms per megagram as calculated using Equation 4; and
M_{TG} = the mass of tooling gel coat used in the past consecutive 12-month period, in megagrams.

Equation 4:

$$PV_{OP} = \sum_{i=1}^{n} (M_i PV_i) / \sum_{i=1}^{n} (M_i)$$

where:

M_i = the mass of resin or gel coat i used within an operation in the past consecutive 12-month period, in megagrams;
n = the number of different open molding resins and gel coats used within an operation in the past consecutive 12-month period;
PV_i = the monomer VOC emission rate for resin or gel coat i used within an operation in the past consecutive 12-month period, in kilograms of monomer VOC per megagram of material applied. Use the equations in Table 310 CMR 7.18(32)(e)3. to compute PV_i; and
PV_{OP} = the sum of the products of M_i and PV_i for open molding resin or gel coats one through n, divided by M_i one through n, as in Table 310 CMR 7.18(32)(e)3.

Table 310 CMR 7.18(32)(e)3.
Monomer VOC Emission Rate Equations for Open Molding Operations

Material Used	Application Method	Equation to Calculate Monomer VOC Emission Rate PV_i (kg of monomer VOC per Mg of material applied) =
Production resin, tooling resin	Atomized	$0.014 \times (\text{Resin VOC\%})^{2.425}$
	Atomized, plus vacuum bagging with roll-out	$0.01185 \times (\text{Resin VOC\%})^{2.425}$
	Atomized, plus vacuum bagging without roll-out	$0.00945 \times (\text{Resin VOC\%})^{2.425}$
	Non-atomized	$0.014 \times (\text{Resin VOC\%})^{2.275}$
	Non-atomized, plus vacuum bagging with roll-out	$0.0110 \times (\text{Resin VOC\%})^{2.275}$
	Non-atomized, plus vacuum bagging without roll-out	$0.0076 \times (\text{Resin VOC\%})^{2.275}$
Pigmented gel coat, clear gel coat, tooling gel coat	All methods	$0.445 \times (\text{Gel coat VOC\%})^{1.675}$

4. Add-on Air Pollution Capture and Control Equipment. Use add-on air pollution capture and control equipment to emit no more than a numerical monomer VOC emission limitation that is determined for each facility in accordance with Equation 2, based on the mix of application methods and materials used at that facility, except that instead of using the mass of each

material used over the past consecutive 12-month period, the facility shall use the mass of each material used during the air pollution control device performance test.

5. Filled Resin Emission Rate. In addition to complying with 310 CMR 7.18(32)(e)1., 2., 3. or 4., the following shall be used in calculating the emission rate for the filled resins used at the facility:

a. when using a filled production resin or filled tooling resin, any person subject to 310 CMR 7.18(32) shall calculate the emission rate for the filled material on an as-applied basis using Equation 5:

Equation 5:

$$PV_F = PV_U \times (100 - \%\ Filler) / 100$$

where:

PV_F = **the as-applied monomer VOC emission rate for the filled production resin or tooling resin, kilograms monomer VOC per megagram of filled material;**

PV_U = **the monomer VOC emission rate for the neat or unfilled resin, before filler is added, as calculated using the equations in Table 310 CMR 7.18(32)(e)3.; and**

% Filler = **the weight percent of filler in the as-applied filled resin system.**

b. If the filled resin is used as a production resin, the value of PV_F calculated using Equation 5 shall not exceed 46 kilograms of monomer VOC per megagram of filled resin applied.

c. If the filled resin is used as a tooling resin, the value of PV_F calculated using Equation 5 shall not exceed 54 kilograms of monomer VOC per megagram of filled resin applied.

d. If the facility includes a filled resin in the facility-specific material emissions averaging procedure, the facility shall use the value of PV_F calculated using Equation 5 for the value of PV_i in 310 CMR 7.18(32)(e)3., Equation 4.

6. Non-monomer VOC Content.

a. Up to five percent by weight of non-monomer VOC content of a resin or gel coat shall be exempt from the VOC content limitations of 310 CMR 7.18(32)(e).

b. If the non-monomer VOC content of a resin or gel coat exceeds five percent by weight, then the excess non-monomer VOC over five percent by weight shall be added to the monomer VOC content in determining compliance with 310 CMR 7.18(32)(e).

(f) Application Methods. Production resins, including skin coat resins, that must meet specifications under 46 CFR chapter I subchapter Q (Equipment, Construction and Materials: Specifications and Approval) or 46 CFR chapter I subchapter T (Small Passenger Vessels (Under 100 Gross Tons)), and that do not meet the requirements in 310 CMR 7.18(32)(e), shall be applied with non-atomizing resin application equipment.

(g) Work Practices and Emission Limitations for Cleaning Operations and Resin and Gel Coat Mixing Containers.

1. Any person subject to 310 CMR 7.18(32) shall comply with the work practices of 310 CMR 7.18(31)(e).

2. Any person subject to 310 CMR 7.18(32) using resin and gel coat mixing containers with a capacity equal to or greater than 208 liters, equivalent to 55 gallons, including those used for on-site mixing of putties and polyputties, shall have a cover with no visible gaps in place at all times, except when material is being manually added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.

3. Any person subject to 310 CMR 7.18(32) shall only use VOC cleaning solvents for routine application equipment cleaning that either:

a. contain no more than five percent VOC by weight; or

b. have a VOC composite partial pressure of no more than 0.50 mm Hg at 68 ºF.

4. Any person subject to 310 CMR 7.18(32) shall only use non-VOC solvents to remove cured resin and gel coat from application equipment.

(h) Plan and Extension Submittal Requirements.

1. Any person subject to 310 CMR 7.18(32)(a)1. who chooses to install add-on air pollution capture and control equipment to comply with 310 CMR 7.18(32)(e) shall submit an emission control plan in accordance with 310 CMR 7.18(20).

2. Any person subject to 310 CMR 7.18(32)(a)1. who chooses to apply for an extension under 310 CMR 7.18(32)(d) shall comply with 310 CMR 7.18(20).

(i) Recordkeeping Requirements. Any person subject to 310 CMR 7.18(32)(a) shall prepare and maintain records sufficient to demonstrate compliance consistent with 310 CMR 7.18(2). 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 or upon request. Such records shall include, but are not limited to:

1. identity, quantity, formulation and density of resins and gel coat(s) used;

2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used;

3. solids content of any gel coat(s) or resins used;

4. actual operational and emissions characteristics of the operation 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) issued under 310 CMR 7.18(20) or any order(s) issued to the person.

(j) Testing Requirements. Any person subject to 310 CMR 7.18(32)(a) shall, upon request of the Department, perform or have performed the following tests, as applicable, to demonstrate compliance with 310 CMR 7.18(32).

1. Testing to determine the monomer VOC content of resin and gel coat materials shall be conducted in accordance with SCAQMD Method 312-91, Determination of Percent Monomer in Polyester Resins, revised April 1996.

2. Testing to determine the non-monomer VOC content of resin and gel coat materials shall be conducted in accordance with EPA Method 24 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.

3. If acceptable to the Department and EPA, manufacturer's formulation data may be used to demonstrate compliance with monomer and non-monomer VOC content limitations. In the case of a dispute, the VOC content determined using SCAQMD Method 312-91 and EPA Method 24 shall prevail, unless a person is able to demonstrate to the satisfaction of the Department and EPA that the manufacturer's formulation data are correct.

4. EPA Method 25A shall be used when:

a. an exhaust concentration of less than or equal to 50 parts per million volume (ppmv) as carbon is required to comply with the applicable limitations;

b. the inlet concentration and the required level of control results in an exhaust concentration of less than or equal to 50 ppmv as carbon; or

c. the high efficiency of the control device alone results in an exhaust concentration of less than or equal to 50 ppmv as carbon.

Amend subsections 310 CMR 7.26(20) – (29) as follows:

(20) Environmental Results Program: Lithographic, **Gravure, Letterpress, Flexographic**~~**Graphic Arts**~~, and Screen Printing.

(a) 310 CMR 7.26(20) through (29) sets forth performance standards and recordkeeping requirements for lithographic, **gravure, letterpress, flexographic,**~~**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)**~~**[Reserved].**

(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 NOx, 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**in 310 CMR 7.26(20) with:**~~**, 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.**~~

1. a primary 2012 North American Industry Classification System (NAICS) code of 323111 "Commercial Printing (except Screen and Books)," 323113 "Commercial Screen Printing," or 323117 "Books Printing;" and

2. one or more screen, lithographic, gravure, flexographic, or letterpress printing presses.

(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**~~**2012** 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.

…

Alcohol Substitute means non-alcohol fountain solution additives, including, but not limited to, glycol ethers or ethylene glycol.

…

Large Printer means a printer that

(a) 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 **or**

(b) after March 9, 2020, emits more than ten tons of VOC facility-wide per rolling 12 month period based on materials used before the application of air pollution control equipment.

Incidental material, ink used in non-heatset offset lithographic printing, water-based ink/coating/adhesive, plastisol**, electron beam ink** and ultraviolet ink are excluded from this calculation.

…

Midsize Printer means a printer that

(a) 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~~**

(b) 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**; or**

(c) after March 9, 2020, does not meet the definition of a large printer and emits, before any application of add-on air pollution capture and control equipment, equal to or greater than 15 pounds of VOC per day or, in the alternative, equal to or greater than three tons of VOC per rolling 12 month period from offset lithographic printing operations and related cleaning operations, or letterpress printing operations and related cleaning operations.

Incidental material, ink used in non-heatset offset lithographic printing, water-based ink/coating/adhesive, plastisol**, electron beam ink** and ultraviolet ink are excluded from this calculation.

Non-conforming Operation means a press or presses that use**(s)** 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.

…

Rolling 12 Month Period **~~or Rolling 12 Month Period~~** means any consecutive 12 month period of time.

SDS means a Safety Data Sheet.

…

Small Printer means a printer**~~,~~ that**

(a) does not qualify as a Very Small Printer~~,~~; and ~~that~~

(b) 1. 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~~**

2. 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**, electron beam ink** and ultraviolet ink are excluded from this calculation.

…

[*Note to reviewer: a related "Very Small Printer" definition is included in a related proposed ERP regulation package.*]

Very Small Printer means a printer that

(a) is connected to municipal sewer;

(b) uses a total of no more than 55 gallons of cleanup solution and inks/coatings/adhesives with a VOC content greater than 10% by weight as applied per rolling 12 month period;

(c) uses no more than 55 gallons of alcohol per rolling 12 month period; and

(d) generates no more than 55 gallons of hazardous waste per rolling 12 month period.

Incidental material, ink used in non-heatset offset lithographic printing, water-based ink/coating/adhesive, plastisol, electron beam ink and ultraviolet ink are excluded from the calculation in (b).

(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. **[Reserved.]~~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.**, except to the extent applicable requirements of 310 CMR 7.18 become more stringent than those in the plan approval or 310 CMR 7.26**.

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 nonconforming operation shall be operated in compliance with the terms and conditions of that plan approval or permit**, except to the extent applicable requirements of 310 CMR 7.18 or 7.26 become more stringent than those in the plan approval or permit**.

4. The following provisions take effect on March 9, 2020: 310 CMR 7.26(24)(a)1.b., (24)(a)2.a.ii., (25)(b)2.b., (28)(b)5., and (28)(c)6.

(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

a. not contain any alcohol**; and**

b. contain no more than 5% alcohol substitutes by weight as applied.

2. For Sheet-fed Presses**, except for a sheet-fed press with maximum sheet size of 11 by 17 inches or smaller**:

a. unrefrigerated fountain solution ~~**containing alcohol**~~ shall **either:**

i. contain no more than 5**.0**% VOC by weight **as applied;** ~~**including but not limited to alcohol,**~~ **or**

ii. contain no more than 5% alcohol substitutes by weight as applied and contain no alcohol; and~~;~~

b. refrigerated fountain solution ~~**containing alcohol**~~ shall contain no more than 8% VOC by weight **as applied**, ~~**including but not limited to alcohol,**~~ and shall be refrigerated to a temperature of less than 60° F.

~~**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) **Work Practices and Emission Limitations for Printing and Cleaning Operations ~~Cleanup solution standard~~**:

1. Any person subject to 310 CMR 7.26(20) shall comply with the work practices of 310 CMR 7.18(31)(e).

2. Cleanup solution used to clean an offset lithographic printing press shall meet **at least one of** the following standards, except that these standards do not apply to incidental materials:~~**1. cleanup solution either**~~

a. shall not exceed ~~**30**~~ **70**% VOC by weight as applied, calculated pursuant to EPA test method 24~~**,**~~**;** or

b. 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) **Work Practices and Emission Limitations for Printing and Cleaning Operations ~~Cleanup solution standard~~**:

1. Any person subject to 310 CMR 7.26(20) shall comply with the work practices of 310 CMR 7.18(31)(e).

2. 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:

a~~**1**~~. cleanup solution shall have a VOC composite partial pressure of 25 mm Hg or less at 20°C (68°F)~~**,**~~**; and**

b. cleanup solution used to clean a letterpress printing press at a midsize or large printer, as of the effective date in 310 CMR 7.26(23)(a)4., shall:

i. have a VOC composite partial pressure of less than 10 mm Hg at 20°C (68°F); or

ii. contain less than 70% VOC by weight.

~~**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)

(b) **Work Practices and Emission Limitations for Printing and Cleaning Operations ~~Cleanup solution standard~~**:

1. Any person subject to 310 CMR 7.26(20) shall comply with the work practices of 310 CMR 7.18(31)(e).

2. Cleanup solution used in screen printing shall **have a VOC composite partial pressure of 5.0 mm Hg or less at 20°C (68°F)~~meet the following standards~~**, except that **~~these~~ this** standard**~~s~~** do**es** 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:

…

(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:

a~~i~~. raw material inputs associated with the new press(es) or operation(s); and

b~~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)**, except to the extent applicable requirements of 310 CMR 7.18 or 7.26 become more stringent than those in the plan approval or permit**.

…

(28) Recordkeeping: Each printer shall maintain records sufficient to demonstrate compliance. Such records shall be kept on-site for at least **~~three~~ five** 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 **and very small printer** shall maintain:

1. monthly purchase or usage records sufficient to demonstrate that the printer is a small printer **or very small printer**, including but not limited to records concerning cleanup solutions, alcohol, inks, coatings, adhesives and incidental materials, excluding water-based inks/coatings/ adhesives, **electron beam inks,** ultraviolet inks, plastisol inks, and inks used in non-heatset offset lithographic printing;

…

3. for water-based inks/coatings/adhesives, **electron beam inks,** ultraviolet inks, and plastisol inks, ~~M~~SDSs or other records demonstrating that the ink/coating/adhesive is water-based, **electron beam,** 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, **electron beam inks,** ultraviolet inks, plastisol inks, and inks used in non-heatset offset lithographic printing;

…

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;

5. records of the percent by weight of alcohol substitutes in fountain solution as determined each time alcohol substitutes are used to mix a new batch of fountain solution and each time alcohol substitutes are added to fountain solution on-press, based on analytical data, and the proportions of the constituents mixed;

6. for water-based inks/coatings/adhesives, **electron beam inks,** ultraviolet inks, and plastisol inks, ~~M~~SDSs or other records demonstrating that the ink/coating/adhesive is water-based, **electron beam,** 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., ~~M~~SDSs) 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, **electron beam inks,** ultraviolet inks, plastisol inks, and inks used in non-heatset offset lithographic printing;

…

3. a calculation of actual emissions per calendar month based o**n**~~f~~ all VOC and each HAP containing compound~~s~~ used at the facility. VOC emissions from non-heatset**, non-vegetable-based** 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**, non-vegetable-based** 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**. VOC emissions from vegetable-based inks used in lithography shall be calculated by assuming that none of the inks' VOCs are emitted to the atmosphere and 100% are retained in the paper. VOC emissions from cleaning materials in shop towels shall be calculated by assuming that 50% of the VOCs are emitted to the atmosphere and 50% are retained in the towels, only if VOC composite vapor pressure of the cleaning material is less than 10 mm Hg at 20 ºC and cleaning materials and used shop towels are kept in closed containers**;

4. the percent by weight of VOC in fountain solution as ~~**measured**~~ **determined** 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;

6~~**7**~~**. records of the percent by weight of alcohol substitutes in fountain solution as determined each time alcohol substitutes are used to mix a new batch of fountain solution**

and each time alcohol substitutes are added to fountain solution on-press, based on analytical data, and the proportions of the constituents mixed;
7. for water-based inks/coatings/adhesives, **electron beam inks,** ultraviolet inks, and plastisol inks, ~~M~~SDSs or other records demonstrating that the ink/coating/adhesive is water-based, **electron beam,** 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.*, ~~M~~SDSs) demonstrating that the fountain solution constituents are alcohol-free.

(29) Compliance Certification Requirement:
(a) Beginning on September 15, 2006, each printer**, except very small printers,** shall submit to the Department a compliance certification **on a form prescribed by the Department,** 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) **1.** 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.
2. If, on March 9, 2020 a printer that formerly met the definition of a very small printer or small printer meets the definition of a midsize printer or a large printer, the printer shall, on or before March 9, 2020, notify the Department in writing. Such printer shall comply with 310 CMR 7.26(20) through (29) based on the applicable new size classification on and after March 9, 2020.
(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.

Amend 310 CMR 7.00: Appendix B, as follows:

(4)(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 (**6**~~7~~), (10) through (12), (14) through (16), (21) through (2**6**~~7~~)**, (30)(c)7., (31)** 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 NOx per million Btu of heat input, respectively, and who chooses to comply by emission averaging.

7.00: Definitions

Add the following definition after the definition for AMBIENT AIR SPACE:

ANNUAL CAPACITY FACTOR means the ratio between the actual heat input to the emission unit during the calendar year and the potential heat input to the emission unit had it been operated for 8,760 hours during a calendar year at the rated capacity; rated capacity for combustion turbines shall be at ISO (the International Organization for Standardization) conditions (i.e., 59˚ Fahrenheit, 60% relative humidity, and 101.3 kilopascals pressure).

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~~threshold in 310 CMR 7.19(1)(a).

(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 that the person obtains a permit restriction from the Department under 310 CMR 7.02(9) (Restricted Emission Status or RES) 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 emission~~s~~ 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 of NO_x from the emission~~s~~ unit.

3. Any boiler having an energy input capacity of less than 20,000,000 Btu per hour provided that potential emissions from the emission~~s~~ 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 NO_X.

9. Any person who, since January 1, 1990, obtains a plan approval for an emission unit under 310 CMR 7.02 where ~~said~~such approval establishes BACT or LAER to be no less stringent than the RACT applicable to the~~for a~~ facility size and type, as defined in 310 CMR 7.19. Such person shall comply with the BACT or LAER established in the plan approval, and is not subject to RACT standards of 310 CMR 7.19 as may otherwise be applicable, until the applicable RACT standards of 310 CMR 7.19 become more stringent than the BACT or LAER established in the plan approval, at which ~~point~~time the person shall become subject to the updated RACT standards.

10. Any large municipal waste combustor unit subject to 310 CMR 7.08(2).

11. Any engine subject to and in compliance with 310 CMR 7.26(43).

(d) Any large boiler subject to 310 CMR 7.19(4)(b), or combustion turbine subject to 310 CMR 7.19(7)(b), that, as of March 9, 2018 has an annual capacity factor of less than 10% averaged over the most recent three calendar year consecutive period, shall not be required to meet the applicable emission standards. If such a boiler or combustion turbine subsequently meets or exceeds the 10% capacity factor based on a three calendar year consecutive period, the owner/operator of the boiler or combustion turbine shall notify the Department in writing, and, if applicable, submit an Emission Control Plan pursuant to 310 CMR 7.19(3)(a)1., within 180 days of the end of the three year period, and shall comply with the applicable NO_x emission standards within two years of the three year period.

(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)(b), ~~(5),~~ (7)(b), (8)(d) or (9) may submit an application under 310 CMR 7.19(3) for a source specific alternative RACT~~;~~. ~~said~~Such application ~~to~~shall be submitted to the Department for approval no later than September 5, 2018~~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,~~ No later than March 10, 2020, 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. drylow-NO_X combustors;
7. ignition timing retard;
8. low emission combustion for reciprocating internal combustion engines;

~~8.~~9. separate circuit after-cooling;

~~9.~~10. fuel emulsification;

~~10.~~11. fuel switching;

~~11.~~12. selective noncatalytic reduction (SNCR);
~~12.~~13. selective catalytic reduction (SCR);
~~13.~~14. nonselective catalytic reduction (NSCR);~~.~~
~~14.~~15. gas reburn; and
~~15.~~16. 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).

…

(f) Seasonal fuel switching. After May 31, 1995 but before March 9, 2018, 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.

b. The base year 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. ~~t~~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.

(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). For any ERCs generated from emissions reductions at a facility that, if it were operating after March 9, 2018, would be subject to 310 CMR 7.19(4)(b), 7.19(7)(b), and 7.19(8)(d), and such ERCs were certified prior to March 9, 2018 in accordance with Appendix B(3), the Department shall devalue the ERCs based on the ratio of the new applicable NOx RACT emission standard to the lower of the actual emissions or the allowable NOx RACT emission standard that was used to generate the ERCs.

(3) Emission Control Plans for Implementation of RACT.

(a) 1. General Applicability. After March 9, 2018, any person owning, leasing, operating or controlling a facility subject to 310 CMR 7.19(4)(b), (7)(b), or (8)(d) that requires installation of air pollution controls or retrofitting of air pollution controls, or proposes to use ERCs, to meet applicable emission standards shall submit an Emission Control Plan to the Department within 180 days of March 9, 2018.

2. A~~ny 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 a~~ny person subject to 310 CMR 7.19(9) shall submit an Emission Control Plan by September 5, 2018~~May 1, 1999~~ for Department approval~~ in accordance with 310 CMR 7.19(9)(b)~~. ~~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.~~

3. Any person using ERCs in accordance with 310 CMR 7.19(2)(b)16. shall submit an Emission Control Plan~~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~~b) 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;

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~~c) 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~~c) or 7.19(12), must meet the following requirements in addition to the requirements under 310 CMR 7.19(3)(~~c~~b). ~~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. The plan must include pertinent information supporting the demonstration made under 310 CMR 7.19(3)(c~~d~~)1., including technical and economic considerations.

(~~e~~d) Approval of an Emission Control Plan. For persons applying under 310 CMR 7.19(2)(b) or (4)(~~b~~c) 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~~e) 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~~f) 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 standards in 310 CMR 7.19(4)(a), except as provided in 310 CMR 7.19(2)(b), 7.19(2)(e), 7.19(2)(f), 7.19(4)(b),7.19(4)(c~~b~~) and 7.19(4)(d~~e~~).

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.
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.

(b) Applicability and NO_X RACT. On or after two years from March 9, 2018, 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 NOx emission standards in 310 CMR 7.19(4)(b), except as provided in 310 CMR 7.19(1)(d), 7.19(2)(b), and 7.19(2)(e)~~:~~.

1. For dry bottom boilers burning coal:
   a. for tangential fired boilers, 0.12 pounds per million Btu,
   b. for face fired boilers, 0.12 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, 0.15 pounds per million Btu;

ii. for tangential gas fired boilers, 0.08 pounds per million Btu.

b. for face fired boilers, 0.15 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, 0.15 pounds per million Btu, and

b. for boilers with a heat release greater than 70,000 Btu/hour-ft^3, 0.15.

5. For boilers burning only gas, 0.06 pounds per million Btu.

6. The averaging time for determining compliance with 310 CMR 7.19(4)(b) 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 either a calendar day average or calendar month basis when a facility demonstrates existing controls installed for purposes of 310 CMR 7.29 compliance relied on the longer averaging period.

~~(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)(a) or (b), as applicable.

(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.

(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.

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.

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.

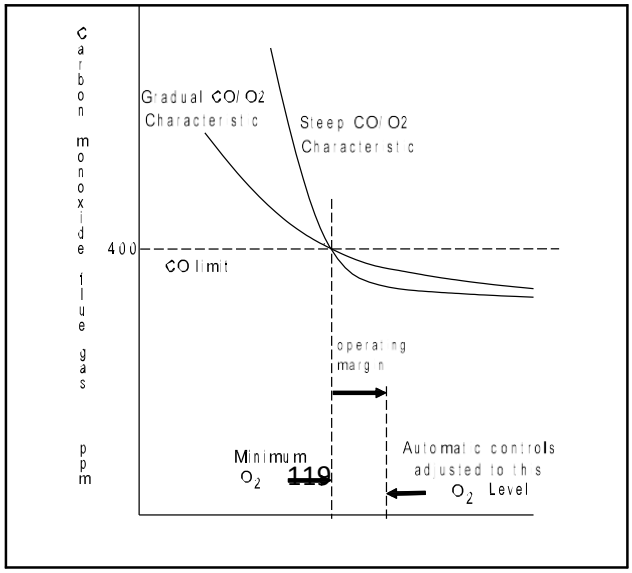
10. Verify that the new settings can accommodate the sudden changes that may occur in daily operation without adverse effects. Do this by increasing and decreasing load rapidly while observing the flame and stack. If any of the conditions in 310 CMR 7.19(6)(a)5. result, reset the combustion controls 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. Alternatively, ~~A~~another tune-up procedure, such as found in MACT subpart JJJJJJ [40 CFR 63.11223(b) and Table 2] or MACT Subpart DDDDD [40 CFR 63.7540(a)(10) and Table 3]~~method~~, may be used~~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.



Flue gas oxygen content - %

Figure 310 CMR 7.19(6) - 1

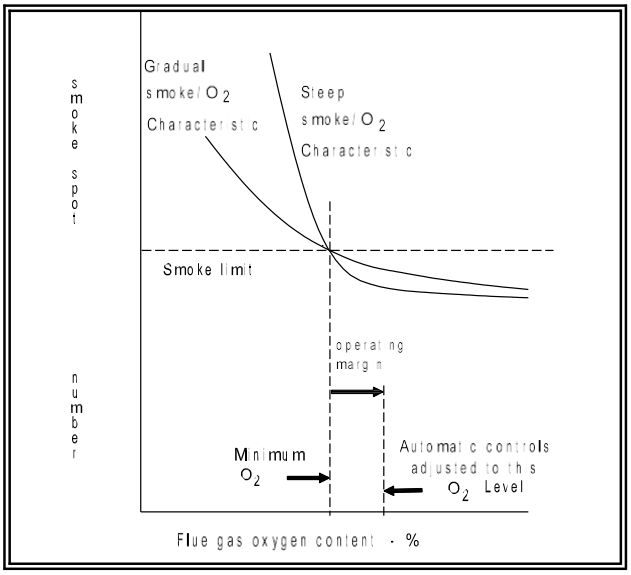


Figure 310 CMR 7.19(6) - 2

(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 standards in 310 CMR 7.19(7)(a), 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. Notwithstanding the CO emission standard stated in 310 CMR 7.19(7)(a)1.c. and 310 CMR 7.19(7)(a)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) Applicability and NO_X RACT. On or after two years from March 9, 2018, 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 NO_X and CO emission standards in 310 CMR 7.19(7)(b), except as provided in 310 CMR 7.19(1)(d), 7.19(2)(b), and 7.19(2)(e).

1. For combined cycle stationary combustion turbines, based on a one-hour average:
   a. 25 ppmvd NO_X, corrected to 15% O_2, when firing gas, and
   b. 42 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. 40 ppmvd NO_X, corrected to 15% O_2, when firing gas, and
   b. 50 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.

(~~b~~c) 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) or (e) as applicable, except as provided for in 310 CMR 7.19(2)(b), 7.19(2)(e) and 7.19(2)(f).

(b) Exemption. ~~Emergency standby~~An engine~~s~~ installed and operated in compliance with 310 CMR 7.02(8)(i), 310 CMR 7.03(10), or 310 CMR 7.26(42) is~~are~~ exempt~~ed~~ 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, but has not operated 1000 hours or more during any consecutive 12 month period after March 9, 2018, 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 operated 1000 hours or more during any consecutive 12 month period since March 9, 2018, the owner/operator of such engine shall have until two years after the 12 month consecutive period that exceeded the 1000 hours of operation to comply with the applicable NOx emission standards below:

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, 1.5 grams per bhp-hr, based on a one hour average.
3. For lean burn, oil-fired or dual fuel reciprocating internal combustion engines, 2.3 grams per bhp-hr, based on a one-hour average.
4. For stationary reciprocating internal combustion engines 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)~~(e) 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 (d), as applicable; 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) or (d), as applicable.
5. maintain records to certify that the ignition timing of the engine has been inspected and adjusted at least once every three years.

~~(e)~~(f) 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).

…

(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). 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 engines 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~~e).

9. For stationary reciprocating internal combustion engines 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)(e~~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).

(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~~14. 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 subject to 40 CFR 75 for NOx also may monitor CO emissions using 40 CFR 75 procedures to gather and analyze data and provide quality assurance and quality control in order to determine compliance with 310 CMR 7.19, except that CO quality assurance performance specifications shall comply with 40 CFR 60 Appendix B as an alternative to compliance with 310 CMR 7.19(13)(b)1. through (b)14. Any person subject to 310 CMR 7.19(13)(b) shall comply with 310 CMR 7.19(13)(b)9, 10, 11, and 12 for data averaging, hourly data validity, and data capture requirements. Any person operating a CEMS subject to 40 CFR 75 for NOx may conduct Quarterly Quality Assurance activities for CO in accordance with the same 40 CFR 75 timelines as NOx. Any person subject to 310 CMR 7.19(13)(b)1. through (b)14., but not 40 CFR 75, may choose to use 40 CFR 75 procedures to gather and analyze data and provide quality assurance and quality control for NOx and CO emissions (i.e., pollutant and diluents) in accordance with 40 CFR 75 as described above; however, the CEMS first must be re-certified in accordance with 40 CFR 75 for NOx and CO, except that CO quality assurance performance specifications in 40 CFR 60 Appendix B shall apply. Any person demonstrating compliance with 310 CMR 7.19 for emission units using CEMS who is not subject to or choosing to follow 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 CO, 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 month average from each operating day average within the applicable month; (an operating day must consist of at least 4 operating hours, including startup and shutdown time). ~~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. calculate a calendar day average for each operating day from a block hourly average for each hour the emissions unit is operating.

11. calculate a block hourly average from at least three data points, generated by a CEMS at 15 minute intervals over each one-hour period or in accordance with 40 CFR 60.13(h)(2).

~~10~~12. 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 operating day, 75% of the operating days per month, and ~~90~~95% of the hours per quarter during which the emission unit is operating;

~~11~~13. 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~~14. 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. Alternatively, the Department or EPA may approve a predictive emission monitoring system that meets EPA performance specification PS-16. The Department or EPA 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.~~

(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)~~ shall submit to the Department the necessary information (calculations and data) to demonstrate an applicable emission unit has an annual capacity factor of less than 10% in accordance with 310 CMR 7.19(1)(d). This documentation shall be provided to the Department in the first quarter of each year (i.e., no later than March 31), and may be included in the fourth quarter RACT quarterly report (due January 30) if the facility operates other RACT sources.

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. 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.

…

Delete 310 CMR 7.32 in its entirety.

Add a new subsection 310 CMR 7.34 as follows:

7.34 Massachusetts NO_x Ozone Season Program ($MassNO_x$)

(1) Massachusetts NO_x Ozone Season Program General Provisions.

(a) Purpose and Scope. The purpose of 310 CMR 7.34 is to control mass emissions of nitrogen oxides (NO_x) during the ozone season (May 1st through September 30th of each year). 310 CMR 7.34 establishes a statewide budget of 1,799 tons of NO_x mass emissions from $MassNO_x$ Facilities for each ozone season.

(b) Applicability. The units listed in 310 CMR 7.34(7)(b): Table A shall be $MassNO_x$ Units subject to the requirements of 310 CMR 7.34.

(c) Permanently Retired Units. The owner or operator of a $MassNO_x$ Unit that is permanently retired after {date of promulgation} shall comply with the requirements of 310 CMR 7.34(4)(d) and 310 CMR 7.34(6)(c) and shall not be subject to the remaining requirements in 310 CMR 7.34.

(d) Averaging Emissions. For the purposes of determining the total ozone season NO_x mass emissions of a $MassNO_x$ Facility, the owner or operator of a $MassNO_x$ Facility shall not average the total NO_x ozone season mass emissions of a $MassNO_x$ Unit with the ozone season NO_x mass emissions of another facility.

(2) Definitions. The terms used in 310 CMR 7.34: *Massachusetts NO_x Ozone Season Program ($MassNO_x$)* are defined at 310 CMR 7.34(2). Where a term is defined in both 310 CMR 7.00: *Definitions* and in 310 CMR 7.34, the definition in 310 CMR 7.34 shall apply.

Acid Rain Program means a multi-state SO_2 and NO_x air pollution control and emission reduction program established by the Administrator under title IV of the Act and 40 CFR Parts 72 through 78.

Alternate $MassNO_x$ Designated Representative means the person who has been authorized by the owner or operator of the facility in accordance with 310 CMR 7.34(5)(c) to act on behalf of the $MassNO_x$ Designated Representative in matters pertaining to NO_x mass emissions monitoring and reporting for the $MassNO_x$ program. If the $MassNO_x$ Facility is also subject to the Acid Rain Program then this person shall be the same natural person as the Alternate Designated Representative under the Acid Rain Program. If the $MassNO_x$ Facility is not subject to the Acid Rain Program then this person shall be the same natural person as the $SIPNO_x$ Source Alternate Designated Representative.

CAIR NO_x Ozone Season Allowances means a limited authorization that was issued by the Department to the owner or operator of a $MassNO_x$ Unit under provisions of the State Implementation Plan that was approved under 40 CFR 51.123(aa)(1) or (2) and (bb)(1), (bb)(2), (dd), (ee), or under Subpart EEEE of 40 CFR Part 97 or 97.388, to emit a specified amount of tons of NO_x during the 2015 ozone season.

Combustion Turbine means:

1. An enclosed device comprising of 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 is combined cycle, any associated duct burner, heat recovery steam generator, and steam turbine.

Cross-State Air Pollution Rule (CSAPR) means the regulation promulgated at 40 CFR 97 Subpart EEEEE CSAPR NO_x Ozone Season Group 2 Trading Program by the Administrator of the United States Environmental Protection Agency.

1. CSAPR NO_x Ozone Season Group 2 Allowance means a limited authorization issued and allocated or auctioned by the Administrator under 40 CFR 97 Subpart EEEEE or §97.526(c), or by a State or permitting authority under a SIP revision approved by the Administrator under 40 CFR 52.38(b)(6), (7), (8), or (9), to emit one ton of NO_x during a control period of the specified calendar year for which the authorization is allocated or auctioned or any calendar year thereafter under the CSAPR NO_x Ozone Season Group 2 Trading progam.

$MassNO_x$ Designated Representative means the person who has been authorized by the owner or operator of the $MassNO_x$ Facility to represent and legally bind the owner or operator in matters pertaining to the MassNOx program. If the $MassNO_x$ Facility is also subject to the Acid Rain Program then this person shall be the same natural person as the Designated Representative under the Acid Rain Program. If the $MassNO_x$ Facility is not subject to the Acid Rain Program then this person shall be the same natural person as the $SIPNO_x$ Source Designated Representative.

$MassNO_x$ Facility means a facility that has one or more $MassNO_x$ Units on site.

$MassNO_x$ Facility Emissions Budget means a budget amount of ozone season NO_x mass emissions assigned to a MassNOx Facility as determined by the Department.

$MassNO_x$ Unit means any unit listed in 310 CMR 7.34(7)(b): Table A.

Monitoring System means a monitoring system that meets the requirements of 310 CMR 7.34(3) including a continuous emissions monitoring system, an alternative monitoring system, or an accepted monitoring system under 40 CFR Part 75, or as otherwise approved by the Department or the Administrator.

Operator means any person who operates, controls, or supervises a $MassNO_x$ Unit or a $MassNO_x$ Facility including, but not be limited to, any holding company, utility system, or plant manager of such a $MassNO_x$ Unit or $MassNO_x$ Facility.

Owner means any of the following persons:

1. Any holder of any portion of the legal or equitable title in a $MassNO_x$ Unit or a $MassNO_x$ Facility; or
2. Any holder of a leasehold interest in a $MassNO_x$ Unit or a $MassNO_x$ Facility; or
3. Any purchaser of power from a $MassNO_x$ Unit or a $MassNO_x$ Facility 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 a passive lessor, whose rental payments are not based (either directly or indirectly) on the revenues or income from a $MassNO_x$ Unit or a $MassNO_x$ Facility.

Ozone Season means the period beginning May 1st of a calendar year, and ending on September 30th of the same year, inclusive.

Reference Method means any direct test method of sampling and analyzing for an air pollutant as specified in 40 CFR 75.22.

$SIPNO_x$ Source means any $MassNO_x$ Unit that is subject to;

1. The applicability requirements of 40 CFR 75.2 and is required, by the Administrator, to monitor and report NO_x mass emissions under 40 CFR 75 in the Emissions Collection and Monitoring System (ECMPS); or
2. The applicability requirements of 40 CFR 75.70 and is required, by the Department, to monitor and report NO_x mass emissions under 40 CFR 75 Subpart H in the Emissions Collection and Monitoring System (ECMPS).

Ton means 2,000 pounds. For the purpose of determining compliance with the statewide emissions budget, total tons of NO_x mass emissions for an ozone season 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 7.34(3)(c), 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.

(3) Monitoring Requirements.

(a) Definitions and Terms. For purposes of complying with monitoring requirements, the definitions in 310 CMR 7.34(2), 40 CFR 75.2, and 40 CFR 75.70 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 ''$MassNO_x$ Unit,'' "$MassNO_x$ Facility," ''$MassNO_x$ Designated Representative,'' and ''monitoring system,'' respectively, as defined in 310 CMR 7.34(2).

(b) Monitoring Requirements. The owner or operator of a $MassNO_x$ Unit, shall operate and maintain a monitoring system to measure NO_x ozone season mass emissions and heat input in accordance with the provisions 40 CFR Part 75 Subpart H.

(c) Mass Emissions Determination. The owner or operator of a $MassNO_x$ Unit shall maintain and operate all monitoring systems, including all systems required to monitor NO_x mass emission rate, NO_x concentration, stack gas moisture content, stack gas flow rate, CO_2 or O_2 concentration, fuel flow rate, and heat input, as applicable, in accordance with 40 CFR 75.71 and 40 CFR 75.72.

(d) Out of Control Periods. Whenever a 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 applicable missing data procedures of 40 CFR Part 75 Subpart D, or H, or 40 CFR 75 Appendix D or E.

(e) Prohibitions. The owner or operator of a $MassNO_x$ Unit shall not use any alternative monitoring system, alternative reference method, or any other alternative to any requirement of 310 CMR 7.34(3) without prior written approval from the Department and the Administrator.

(4) Reporting Requirements.

(a) General Requirements. The owner or operator, and to the extent applicable, the $MassNO_x$

Designated Representative, of a MassNO_x Unit, shall comply the reporting requirements of 40 CFR 75 Subpart H and 310 CMR 7.34(4).

(b) Quarterly Emissions Reporting. The MassNO_x Designated Representative shall submit quarterly reports of NO_x mass emissions data and heat input data from the MassNO_x Facility to the Administrator on a quarterly basis or for the control period within 30 days following the end of the calendar quarter covered by the report in the manner specified in 40 CFR 75.73(f).

(c) Compliance Certification Reporting. The MassNO_x Designated Representative shall submit a compliance certification to the Administrator in a format prescribed by the Administrator. The compliance certification shall be submitted in support of each quarterly report based on a reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. In the compliance certification the MassNO_x Designated Representative shall certify:

1. The monitoring data submitted was recorded in accordance with the applicable requirements of 310 CMR 7.34(3) and 40 CFR Part 75, including the quality assurance procedures and specifications;

2. For a MassNO_x Unit with add-on NO_x emission controls and for all hours where NO_x 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 NO_x emissions; and

3. For a unit that is reporting on a control period basis under 310 CMR 7.34(4)(b), the NO_x mass emission rate and NO_x 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 NO_x emissions.

(d) Permanently Retired Unit Reporting. Within 30 days of the permanent retirement of the MassNO_x Unit, the MassNO_x Designated Representative shall submit a statement to the Department and a duplicate copy to the Administrator. In the statement the MassNO_x Designated Representative shall certify:

1.That the MassNO_x Unit was permanently retired;

2.The date on which the MassNO_x Unit was permanently retired;

(e) Certification of Reports. All reports submitted to the Department under the MassNO_x program must be signed and attested to by the MassNO_x Designated Representative or Alternate MassNO_x Designated Representative and must include the following statement:

> "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."

(5) MassNO_x Designated Representatives and Alternate MassNO_x Designated Representatives.

(a) Authorized MassNOx Designated Representative. Each MassNO_x Facility shall authorize one MassNO_x Designated Representative to act on behalf of the owner or operator with regard to all matters under the MassNO_x program, the MassNO_x Facility, or any individual MassNO_x Unit.

(b) Certificate of Representation. The owner or operator of a MassNO_x Facility shall, in the format prescribed by the Administrator, submit to the Administrator a complete certificate of representation for a MassNO_x Designated Representative and/or an Alternate MassNO_x

Designated Representative.

(c) Alternate $MassNO_x$ Designated Representative. A certificate of representation under 310 CMR 7.34(5)(b) may designate one Alternate $MassNO_x$ Designated Representative who may act on behalf of the $MassNO_x$ Designated Representative. Upon receipt by the Administrator of a complete certificate of representation under 310 CMR 7.34(5)(b), any representation, action, inaction, or submission by the Alternate $MassNO_x$ Designated Representative shall be deemed to be a representation, action, inaction, or submission by the $MassNO_x$ Designated Representative.

(d) Change of the $MassNO_x$ Designated Representative or Alternate $MassNO_x$ Designated Representative. The owner or operator may change the $MassNO_x$ Designated Representative or the Alternate $MassNO_x$ Designated Representative at any time by submitting a certificate of representation under 310 CMR 7.34(5)(b); such change shall be effective upon receipt by the Administrator.

(6) Recordkeeping Requirements.

(a) General Requirements. An owner or operator of a $MassNO_x$ Facility shall comply with all of the recordkeeping requirements of 40 CFR 75 Subpart H and 310 CMR 7.34(4).

(b) On-site Record Retention. An owner or operator of a $MassNO_x$ Facility shall keep on-site at the facility all records and reports required by 310 CMR 7.34(4) for a period of five years from the date the record or report is created. The Department may extend this period for cause, in writing, at any time before the end of the five years.

(c) Permanently Retired Units Record Retention. An owner or operator of a permanently retired $MassNO_x$ Unit shall retain, at the $MassNO_x$ Facility, records demonstrating that the $MassNO_x$ Unit is permanently retired, for a period of five years from the date the record is created. The Department or the Administrator may extend this period for cause, in writing, at any time before the end of the five years.

(7) $MassNO_x$ Ozone Season Emissions Budgets.

(a) Statewide Emissions Budget. Beginning May 1, 2017, and for each ozone season thereafter, the total statewide emissions budget for $MassNO_x$ Facilities shall be 1,799 tons for each ozone season. The statewide budget shall remain 1,799 tons for each ozone season regardless of any $MassNO_x$ Facility or $MassNO_x$ Unit retirement.

(b) $MassNO_x$ Facility Emissions Budgets. Beginning May 1, 2017, the emissions budget in 310 CMR 7.34(7)(b): *Table A* shall apply to each listed facility.

310 CMR 7.34(7)(b): Table A

FACILITY NAME	ORIS CODE	UNIT(S)	$MASSNO_x$ FACILITY EMISSIONS BUDGET (Tons of NO_x Per Ozone Season)
Braintree Electric	1660	3, 4, 5	23
Brayton Point Energy, LLC	1619	1, 2, 3, 4	989
Dartmouth Power Associates	52026	1, 2, 5	32
Essential Power Mass LLC Doreen St.	1631	1	0
Essential Power Mass LLC Woodland St.	1643	1	0
Essential Power West Springfield	1642	15, 17	9

Exelon Framingham	1586	FJ-1, FJ-2, FJ-3	0
Exelon New Boston	1589	NBJ1	0
Exelon West Medway	1592	J1T1, J1T2, J2T1, J2T2, J3T1, J3T2	1
General Electric Aircraft Engines	10029	99-5, 99-3	10
Harvard University Blackstone Steam Plant	1594	B11, B12	8
Kendall Green Energy LLC	1595	2, 3, S6	67
Kneeland St. Station	880023	1, 2, 3, 4	60
Masspower	10726	1, 2	93
MBTA South Boston Power	10176	A, B	1
Milford Power , LLC	54805	1	76
MWRA Deer Island	10823	S42, S43	0
Mystic Station	1588	4, 10	42
NEA Bellingham	10307	1, 2	138
NRG Canal Station	1599	1, 2	143
Peabody Municipal Light Plant – Waters River	1678	1, 2	3
Pittsfield Generating Company LP	50002	1, 2, 3	29
Stony Brook Energy Center	6081	1, 2, 3, 4, 5	60
Taunton Municipal Light Plant – Cleary Flood	1682	8, 9	15

(c) Permanently Retired Units. The owner or operator of a permanently retired MassNO_x Unit shall not operate the MassNO_x Unit during the ozone season. The retirement of a MassNO_x Unit shall not affect the MassNO_x Facility Emissions Budget listed in 310 CMR 7.34(7)(b).

(d) Permanently Retired Facilities. The owner or operator of a permanently retired MassNO_x Facility shall not operate the MassNO_x Facility during the ozone season. The retirement of a MassNO_x Facility shall not affect the statewide budget in 310 CMR 7.34(7)(a) and the MassNO_x Facility's Emissions Budget listed in 310 CMR 7.34(7)(b) shall not be allocated to any other MassNO_x Facility.

(8) Statewide Emissions Budget Exceedance and Required Actions.

(a) If the Department determines that the statewide emissions budget of 1,799 tons of NO_x per ozone season is exceeded, the Department shall notify the owner or operator of each MassNO_x Facility that emitted greater than the MassNO_x Facility Emissions Budget listed in 310 CMR 7.34(7)(b): Table A, no later than 30 days after the close of the ozone season.

(b) Within 60 days of being notified by the Department, each such MassNO_x Facility shall transfer to the Department CSAPR NO_x Ozone Season Group 2 Allowances, 2017 vintage or later, at a rate of one CSAPR NO_x Ozone Season Group 2 Allowance for every one ton of excess emissions above the MassNO_x Facility Emissions Budget.

(c) The Department may request NO_x emissions data or any additional related information from any MassNO_x Facility during or after the applicable ozone season for verification purposes.

310 CMR 7.51 Hearings Relative to Orders and Approvals

Subsection 7.51(1) is deleted and replaced by the following:

(1) Rules to Request an Adjudicatory Hearing

(a) Definitions: Unless otherwise indicated, the definitions in 310 CMR 7.00 apply to 310 CMR 7.51(1) and 7.51(3). Where a term is defined in 310 CMR 7.00 and 310 CMR 7.51(1), the definition in 310 CMR 7.51(1) controls for purposes of 310 CMR 7.51(1) and 7.51(3).

Adjudicatory Hearing or Hearing means a hearing under M.G.L. c. 30A, where parties may present evidence on issues of fact and argument on issues of law, and which is concluded by the Commissioner's issuance of a final decision pursuant to 310 CMR 1.01(14).

Aggrieved Person means any person who, because of an act or failure to act by the Department, may suffer an injury in fact that is different either in kind or magnitude from that suffered by the general public, and that is within the scope of the interests protected by 310 CMR 7.00.

Applicant means the person named in the application as the owner or operator of the proposed facility or emission unit.

Application means any request by a person for a permit, a plan approval, an emission control plan, a restricted emission status, an operating permit, an emission reduction credit or other approval issued by the Department pursuant to 310 CMR 7.00.

Approve or Approval means the approval or approval with conditions of an application for a permit, a plan approval, an emission control plan, a restricted emissions status, an operating permit, an emission reduction credit or other type of approval issued by the Department pursuant to 310 CMR 7.00.

Disapprove or Disapproval means the disapproval or denial by the Department of an application for a permit, a plan approval, an emission control plan, a restricted emissions status, an operating permit, an emission reduction credit or other type of application made to the Department pursuant to 310 CMR 7.00.

Decision means the Department's action to approve or disapprove of an application pursuant to 310 CMR 7.00.

Date of Issuance means the date the Department sends the decision to an applicant.

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.

Request for adjudicatory hearing means the notice of claim for an adjudicatory hearing that is filed with the Office of Administrative Dispute Resolution in accordance with the requirements in 310 CMR 1.01.

(b) Applicability.

The provisions of 310 CMR 7.51(1) apply to any person seeking to request an adjudicatory hearing to review any Department decision on an application submitted pursuant to 310 CMR 7.00, except as exempted in 310 CMR 7.51(1)(c).

(c) Exemptions.

No person or ten persons group may file a request for an adjudicatory hearing pursuant to the requirements in 310 CMR 7.51(1) for the following actions:

1. Administrative orders issued by the Department for violations of any provision of 310 CMR 7.00 that shall be appealed within 10 days of issuance pursuant to the procedures and requirements of 310 CMR 7.51(3).
2. Administrative penalty assessments issued pursuant to M.G.L. c. 21A, §16 and 310 CMR 5.00 for violations of any provisions of 310 CMR 7.00 shall be appealed in accordance with the provisions of 310 CMR 1.01 and 5.00.
3. Tunnel Ventilation Certifications issued by the Department pursuant to 310 CMR 7.38 that require appeals to Superior Court.
4. Approvals or disapprovals or portions of approvals or disapprovals, issued by the Department pursuant to federal law, that require appeal to be filed with a federal administrative agency or in federal court.
5. Notifications, certifications and other submittals to the Department on which the Department does not issue decisions, including, but not limited to, the certification required pursuant to 310 CMR 7.02(7)(c), Facility Emission Cap Notifications pursuant to 310 CMR 7.02(11) notifications regarding demolition/renovation operations pursuant to 310 CMR 7.09, notifications regarding asbestos abatement activities pursuant to 310 CMR 7.15, notifications and certifications pursuant to 310 CMR 7.24, and/or certifications pursuant to 310 CMR 7.26.
6. Department requests for and approval of monitoring, modeling, and compliance protocols, actions, and results pursuant to 310 CMR 7.00, including, but not limited to, stack testing pursuant to 310 CMR 7.13 and emissions monitoring pursuant to 310 CMR 7.14.
7. Department approvals or denials of waivers or variances under 310 CMR 7.00, including but not limited to, notification waivers and non-traditional work practice approvals issued pursuant to 310 CMR 7.15.
8. Approvals of administrative amendments to plan approvals issued by the Department pursuant to 310 CMR 7.02(13) and minor modifications to Operating Permits issued by the Department pursuant to 310 CMR 7.00: Appendix C(8).

(d) Comments on Proposed Decisions. If the Department provides a public comment period on the proposed decision, then any person or ten persons group may file written comments on the proposed decision during the public comment period provided by 310 CMR 7.00. Failure by an aggrieved person or ten persons group to submit written comments as provided herein shall result in the waiver of any right to request an adjudicatory hearing. Where the Department is not required under 310 CMR 7.00 to provide a public comment period on the proposed decision, then an aggrieved person or ten persons group is not required to submit public comments as a prerequisite for obtaining the right to request an adjudicatory hearing.

(e) Copy of Department's Decision. Any person or ten persons group who wants to receive a copy of a decision on the date the Department issues the decision to the applicant shall submit a written request to the Department's contact person's electronic mail address and/or mailing address listed in the public notice.

(f) Final Decision.

The Department's decision to issue an approval or disapproval is final either:

1. Twenty-two (22) days from the issuance date, or
2. If an aggrieved person or a ten persons group files a request for an adjudicatory hearing in accordance with 310 CMR 7.51(1)(h) within twenty-one (21) days from the issuance date, then when the Commissioner issues a Final Decision pursuant to 310 CMR 1.01(14).

After the issuance of a final decision, a stay of the final decision shall be governed by M.G.L. c. 30A, §14.

(g) Persons Who Have a Right to Request an Adjudicatory Hearing. The following persons shall have the right to request an adjudicatory hearing on the Department's decision:

1. The applicant.
2. An aggrieved person who has submitted written comments in accordance with 310 CMR 7.51(1)(d), where applicable.
3. A ten persons group that has submitted written comments in accordance with 310 CMR 7.51(1)(d), where applicable.

(h) Process for Requesting an Adjudicatory Hearing.

1. To request an adjudicatory hearing, a person who has the right to request an adjudicatory hearing shall file a notice of claim for an adjudicatory hearing pursuant to 310 CMR 1.01 within twenty-one (21) days from the date of issuance.
2. The notice of claim for an adjudicatory hearing shall meet all the requirements contained in 310 CMR 1.01. An aggrieved person, or a ten persons group, shall send a copy of the request for an adjudicatory hearing by first class mail to the applicant and to the Department's contact person listed in the decision.
3. An aggrieved person who files a request for an adjudicatory hearing shall have the burden of proof to establish his or her status as an aggrieved person as

defined herein and shall state with specificity in the request for adjudicatory hearing the basis of his or her claim of aggrievement and the relief sought.

4. A ten persons group that files a request for an adjudicatory hearing shall clearly and specifically state the facts and grounds for the appeal and the relief sought, and each person shall file an affidavit stating the intent to be a part of the group and to be represented by its authorized representative.

(i) Limitation on Matters Raised In Request for Adjudicatory Hearing.

1. The issues that may be raised in a request for an adjudicatory hearing are limited to the subject matter of the Department's decision.
2. If the Department provided a public comment period, the issues that may be raised in a request for an adudicatory hearing are further limited to the matters raised during the public comment period; provided, however, that a matter may be raised upon showing that it was not reasonably possible with due diligence to have raised such matter during the public comment period or for good cause shown.

Subsection 7.51(2) is maintained:

(2) Hearings on Facilities Regulated by the Department of Public Utilities. Upon receipt of a proposal for the construction, substantial reconstruction or alteration and subsequent operation 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.

Subsection 7.51(3) is added:

(3) Enforcement Provisions and Appeals of Certain Orders

(a) General. A person whose activities are governed by M.G.L. c. 111, §§ 142A through 142O and 310 CMR 7.00, or by M.G.L. c. 111, § 150A as it relates to 310 CMR 7.08(2), or by M.G.L. c. 21C or 21E as they relate to sections of 310 CMR 7.00 as cited therein, who fails to comply fully with the provisions of such statutes and regulations, or to comply fully with the terms and conditions of any order, permit, authorization, determination, or approval issued thereunder, or who acts without an order, permit, authorization, determination, or approval where one is required, shall be in violation of said statutes and 310 CMR 7.00. Nothing in 310 CMR 7.00, or in any order issued pursuant thereto, shall be construed to limit any right of the Department to take enforcement action pursuant to any other authority.

(b) Action by the Department. Without limitation, whenever the Department has cause to believe that a violation has occurred, it may:

1. Order the owner or operator of a site or facility, and/or any other person responsible for the violation, to cease all illegal activity and comply fully with the provisions of M.G.L. c. 111, §§ 142A through 142O and 310 CMR 7.00, and M.G.L. c. 111, §150A as it relates to 310 CMR 7.08(2), and M.G.L. c. 21C and 21E, and 310 CMR 7.00, and any order, permit, authorization, determination or approval;

2. Order the owner or operator of a site or facility, and/or any other person responsible for the violation, to take appropriate measures to come into compliance or to protect public health, safety or the environment;
3. Commence proceedings to rescind, suspend, revoke, or modify an order, permit, authorization, determination or approval;
4. Issue a notice of non-compliance pursuant to M.G.L. c. 21A, §16 and 310 CMR 5.00;
5. Assess a civil administrative penalty pursuant to M.G.L. c. 21A, §16 and 310 CMR 5.00; and/or
6. Take such other action provided by 310 CMR 7.00 or other applicable statutory or regulatory authority as the Department deems appropriate.

(c) Service of Notices and Orders. Service in all civil administrative penalty actions is governed by 310 CMR 5.00. The Department may serve an order issued pursuant to 310 CMR 7.51(3)(b)1. or 2. according to any of the following procedures except for processes, notices, and orders issued in the course of an adjudicatory hearing which are governed by the provisions of 310 CMR 1.01:

1. Service of an order is complete when it is hand delivered by an employee or agent of the Department to the person to be served or to any officer, employee, responsible official or agent of the person. The fact and date of service is established by the return or affidavit of the person making service.
2. Service of an order when made by any form of mail requiring the return of a receipt signed by the person to be served is complete upon delivery to the person or to any officer, employee, responsible official or agent of the person. The fact and date of service is established by the returned receipt.
3. The Department may make service of an order in any other manner, including any form of electronic mail, facsimile or other electronic medium, national overnight carrier, regular mail to the last known address, or other publication or method of delivery. The Department uses such alternative or substitute methods of service only when exigent circumstances require it doing so or when the person to be served declines to accept receipt or mail is returned from either of the service methods specified in 310 CMR 7.51(3)(c)1. and 2. The fact of service in such cases is established by such records as may be available. The date of service shall be the date on which the Department initiates electronic transmission, the date of publication, one day after the date of overnight mailing or three days after the date of regular mailing.

(d) Right to Request an Adjudicatory Hearing. Pursuant to M.G.L. c. 111, §142B, a person who is the subject of an order issued pursuant to 310 CMR 7.51(3)(b)1. or 2. shall have the right to request an adjudicatory hearing on such order within ten (10) calendar days of the date of service of the order by the procedures set forth herein and in 310 CMR 1.01. Any right to an adjudicatory hearing concerning assessment of a civil administrative penalty shall be determined in accordance with the provisions of 310 CMR 1.01 and 5.00.

(e) Waiver of Right to Request an Adjudicatory Hearing. Any person who is the subject of an order issued pursuant to 310 CMR 7.51(3)(b)1. or 2. shall be deemed to have waived the right to request an adjudicatory hearing unless within ten (10) calendar days of the date of service of the

order the Department receives a written statement setting forth the basis for the request for an adjudicatory hearing that complies with 310 CMR 1.01.