

COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF ENVIRONMENTAL PROTECTION

310 CMR 7.00

AIR POLLUTION CONTROL REGULATIONS

310 CMR 7.00 APPENDIX A

“EMISSION OFFSETS AND NONATTAINMENT
REVIEWS”

310 CMR 7.00: Appendix A: Emission Offsets and Nonattainment Review

(1) Introduction. 310 CMR 7.00: *Appendix A* sets forth the Massachusetts preconstruction review program for stationary sources of air pollution (not including indirect sources) pursuant to sections 172(c)(5) and 173 of the Clean Air Act. A new major source or major modification located in an area designated as nonattainment pursuant to section 107(d) of the Act, published at 40 CFR 81, for any National Ambient Air Quality Standards (NAAQS) for which the source or modification would be major or that is major for volatile organic compounds or oxides of nitrogen must meet the stringent conditions set forth in this appendix prior to receiving approval to construct. These conditions are designed to insure that the increased emissions will be controlled to the greatest degree possible: that more than equivalent offsetting emission reductions (emission offsets) will be obtained from existing sources; and that there will be reasonable further progress toward achievement of the National Ambient Air Quality Standards (NAAQS).

(2) Definitions. The definitions found in 310 CMR 7.00 apply to *Appendix A*. The following words and phrases shall have the following meanings as they appear in 310 CMR 7.00: *Appendix A*. Where a term is defined in the 310 CMR 7.00 definitions section and the definition also appears in 310 CMR 7.00: *Appendix A* definition section, the definition in *Appendix A* controls.

Actual Emissions means:

- (a) As of a particular date, actual emissions shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The Department shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period. For the purposes of calculating a net emissions increase where actual emissions exceed allowable emissions, the actual emissions for the unit will be

presumed to be equivalent to the source-specific allowable emissions of the unit.

(b) For either an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) or an emissions unit(s) complying with 310 CMR 7.18, 7.19, or 7.24, actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit, provided the source owner or operator maintains and submits to the Department, on an annual basis for a period of five years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed ten years, may be required by the Department if it determines such period to be more representative of normal source post-change operations.

(c) For any emissions unit (except as provided for in 310 CMR 7.00: *Appendix A Actual Emissions*(b)) which has not begun normal operations on the particular date, actual emissions shall equal the federal potential emissions of the unit on that date.

Allowable Emissions means the emissions rate, in tons per year, of a stationary source calculated by multiplying the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) times the most stringent of:

- (a) Any applicable standards set forth in 40 CFR part 60 (NSPS) or 61 (NESHAPS);
- (b) Any applicable Massachusetts SIP emissions limitation including a limitation with a future compliance date; or
- (c) Any emissions rate specified as a federally enforceable permit condition, including a limitation with a future compliance date.

Begin Actual Construction means physical on-site construction activities on an emissions unit which is of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

Building, Structure, Facility, or Installation means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Any marine vessel is a part of a facility while docked at the facility.

Any marine vessel is a part of an Outer Continental Shelf (OCS) source while docked at and within 25 miles en route to and from the OCS source. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same Major Group (i.e., which have the same two-digit code) as described in the *Standard Industrial Classification Manual*, 1987.

Clean Coal Technology (CCT) means any technology at a new or existing emissions unit(s), including technologies applied at the precombustion, combustion, or post combustion stage, which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

Clean Coal Technology Demonstration Project means a project using funds appropriated under the heading 'Department of Energy-Clean Coal Technology,' up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the United States Environmental Protection Agency (EPA). The Federal contribution for a qualifying project shall be at least 20% of the total cost of the demonstration project.

Coastal Waters means tidal waters over permanently or periodically submerged lands lying between the mean high tide line and a line seaward from the coastline to the boundary line of each State. The boundary shall extend no more than three geographical miles into the Atlantic Ocean.

Commence means as applied to construction of a major stationary source or major modification that the owner or operator has all necessary preconstruction approvals or permits and either has:

- (a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or,
- (b) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

Complete means, in reference to an application for a plan approval, that the application contains all of the information necessary for processing the application, as determined by the Department. Designating an application administratively complete for purposes of permit processing does not preclude the Department from requesting or accepting any additional information.

Construction means any physical change or change in the method of operation (including

fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in an increase in actual emissions.

Corresponding Onshore Area means, for stationary sources located in, or on, navigable rivers and lakes, coastal waters, or the Outer Continental Shelf (OCS), the onshore attainment or nonattainment area which is closest to the source. However, the Department or EPA may determine that another area with more stringent requirements with respect to the control and abatement of air pollution may reasonably be expected to be affected by such emissions. Such determination shall be based on the potential for air pollutants from the offshore source to reach the other onshore area and the potential of such air pollutants to affect the efforts of the other onshore area to attain or maintain any Federal or State ambient air quality standard or to comply with the provisions of 310 CMR 7.00: *Appendix A*.

Electric Utility Steam Generating Unit means any steam electric generating unit that is constructed for the purpose of supplying more than $\frac{1}{3}$ of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

Emissions Unit means any part of a stationary source, which emits or would have federal potential emissions of any pollutant (including fugitive emissions), subject to regulation under the Act.

Energy Input means the total gross calorific value (where gross calorific value is measured by ASTM Method D2015-66, D240-64, or D1826-64) of all fuels burned. Energy input is calculated in British thermal units (Btu) per hour using the higher heating value of the fuel.

Fossil Fuel-Fired Boiler means a unit (or combination of such units) which combusts fossil fuel (or receives energy from other fossil fuel-fired units) to produce steam by indirect heat transfer and includes such units that produce steam for electric generation. The energy input for such units includes any energy provided to such units from the combustion of fossil fuels in other units. The total energy input from fossil fuel-firing for a combination of such units is the sum of the energy inputs from fossil fuel-firing for each unit.

Fossil Fuel-Fired Electric Plant means one or more units (a plant) that combust fossil fuel to produce electricity. The total energy input for such a plant from fossil fuel-firing is the sum of the energy inputs from fossil fuel-firing for each combustion unit that is part of such plant.

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

Indian Governing Body means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

Indian Tribe means any Indian tribe, band, nation, or other organized group or community which is Federally recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

Lowest Achievable Emission Rate (LAER) means, for any source, the more stringent rate of emissions based on the following:

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

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

In no event shall LAER allow a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable pursuant to applicable new source standards of performance.

Major Modification means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant, for which the existing source is major, subject to regulation under the Act.

(a) Any net emissions increase that is considered significant for VOCs shall be considered significant for ozone; and

(b) For the purpose of applying the requirements of 310 CMR 7.00: *Appendix A* to major stationary sources of NO_x any significant net emissions increase of NO_x is considered significant for ozone, in addition to any separate requirements for NO_x under part C or D of Title I of the Act; and

(c) A physical change or change in the method of operation shall not include:

1. Routine maintenance, repair and replacement; or

2. Use of an alternative fuel or raw material by reason of an order under sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act; or
3. Use of an alternative fuel by reason of an order or rule under sec. 125 [Measures to Prevent Economic Disruption or Unemployment] of the Act; or
4. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste; or
5. Use of an alternative fuel or raw material by a stationary source where:
 - a. The source is approved to use such fuel or raw material under any plan approval issued under 310 CMR 7.00: *Appendix A* ; or
 - b. The source was capable of accommodating such fuel or raw material before December 21, 1976, unless such change would be prohibited under any federally-enforceable permit condition which was established after December 21, 1976 pursuant to 40 CFR part 52.21 (Prevention of significant deterioration of air quality), plan approval requirements under 310 CMR 7.02(2), 310 CMR 7.00: *Appendix A* , 310 CMR 7.00: *Appendix B* (3), operating permits issued either under 310 CMR 7.00: *Appendix C* or pursuant to 40 CFR part 71 or prohibited under any other federally-enforceable regulatory requirements; or
6. An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally-enforceable permit condition which was established after December 21, 1976 pursuant to 40 CFR 52.21 (Prevention of significant deterioration of air quality), plan approval requirements under 310 CMR 7.02(2), 310 CMR 7.00: *Appendix A* : , 310 CMR 7.00: *Appendix B* (3), operating permits issued either under 310 CMR 7.00: *Appendix C* or pursuant to 40 CFR part 71 or prohibited under any other federally-enforceable regulatory requirements; or
7. Any change in ownership at a stationary source; or
8. The addition, replacement or use of a pollution control project at either an existing electric utility steam generating unit or an emissions unit(s) in order to comply with 310 CMR 7.18, 7.19, or 7.24, unless the Department determines that such addition, replacement, or use renders the unit less

environmentally beneficial; or unless

- a. The Department has reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of Title I of the Act, if any; and
- b. The Department determines that the increase will cause or contribute to a violation of any national ambient air quality standard or PSD increment, or visibility limitation; or

9. The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

- a. the Massachusetts SIP, and
- b. other requirements necessary to attain and maintain the national ambient air quality standard during the project and after it is terminated.

Major Stationary Source means any stationary source of air pollutants which emits, or has the federal potential emissions greater than or equal to, 100 tpy or more of any pollutant subject to regulation under the Act, except that lower emissions thresholds shall apply as follows:

50 TPY of volatile organic compounds (VOC), or

50 TPY of oxides of nitrogen (NO_x).

In addition, any physical change that would occur at a stationary source not previously qualifying as a major stationary source will be considered a major stationary source, if the physical change would result in the following increases either in actual emissions or in the federal potential to emit, greater than or equal to:

50 TPY of volatile organic compounds (VOC), or

50 TPY of oxides of nitrogen (NO_x), or

100 TPY or more of any other pollutant subject to regulation under the Act.

(a) A stationary source that is major for VOC shall be considered major for ozone. VOC emissions, as precursors to the pollutant ozone, are subject to the requirements of 310 CMR 7.00: *Appendix A* ; and

(b) For the purpose of applying the requirements of 310 CMR 7.00: *Appendix A* to major stationary sources of NO_x a stationary source that is major for NO_x is considered major for ozone, in addition to any separate requirements for NO_x under part C or D of Title I of the Act; and

(c) The fugitive emissions of a stationary source shall not be included in determining, for any of the purposes of 310 CMR 7.00: *Appendix A* , whether the stationary source is a major stationary source, unless the stationary source belongs to one of the following categories of stationary sources:

Carbon black plants (furnace process); or

Coal cleaning plants (with thermal dryers); or

Coke oven batteries; or

Charcoal production plants; or

Chemical process plants; or

Fuel conversion plants; or

Fossil fuel-fired boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input; or

Fossil fuel-fired electric plants of more than 250 million British thermal units per hour heat input; or

Glass fiber manufacturing plants; or

Hydrofluoric acid plants; or

Iron and steel mills; or

Kraft pulp mills; or

Lime plants; or

Municipal incinerators (or combinations thereof) capable of charging more than 50 tons of refuse per day; or

Nitric acid plants; or

Outer continental shelf sources; or

Petroleum refineries; or

Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels; or

Phosphate rock processing plants; or

Portland cement plants; or

Primary aluminum ore reduction plants; or

Primary copper smelters; or

Primary lead smelters; or

Primary zinc smelters; or

Secondary metal production plants; or

Sintering plants; or

Sulfuric acid plants; or

Sulfur recovery plants; or

Taconite ore processing plants; or

Any other stationary source category regulated under sec. 111 (NSPS) or 112 (NESHAPS) of the Act before November 15, 1990.

Navigable Rivers and Lakes means non-tidal bodies of water which were navigable at the time the States in which they are located became members of the United States. This term does not include waters over lands now or heretofore constituting a part of the public lands of the United States, if such lands were not meandered in connection with the public survey of such lands under the laws of the United States and title to such lands was lawfully conveyed from the United States or any State to any person.

Necessary Preconstruction Approvals or Permits means those permits or plan approvals required under Federal air quality control laws and regulations, and those air quality control laws and regulations which are part of the Massachusetts State Implementation Plan.

Net Emissions Increase means

- (a) The amount by which the sum of the following exceeds zero:
 1. Any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source; and
 2. Any other increases and decreases in actual emissions at the source shall be included for netting purposes, that are contemporaneous with the particular change and are otherwise creditable as described in 310 CMR 7.00: *Appendix A* Net Emissions Increase(b), (c), (d), (e) and (f).
- (b) An increase or decrease is contemporaneous with the particular change only if it occurs over any period of five consecutive calendar years which includes the calendar year the increase will occur, but not earlier than January 1, 1990.
- (c) An increase or decrease in actual emissions must have occurred prior to the increase from the particular change in order for the increase or decrease to be considered contemporaneous for purposes of calculating a net emissions increase.
- (d) An increase or decrease in actual emissions is creditable only if the increase or decrease in actual emissions has not been credited in a previous plan approval issued under 310 CMR 7.00: *Appendix A* , unless that approval has been rescinded.
- (e) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- (f) A decrease in actual emissions is creditable only to the extent that:
 1. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions; and
 2. It is federally-enforceable at and after the time that actual construction on the particular change begins; and
 3. The reduction was not required as a condition of the Massachusetts

SIP, in demonstrating attainment or reasonable further progress, in issuing any permit or plan approval under 310 CMR 7.00: *Appendix A* , 310 CMR 7.02(2) (BACT requirement), 40 CFR 52.21 (PSD), operating permits issued either under 310 CMR 7.00: *Appendix C* or 40 CFR part 71 or otherwise required under the Act; and

4. For VOC emissions, the decreased emissions have approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and

5. The unit was actually operated 1 or more years and emitted the nonattainment pollutant for which the decrease is being sought. Reductions of permitted emissions for units that were never operated cannot be considered creditable emissions decreases.

(g) An emissions increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

(h) Emission reduction credits (ERCs) withdrawn from the Department's Emission Reduction Banking System are creditable if the ERCs meet the criteria in 310 CMR 7.00: *Appendix A Net Emissions Increase*(a) through (g).

Nonattainment Pollutant means an air pollutant (or precursor of the pollutant, as applicable) for which and area is designated nonattainment (as of the date on which a complete application is filed) pursuant to § 107(d) [Nonattainment Designations] of the Act or oxides of nitrogen (NO_x) or volatile organic compounds (VOC).

Outer Continental Shelf (OCS) shall have the meaning provided, as of the date of promulgation of these regulations, by section 2 of the Outer Continental Shelf Lands Act (43 U.S.C. 1331 *et seq*).

Outer Continental Shelf Source means any equipment, activity, or facility which:

- (a) Emits or has federal potential emissions of any air pollutant; and
- (b) Is regulated or authorized under the Outer Continental Shelf Lands Act (43 U.S.C. 1331 *et seq*); and
- (c) Is located on the OCS or in or on the waters above the OCS.

Pollution Control Project means any activity or project at either an existing electric utility steam generating unit or at an emissions unit(s) to comply with 310 CMR 7.18, 7.19, or 7.24 for purposes of reducing emissions from such unit. Such activities or projects are limited to:

- (a) The installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls and electrostatic precipitators; or
- (b) an activity or project to accommodate switching to a fuel which is less polluting than the fuel used prior to the activity or project, including, but not limited to natural gas or coal re-burning, or the co-firing of natural gas and other fuels for the purpose of controlling emissions; or
- (c) a permanent clean coal technology demonstration project conducted under title II, sec. 101(d) of the Further Continuing Appropriations Act of 1985 (sec. 5903(d) of title 42 of the United States Code), or subsequent appropriations, up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the EPA; or
- (d) a permanent clean coal technology demonstration project that constitutes a repowering project; or
- (e) an activity or project to reduce emissions of VOC or NO_x to comply with 310 CMR 7.18, 7.19, or 7.24.

Reasonable Further Progress means such annual incremental reductions in emissions of the relevant air pollutant as are required by part D (Plan Requirements for Nonattainment Areas) of the Act or may reasonably be required by the Department or EPA for the purpose of ensuring attainment of the applicable national ambient air quality standards in an area by the applicable statutory deadline or resulting from shutdowns that are credited towards attainment.

Repowering means:

- (a) replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the EPA, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the

performance of technology in widespread commercial use as of November 15, 1990; or

(b) any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

Representative Actual Annual Emissions means the average rate, in tons per year, at which the source is projected to emit a pollutant for the two-year period after a physical change or change in the method of operation of a unit, (or a different consecutive two-year period within ten years after that change, where the Department determines that such period is more representative of normal source operations), considering the effect any such change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the Department:

(a) shall consider all relevant information, including but not limited to historical operational data, the company's own representations, filings with Massachusetts Department of Public Utilities or Federal regulatory authorities, filings with the Department pursuant to 310 CMR 7.12, Department regulations and approvals issued pursuant to those regulations and compliance plans under title IV of the Clean Air Act; and

(b) shall exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

Secondary Emissions means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, which do not come from the major stationary source or major modification itself. For the purpose of 310 CMR 7.00: *Appendix A*, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not otherwise be constructed or undergo an increase in emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include tailpipe emissions from any source regulated under title II of the Act or any emissions from in-transit, non-OCS marine vessels.

Significant means

(a) In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

POLLUTANT EMISSION RATE	
Carbon monoxide:	100 tpy
Ozone:	25 tpy of nitrogen oxides (NO _x) where an administratively complete application was received on or after November 15, 1992 for the physical change or change in the method of operation.
Ozone:	40 tpy of VOC
	25 tpy of VOC where an administratively complete application was received on or after November 15, 1992 for the physical change or change in the method of operation.
Sulfur dioxide:	40 tpy
Particulate matter:	15 tpy as PM10
Lead:	0.6 tpy

(b) A net increase in emissions of VOCs or NO_x that would result from either any physical change in or change in the method of operation, of a stationary source is significant if such increase exceeds applicable thresholds when aggregated with all, creditable and contemporaneous, increases and decreases, in emissions of the same pollutant.

Stationary Source means any building, structure, facility, or installation which emits or which may emit any air pollutant subject to regulation under the Act.

(a) A stationary source may consist of one or more emissions units and:

1. may be a land-based point or area source; or
2. may be located in, or on, the OCS or other submerged lands beneath navigable waters (lakes, rivers, and coastal waters adjacent to Outer Continental Shelf lands); or
3. may be any internal combustion engine, or engine combination, greater than 175 horsepower (hp) used for any stationary application; or

4. may be any internal combustion engine regulated under Sec. 111 (NSPS) of the Act, regardless of size; or
5. may be any internal combustion engine of less than 175 horsepower (hp) not actually controlled to meet a regulation under Sec. 213 (Nonroad Engines and Vehicles) of the Act.

(b) A stationary source does not include:

1. emissions resulting directly from an internal combustion engine for transportation purposes; or
2. tailpipe emissions from any source regulated under title II of the Act or any emissions from in-transit, non-OCS marine vessels.

Temporary Clean Coal Technology Demonstration project means a CCT demonstration project that is operated for a period of five years or less, and which complies with the Massachusetts SIP and other requirements necessary to attain and maintain the national ambient air quality standard during the project and after it is terminated.

(3) Applicability and exemptions. (see also 310 CMR 7.00: *Appendix A* (10) Source Obligation.)

(a) Any major stationary source or major modification to which the requirements of 310 CMR 7.00: *Appendix A* apply shall not receive a plan approval to begin actual construction unless the Department is satisfied that the stationary source or modification will meet the requirements of 310 CMR 7.00: *Appendix A* .

(b) The requirements of 310 CMR 7.00: *Appendix A* shall apply only to any new major stationary source or major modification that is major for either:

1. the pollutant (or precursor of the pollutant, as applicable) for which an area is designated nonattainment (as of the date on which a complete application is filed) pursuant to § 107(d) [Nonattainment Designations] of the Act if the stationary source or modification would be constructed in the designated nonattainment area; or

2. oxides of nitrogen (NO_x) or volatile organic compounds (VOC).

(c) The requirements of 310 CMR 7.00: *Appendix A* shall apply in any Outer Continental Shelf area for which the corresponding onshore area is designated as nonattainment as of the date on which a complete application is filed in accordance with 310 CMR 7.00: *Appendix A*.

(d) If a stationary source is in one of the categories listed in the definition of 310 CMR 7.00: *Appendix A Major Stationary Source*(c), fugitive emissions, to the extent quantifiable, are included when calculating federal potential emissions to determine if the stationary source or modification is subject to the provisions of 310 CMR 7.00: *Appendix A*.

(e) In the case of any major stationary source of volatile organic compounds located in the area (other than a source which emits or has federal potential emissions of 100 tons or more of volatile organic compounds per year), whenever any physical change or change in the method of operation at that source results in any increase (other than a *de minimis* increase) in emissions of volatile organic compounds from any discrete operation, unit or other pollutant emitting activity at the source, such increase shall be considered a modification for purposes of 310 CMR 7.00: *Appendix A*, except that such increase shall not be considered a modification for such purposes if the owner or operator of the source elects to offset the increase by greater reduction in emissions of volatile organic compounds concerned from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1. If the owner or operator does not make such election, such change shall be considered a modification for such purposes, but in applying 310 CMR 7.00: *Appendix A* (4)(c) in the case of any such modification, the best available control technology (BACT), as defined in 310 CMR 7.00: DEFINITIONS, shall be substituted for the lowest achievable emission rate (LAER).

(f) In the case of any major stationary source of volatile organic compounds located in the area which emits or has federal potential emissions 100 tons or more of volatile organic compounds per year, whenever any physical change or change in the method of operation at that source results in any increase (other than a *de minimis* increase) in emissions of volatile organic compounds from any discrete operation, unit or other pollutant emitting activity at the source, such increase shall be considered a modification for purposes of 310 CMR 7.00: *Appendix A*, except that if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of volatile organic compounds from other operations, units or activities within the source at an internal offset ratio of at least 1.3 to 1, the requirements of 310 CMR 7.00: *Appendix A* (4)(c) (concerning the lowest achievable emission rate (LAER) shall not apply.

(g) 310 CMR 7.00: *Appendix A* (3)(e) and (f) apply to modifications at major stationary sources of NO_x in the same way that they apply to sources of volatile organic compounds.

(4) Control technology review.

(a) A new major stationary source or major modification at an existing major stationary source shall meet each applicable emissions limitation under the Massachusetts SIP and each applicable emissions standard of performance under 40 CFR parts 60 (NSPS) and 61 (NESHAPS).

(b) A new major stationary source shall meet the lowest achievable emission rate (LAER) for each pollutant subject to the provisions of 310 CMR 7.00: *Appendix A* that would have federal potential emissions in major amounts. This provision applies to each new emissions unit at which emissions would occur. Major amounts are as follows:

1. VOC - 50 tons or more per year.
2. NOx - 50 tons or more per year.
3. 100 tons per year or more of any other pollutant subject to regulation under, the Act.

(c) A major modification shall meet the lowest achievable emission rate (LAER) for each pollutant subject to the requirements of 310 CMR 7.00: *Appendix A* which would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of the physical change or change in the method of operation in the unit being proposed. LAER will not be required for previous modifications included in the determination of net emissions increase considered in determining major modification status, but which are not to be modified as part of the proposed project.

(d) For phased construction projects, the determination of the lowest achievable emission rate (LAER) shall be reviewed and modified as appropriate at the latest reasonable time, but no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the stationary source may be required to demonstrate the adequacy of any previous determination of the lowest achievable emission rate to the next phase of construction.

(5) Reasonable further progress.

(a) Sufficient offsetting emissions shall be in effect such that the total emissions from existing sources in the area, from new or modified sources which are not major stationary sources, and from the proposed source will be sufficiently less than the total emissions from existing sources prior to the application for such plan approval to construct or modify so as to represent (when considered together

with the SIP provisions required under sec. 172 of the Act) reasonable further progress by the time the proposed source or modification is to commence operation; and

(b) for the purposes of satisfying the requirements of 310 CMR 7.00: *Appendix A* (5)(a), the determination of total emissions at both the time prior to the application for a plan approval subject to the requirements of 310 CMR 7.00: *Appendix A* and the time such permitted source or modification would commence operation, shall be made in a manner consistent with the Massachusetts SIP approved by the EPA concerning baseline emissions for the demonstration of reasonable further progress and attainment of the national ambient air quality standards for the particular pollutant subject to review pursuant to 310 CMR 7.00: *Appendix A*.

(6) Emissions offsets.

(a) Prior to the issuance of a plan approval for any emission unit(s), for which offsets are required pursuant to 310 CMR 7.00: *Appendix A*, emission offsets must be made federally enforceable; and

(b) Prior to commencing operation of any emission unit(s), for which offsets are required under 310 CMR 7.00: *Appendix A*, emission offsets must actually occur and be obtained from the same source or other sources in the same nonattainment area, except that such emissions reductions may be obtained from a source in another nonattainment area if:

1. The other area has an equal or higher nonattainment classification than the area in which the source is located; and
2. Emissions from such other area contribute to a violation of a national ambient air quality standard in the nonattainment area in which the proposed new or modified source would construct.

(c) Emission offsets for a land-based stationary source may not be obtained from Outer Continental Shelf (OCS) sources. However, emission offsets for an OCS source may be obtained from land-based stationary sources.

(d) The increase in emissions of any applicable nonattainment air pollutant allowed from either the proposed new major stationary source or from the proposed changes at the major stationary source that are part of the major modification, shall be offset by an equal or greater reduction, as applicable, in the actual emissions of such air pollutant from the same or other sources.

(e) In meeting the requirements of 310 CMR 7.00: *Appendix A* (6)(d), the ratio of total actual emission reductions to the increase in actual emissions shall be as follows:

1. 1.2:1 of VOC or NO_x; or
2. 1:1 of any other pollutant subject to regulation under 310 CMR 7.00: *Appendix A*.

(f) Shutdowns.

1. Emissions reductions achieved by shutting down an existing source or curtailing production or operating hours below baseline levels may be generally credited if such reductions are real, surplus, permanent, quantifiable and federally enforceable. In addition, the shutdown or curtailment is creditable only if it occurred after December 31, 1990, and the following conditions have been met:

- a. the Department has submitted a completed emissions inventory as required by section 182(a)(1) of the Act; and
- b. the Department has submitted complete revisions to 310 CMR 7.00: *Appendix A* as required by section 182(a)(2)(C) of the Act; and
- c. the Department submits the 15% VOC reduction plan required by section 182(b)(1)(A) of the Act; and
- d. the Department submits the attainment demonstration required by section 182(c)(2) of the Act; or

2. If any of the submissions in 310 CMR 7.00: *Appendix A* (6)(f)1.a. through d. are delinquent, incomplete or disapproved, emissions reductions from shutdowns or curtailments can not be used, unless the shutdown or curtailment occurred either on or after the date the new source plan approval application is filed or unless the applicant can establish that the proposed new source is a replacement for the shutdown or curtailed source, and the cutoff date provisions of paragraph (6)(f)1. are observed.

(g) With respect to a proposed increase in VOC emissions, no emissions credit shall be allowed for reductions in any organic compound specifically excluded from the definition of "VOCs" in 310 CMR 7.00.

(h) Credit for an emissions reduction may not be claimed to the extent that the Department has relied on the reduction as a condition of the Massachusetts SIP, in demonstrating attainment or reasonable further progress, in issuing any permit or plan approval under 310 CMR 7.02(2) (BACT requirement), 310 CMR 7.00: *Appendix A*, 40 CFR 52.21 (PSD), operating permits issued either under 310 CMR 7.00: *Appendix C* or pursuant to 40 CFR part 71 or otherwise required under the Act. Incidental emissions reductions which are not otherwise required under the Act may be creditable as emissions reductions for such purposes if such emissions reductions meet the applicable requirements of 310 CMR 7.00: *Appendix A* (6).

(i) Emission reduction credits (ERCs) withdrawn from the Massachusetts Emission Reduction Credit Bank (310 CMR 7.00: *Appendix B* (3)) may be used as offsets, providing the ERCs are federally enforceable and meet all of the requirements under 310 CMR 7.00: *Appendix A* (6).

(j) Emission reductions generated by the seasonal control of ozone precursors (VOC or NO_x), during the period May 1 through September 30, may be used at any time during the calendar year. Emission reductions generated by the seasonal control of VOC or NO_x, during the period October 1 through April 30, may only be used during the period October 1 through April 30. Emission reductions generated by the seasonal control of carbon monoxide, during the period November 1 through February 28, may be used at any time during the calendar year. Emission reductions generated by the seasonal control of carbon monoxide, during the period March 1 through October 31, may only be used during the period March 1 through October 31.

(7) Source Impact Analysis. The applicant shall demonstrate to the satisfaction of the Department that;

(a) the emissions offsets required under 310 CMR 7.00: *Appendix A* (6), when considered in conjunction with the proposed emissions increase will have a net air quality benefit in the affected area; and

(b) the emissions from the proposed new major stationary source or major modification will not contribute to nonattainment in, or interfere with maintenance by any other state of any national primary or secondary ambient air quality standard; and

(c) the emissions from the proposed new major stationary source or major modification will not interfere with measures required to be included in the applicable implementation plan for any other State under a program for the prevention of significant deterioration or for the protection of visibility.

(8) Additional conditions for approval. In order for the Department to issue an approval under 310 CMR 7.00: *Appendix A*, the following conditions shall be met:

(a) All major stationary sources in Massachusetts owned or operated by the owner or operator of the proposed source (or by any entity controlling, controlled by, or under common control with such owner or operator) which are subject to federally enforceable emission limitations must be in compliance, or on a federally enforceable schedule for compliance, with all applicable emissions limitations and standards under the Act.

(b) By means of an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed new or modified stationary source, the owner or operator of the proposed stationary source or modification shall demonstrate to the satisfaction of the Department that the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

(c) The Administrator has not determined that the Massachusetts SIP is not being adequately implemented for the nonattainment area in which the proposed stationary source or modification is to be constructed in accordance with the requirements of part D of the Act.

(9) Public participation.

(a) The Department shall notify all applicants as to any administrative or technical deficiencies in the application or information submitted.

(b) After receipt of a technically complete application the Department shall:

1. Make a proposed decision as whether the plan approval application should be approved, approved with conditions, or disapproved.

2. Make available, in at least one location in each region in which the proposed source would be constructed, a copy of all materials the applicant submitted, a copy of the proposed decision, and a copy or summary of other materials, if any, considered in making the proposed decision.

3. Notify the public, by advertisement in a newspaper of general circulation in each region in which the proposed source would be constructed of the opportunity for comment at a public hearing in accordance with the provisions of M.G.L.c. 30A, §2. as well as of the opportunity to submit written public comment to the Department.

4. Send a copy of the notice of public comment to the applicant, the EPA, and officials and agencies having jurisdiction over the location where the proposed construction would occur as follows: any other State or local air pollution control agencies, the chief executives of the city where the source would be located; any comprehensive regional land use planning agency, and any Federal Land Manager, or Indian Governing body whose lands may be affected by emissions from the source or modification.
5. Consider all public comments (written and oral) submitted at any public hearing(s) in making a final decision on the approvability of the application. The Department shall make all comments available for public inspection in the same locations where the Department made available preconstruction information relating to the proposed source or modification.
6. Make a final decision as to whether the plan approval application should be approved, approved with conditions, or disapproved.
7. Notify the applicant in writing of the final decision and make such notification available for public inspection at the same location where the Department made available preconstruction information and public comments relating to the source.

(10) Source obligation.

(a) Except as provided for in 310 CMR 7.00: *Appendix A* (10)(b),

1. any owner or operator who constructs or operates either a stationary source or modification not in accordance with the terms of the approval to construct issued under 310 CMR 7.00: *Appendix A*; or
2. any owner or operator of a stationary source or modification subject to 310 CMR 7.00: *Appendix A*, who commences construction after November 15, 1992 without applying for and receiving approval under 310 CMR 7.00: *Appendix A*,

shall be considered in noncompliance with 310 CMR 7.00: *Appendix A*, unless a complete application to construct or substantially reconstruct or alter under 310 CMR 7.02(2) was filed by November 15, 1992 and the change was approved by the Department.

(b) If an owner or operator of a stationary source began construction of a new source or a modification before the applicable date specified in 310 CMR 7.00:

Appendix A (10)(b)(1. through 4.), then the owner or operator need not comply with 310 CMR 310 CMR 7.00: *Appendix A* .

1. If the source or modification resulted in an increase in actual emissions of VOC's, then the applicable date is January 10, 1980.
2. If the source or modification resulted in an increase in actual emissions of CO, then the applicable date is January 10, 1980, or the date on which the location in which the construction or modification occurred was declared in the Federal Register to be in nonattainment.
3. If the source or modification resulted in an increase in actual emissions of NOx, then the applicable date is November 15, 1990.
4. If the source or modification resulted in an increase in any other nonattainment pollutant, then the applicable date is the date on which the location in which the construction or modification occurred was declared in the Federal Register to be in nonattainment for that pollutant.

(c) Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

(d) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the Massachusetts SIP and any other requirements under local, State or Federal law.

(e) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation on the capacity of the source or modification to emit a pollutant, where such enforceable limitation was established after August 7, 1980, then the requirements of 310 CMR 7.00: *Appendix A* shall apply to the source or modification as though no previous approval had been issued on the source or modification.