OFFICIAL COMPILATION OF CODES, RULES AND REGULATIONS OF THE STATE OF NEW YORK
TITLE 6. DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CHAPTER III. AIR RESOURCES
SUBCHAPTER A. PREVENTION AND CONTROL OF AIR CONTAMINATION AND AIR POLLUTION
PART 212: GENERAL PROCESS EMISSION SOURCES

(Statutory authority: Environmental Conservation Law, §§ 1-0101, 1-0303, 3-0301, 19-0103, 19-0105, 19-0107, 19-0301, 19-0303, 19-0305, 19-0311, 71-2103, 71-2105)

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§212.1 Definitions

(a) For the purpose of this Part, the general definitions in Part 200 of this Title apply.

(b) For the purpose of this Part, the following definitions also apply:

(1) *Aggregate*. Any hard, inert material used for mixing in graduated particles or fragments. Includes sand, gravel, crushed stone, slag, rock dust or powder.

(2) *Hot mix asphalt*. Paving material that is produced by mixing hot dried aggregate with heated asphalt cement.

(3) *Low NO_x burner*. A burner designed to reduce flame turbulence by the mixing of fuel and air and by establishing fuel-rich zones for initial combustion, thereby reducing the formation of nitrogen oxides.

(4) *Overall removal efficiency*. The total reduction of volatile organic compound emissions considering the efficiency of both the capture system and of the subsequent destruction and/or removal of these air contaminants by the control equipment prior to their release into the atmosphere.

(5) *Process*. Any industrial, commercial, agricultural or other activity, operation, manufacture or treatment in which chemical, biological and/or physical properties of the material or materials are changed, or in which the material(s) is conveyed or stored without changing the material(s) (where such conveyance or storage system is equipped with a vent(s) and is non-mobile), and which emits air contaminants to the outdoor atmosphere. A process does not include an open fire, operation of a combustion installation, or incineration of refuse other than by-products or wastes from processes.

(6) *Tune-up*. Adjustments made to a burner in accordance with procedures supplied by the manufacturer (or an approved specialist) to optimize the combustion efficiency.

§212.2 Determination of environmental rating

When an application is made for a permit to construct or for a certificate to operate for a process emission source, the commissioner will issue an environmental rating for each air contaminant from each emission point in accordance with Table 1 of this Part.

§212.3 Emissions from existing emission sources

Emissions of air contaminants to the outdoor atmosphere from any process emission source are restricted as follows:

(a) No person will cause or allow emissions that violate the requirement specified in Table 2, Table 3 or Table 4 of this Part for the environmental rating issued by the commissioner; or

(b) In instances where determination of permissible emission rate using process weight is not applicable (see Table 5) and for an environmental rating of B or C, no person will cause or allow emissions of solid particulates that exceed 0.15 grains of particulates per cubic foot of exhaust gas, corrected for dilution air and expressed at standard conditions on a dry gas basis.

§212.4 Emissions from new emission sources and/or modifications

Emissions from any process emission source for which an application for a permit to construct is received by the department after July 1, 1973, are restricted as follows:

(a) except as required under section 201.8 of this Title, no person shall cause or allow emissions that exceed the applicable permissible emission rate as determined from Table 2, Table 3 or Table 4 of this Part for the environmental rating issued by the commissioner; or

(b) for gases and liquid particulates with an environmental rating of A, B, or C and for solid particulates with an environmental rating of A, where the emission rate potential is not shown in Table 2 the permissible emission rate shall be specified by the commissioner; or

(c) in instances where determination of permissible emission rate using process weight is not applicable (see Table 5) and for an environmental rating of B or C, no person will cause or allow emissions of solid particulates that exceed 0.050 grains of particulates per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis, except as provided in section 201.6 of this Title.

§212.5 Determining applicable emission standards

(a) Where air contaminants from two or more devices or contrivances are emitted to the outdoor atmosphere through a single emission point, the permissible emission rate or degree of air cleaning required is determined by using the sum of the process weights or emission rate potentials for all such devices or contrivances.

(b) Where air contaminants from a single device or contrivance are emitted to the outdoor atmosphere through more than one emission point, the sum of the emissions from all such emission points shall not exceed the quantity that would be permitted if said emissions were through a single emission point.

(c) Where air contaminants from two or more devices or contrivances are emitted to the outdoor atmosphere through a single emission point and the applicable emission standard for one or more of such devices or contrivances if vented separately to the outdoor atmosphere is a concentration standard (grains per standard cubic foot), the

permissible emission rate through such emission point shall not exceed the quantity that would be allowed if said emissions were through separate emission points.

(d) Where a source owner can demonstrate to the satisfaction of the commissioner that he will apply best available control technology, the commissioner may specify a less restrictive permissible emission rate, emission standard or degree of air cleaning for such source than required under this Part provided that the less restrictive requirement is equivalent to that which can be achieved through the application of best available control technology.

(e) A process emission source, subject to the Federal new source performance standards in 40 CFR part 60, the national emission standards for hazardous air pollutants in 40 CFR part 61, or to the polychlorinated biphenyl disposal criteria in 40 CFR part 761 satisfies the requirements of this Part for the contaminant regulated by the Federal standard if the source owner can demonstrate that the source is in compliance with the respective Federal regulation.

(f) Owners and/or operators of facilities which have limited the facility's annual potential to emit nitrogen oxides or volatile organic compounds below applicability levels through federally and state enforceable special conditions in permits to construct and/or certificates to operate under the provisions of section 212.10(d) of this Part must maintain annual actual emissions below these limitations. Nitrogen oxide and volatile organic compound emission points at these facilities are not subject to the control requirements in section 212.9(b) if the emissions are not given an A rating.

§212.6 Opacity of emissions limited

(a) No person will cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source, except only the emission of uncombined water.

(b) Upon written application by a source owner or operator, the commissioner, at his discretion may accept for an emission source an equivalent opacity standard exceeding the opacity standard of subdivision (a) of this section, if the source owner can demonstrate through acceptable tests for such source that he is in compliance with all applicable emission requirements other than the opacity standard and that the source and any associated emission control equipment is being operated and maintained in a manner acceptable to the commissioner. An equivalent opacity standard for an emission source will only be granted where reasonably available control technology, as determined by the commissioner, has been utilized. In such cases, the source owner or operator will not cause or allow emissions to exceed the equivalent opacity.

§212.7 Exceptions

The following process emission sources are not subject to the provisions of this Part:

(a) process emission sources which are exempt under section 201.6 of this Title;

(b) kilns and clinker coolers in portland cement plants subject to Part 220 of this Title with respect to emissions which are not given an A rating;

(c) ferrous jobbing foundry melting furnaces in operation on or prior to February 6, 1968 with respect to particulate emissions only;

(d) by-product coke oven batteries subject to Part 214 of this Title with respect to emissions which are not given an A rating;

(e) gasoline, petroleum, and volatile organic liquid storage and transfer facilities subject to Part 229 or Part 230 of this Title, with respect to volatile organic compound emissions which are not given an A rating;

(f) process emission sources other than kilns and clinker coolers in a portland cement plant with respect to opacity of emissions only;

(g) process emission sources in a sulfuric or nitric acid plant which are regulated by Part 224 of this Title with respect to emissions of nitrogen oxides, oxides of sulfur, sulfuric acid mist and smoke;

(h) process emission sources in a petroleum refinery subject to Part 223 of this Title with respect to sulfur compound emissions and emissions of volatile organic compounds which are not given an A rating;

(i) process emission sources from which emissions of oxides of sulfur are attributable only to sulfur in fuel with respect to emissions of oxides of sulfur;

(j) solvent metal cleaning processes subject to Part 226 of this Title with respect to emissions of volatile organic compounds which are not given an A rating;

(k) iron and/or steel processes subject to Part 216 of this Title;

(l) surface coating operations subject to Part 228 of this Title or coatings exempt from Part 228 pursuant to section 228.1(h) of this Title with respect to emissions of volatile organic compounds which are not given an A rating;

(m) process emission sources with respect to emissions of carbon monoxide and volatile organic compounds produced solely by incomplete combustion of any fuel, except where material is heated, burned, combusted or otherwise chemically changed under oxygen deficient conditions by design;

(n) perchloroethylene dry cleaning facilities subject to Part 232 of this Title;

(o) pharmaceutical and cosmetic manufacturing processes subject to Part 233 of this Title or processes exempt from Part 233 pursuant to section 233.1(g) of this Title with respect to emissions of volatile organic compounds which are not given an A rating;

(p) graphic arts processes subject to Part 234 of this Title or inks exempt from Part 234 pursuant to section 234.1(h) of this Title with respect to emissions of volatile organic compounds which are not given an A rating;

(q) primary aluminum reduction plant processes subject to Part 209 of this Title with respect to opacity and emissions of total fluorides; and

(r) process emission sources with respect to emissions of nitrogen oxides produced by catalytic oxidizers used as air pollution control equipment.

§212.8 Compliance schedules

(a) Process emission sources which commence construction before November 16, 1985 in the New York City metropolitan area which are subject to Table 3 of this section are required to comply with the applicable standard within six months after the expiration date of the last certificate to operate issued prior to November 15, 1985. Process emission sources which commence construction after November 15, 1985 in the New York City metropolitan area which are subject to Table 3 (section 212.9[c]) of this Part must comply with the applicable standard upon start-up.

(b) An application for a certificate to operate for process emission sources at bakeries subject to this Part must be submitted to the department by October 20, 1994.

§212.9 Tables

(a) *Table 1.*

ENVIRONMENTAL RATING	
Rating	***Criteria***
A	An air contaminant whose discharge results, or may result, in serious adverse effects on receptors or the environment. These effects may be of a health, economic or aesthetic nature or any combination of these.
B	An air contaminant whose discharge results, or may result in only moderate and essentially localized effects; or where the multiplicity of sources of the contaminant in any given area require an overall reduction of the atmospheric burden of that contaminant.
C	An air contaminant whose discharge may result in localized adverse effects of an aesthetic or nuisance nature.
D	An air contaminant whose discharge will not result in measurable or observable effects on receptors, nor add to an existing or predictable atmospheric burden of that contaminant which may cause adverse effects, considering properties and concentrations of the emissions, isolated conditions, stack height and other factors.

The following items will be considered in making a determination of the environmental rating to be applied to an air contaminant:

1. toxic and other properties and emission rate potential of the air contaminant;
2. location of the source with respect to residences or other sensitive environmental receptors, including a consideration of the area's anticipated growth;
3. emission dispersion characteristics at or near the source, taking into account the physical location of the source relative to surrounding buildings and terrain; and
4. the projected maximum cumulative impact of taking into account emissions from all sources in the facility under review and the pre-existing ambient concentration of the air contaminant under review.

(b) *Table 2.*

Degree of Air Cleaning Required for Gases and Liquid Particulate Emissions (Environmental Rating A,B,C or D) and Solid Particulate Emissions (Environmental Rating A or D) but excluding Volatile Organic Compound Emissions in the New York City Metropolitan Area*									
Environmental Rating	***EMISSION RATE POTENTIAL (LB/HR)***								
	Less than 1.0	***1 to 10***	***10 to 20***	***20 to 100***	***100 to 500***	***500 to 1,000***	***1,000 to 1,500***	***1,500 to 4,000***	***4,000 to 10,000***	***10,000 and greater***
A	**	99% OR GREATER OR BEST AVAILABLE CONTROL TECHNOLOGY							
B	**		90%	91%	94%	96%		97%	98%	99% or greater
C	**		70%	75%	85%	90%		93%	95%	98% or greater
D	NO AIR CLEANING REQUIRED								

* See Table 3 of this Part for degree of air cleaning required for volatile organic compound emissions in the New York City Metropolitan Area.

** Degree of air cleaning required shall be specified by the commissioner.

(c) *Table 3.*

Degree of Air Cleaning Required for Process Emission Sources Emitting Volatile Organic Compounds in the New York City Metropolitan Area			
Environmental rating	***EMISSION RATE POTENTIAL (LB/HR)***		
	Less than 1.0	***1.0 to 3.5***	***Greater than 3.5***
A	*	99% OR GREATER OR BEST AVAILABLE CONTROL TECHNOLOGY	
B or C	*		REASONABLY AVAILABLE CONTROL TECHNOLOGY
D	NO AIR CLEANING REQUIRED		REASONABLY AVAILABLE CONTROL TECHNOLOGY

* Degree of air cleaning required will be specified by the commissioner.

(d) *Table 4.*

Permissible Emission Rates Based on Process Weight for Solid Particulate Emissions (Environmental Rating B or C)		
Process weight per hour (lb/hr)	***Existing Source***	***Permissible emission rate (lb/hr) New source or modification***
100	0.51	0.51
500	1.5	1.5
1,000	2.4	2.4
5,000	6.8	6.8
10,000	11	11
25,000	20	20
50,000	32	32
75,000	42	42
100,000	51	51
250,000	58	0.030 grain per standard cubic foot of undiluted exhaust gas on a dry basis.
500,000	64	
750,000	68	
1,000,000	71	
2,000,000	78	
5,000,000	88	

To determine values of permissible emission rate not shown in table:

for all process weight sources up to 100,000 lb/hr, use $E = 0.024P^{0.67}$;

for existing process weight sources in excess of 100,000 lb/hr, use $E = (39P^{0.082}) - 50$, where E = permissible emission rate; P = process weight in lb/hr.

(e) *Table 5.*

Processes for which Permissible Emission Rate is Based on Process Weight

1. Stone dryers (asphalt concrete plants)
2. Expanded aggregate kilns (lightweight aggregate plants)
3. Continuous process material dryers emitting solid particulates and water only
4. Brass and bronze melting furnaces
5. Ferro alloy production furnaces
6. Lime kilns
7. Glass production furnaces
8. Graphitizing and silicon carbide furnaces
9. Gypsum dryers
10. Primary aluminum reduction furnaces

§212.10 Reasonably available control technology for major facilities

(a) (1) Owners and/or operators of facilities located in the lower Orange County or New York City metropolitan areas with an annual potential to emit of 25 tons or more of nitrogen oxides or 25 tons or more of volatile organic compounds must comply with the requirements of this section.

(2) Owners and/or operators of facilities located outside of the lower Orange County and New York City metropolitan areas with an annual potential to emit of 100 tons or more of nitrogen oxides or 50 tons or more of volatile organic compounds must comply with the requirements of this section.

(3) Owners and/or operators of facilities located in the lower Orange County or New York City metropolitan areas with an annual potential to emit of 25 tons or more of nitrogen oxides or facilities located outside of the lower Orange County or New York City metropolitan areas with an annual potential to emit 100 tons or more of nitrogen oxides may petition the Environmental Protection Agency (EPA) for an exemption from the reasonably available control technology requirements for nitrogen oxide emission points in this section. The facility is eligible for the exemption if the owner and/or operator demonstrates that net ozone air quality benefits are greater in the absence of reductions of nitrogen oxides from the facility. Nothing in this paragraph shall exempt owners and/or operators of facilities which petition the Environmental Protection Agency for an exemption from complying with the applicable requirements of this section by the May 31, 1995 deadline absent approval of the exemption.

(b) Owners and/or operators of emission points subject to this Part which emit nitrogen oxides or volatile organic compounds located at facilities described in subdivision (a) of this section must submit a compliance plan to the Department by October 20, 1994. The compliance plan must either include the reasonably available control technology (RACT) analysis required by subdivision (c) of this section or a plan to limit the annual potential to emit below the applicability levels pursuant to subdivision (d) of this section.

(c) (1) The compliance plan must identify reasonably available control technology (RACT) for each emission point which emits nitrogen oxides for major nitrogen oxide facilities or volatile organic compounds for major volatile organic compound facilities. The compliance plan must identify the emission points which do not employ reasonably available control technology (RACT), and a schedule for implementation of RACT must be included in the plan. A RACT analysis is not required for emission points with nitrogen oxide and volatile organic compound emission rate potentials less than 3.0 pounds per hour and actual emissions in the absence of control equipment less than 15.0 pounds per day at facilities located in the lower Orange County and New York City metropolitan areas. A RACT analysis is not required for emission points with nitrogen oxide and volatile organic compound emission rate potentials less than 3.0 pounds per hour at facilities located outside of the lower Orange County and New York City metropolitan areas. Reasonably available control technology as approved by the department must be implemented on each emission point subject to this section by May 31, 1995.

(2) Compliance plans which include construction of emission control equipment must include a milestone date no later than December 20, 1994 for submission of permit to construct applications to the department

for emission control equipment. The compliance plans must include milestone dates for commencement of construction, completion of construction, and completion of emissions testing of emission control equipment.

(3) Reasonably available control technology compliance plans for nitrogen oxide emission points must include technically feasible control strategies to minimize nitrogen oxide formation and emission control equipment alternatives. These process specific RACT demonstrations which are acceptable to the department will be submitted to the United States Environmental Protection Agency for approval as a revision to the State Implementation Plan by the department.

(4) (i) Volatile organic compound emission points which are equipped with a capture system and a control device with an overall removal efficiency of at least 81 percent are equipped with reasonably available control technology.

(ii) Surface coating processes which are not subject to Part 228 of this Title which use a surface coating with a maximum volatile organic compound content of 3.5 pounds VOC per gallon as applied (minus water and excluded VOC) as calculated according to the formula in section 228.2(b)(11) of this Title are equipped with reasonably available control technology.

(iii) Where the facility owner or operator can show to the satisfaction of the department that an emission point cannot achieve an overall removal efficiency of 81 percent or use coatings not exceeding 3.5 pounds VOC per gallon as applied (minus water and excluded VOC) for reasons of technological or economic feasibility, the department may accept a lesser degree of control upon submission of satisfactory evidence that the facility owner or operator will apply reasonably available control technology. These process specific RACT demonstrations which are acceptable to the department will be submitted to the United States Environmental Protection Agency for approval as a revision to the State Implementation Plan by the department.

(d) The owner or operator of any facility with federally and state enforceable conditions in certificates to operate which limit its annual potential to emit nitrogen oxides and volatile organic compounds below the applicability levels of subdivision (a) of this section by May 31, 1995 is exempt from the RACT analysis and implementation requirements of this section. Records must be maintained by the owner or operator at the facility on a monthly basis which verify the facility's annual actual emissions. Upon reasonable request, these records must be submitted to the department in a format acceptable to the department. An exceedance of the annual potential to emit conditions for any calendar year must be reported by the owner or operator to the department within thirty days of the end of that calendar year.

(e) Any facility that is subject to this section after May 31, 1995 will remain subject to these provisions even if the annual potential to emit nitrogen oxides or volatile organic compounds later fall below the applicability threshold.

(f) Owners and/or operators of emission points located at facilities described in subdivision (a) of this section which commence construction after August 15, 1994 must submit a RACT demonstration for nitrogen oxides and volatile organic compound emissions with each application for a permit to construct. Reasonably available control technology must be implemented on these emission points when operation commences. A RACT analysis is not required for new emission points with nitrogen oxide and volatile organic compound emission rate potentials less than 3.0 pounds per hour and actual emissions in the absence of control equipment less than 15.0 pounds per day at facilities located outside of the lower Orange County and New York City metropolitan areas.

§212.11 Sampling and monitoring

(a) Owners and/or operators of any source which is required by the department to demonstrate compliance with this Part must comply with the notification requirements and must conduct capture efficiency and/or stack emissions testing using acceptable procedures pursuant to Part 202 of this Title.

(b) Owners and/or operators of any source equipped with the following emissions control equipment must install continuous monitors and data recorders for the required parameter by June 1, 1995. Continuous monitors must be operated at all times when the associated process equipment is operating except during any quality assurance and routine maintenance activities. Each monitor must be operated according to a quality assurance program approved by the department. Alternative monitoring methods may be employed subject to department approval.

(1) The exhaust gas temperature must be monitored from thermal or catalytic incinerators.

(2) The temperature rise across catalytic incinerator beds must be monitored.

(3) The volatile organic compound outlet concentrations must be monitored from fixed-bed carbon adsorption units.

(4) The outlet gas temperature must be monitored from refrigerated condensers.

(5) Other parameters must be monitored if required by conditions on the permit to construct or certificate to operate for the source.

(c) For the purpose of ascertaining compliance with this Part, the department may obtain or require the owner or operator of a process emission source to provide a sample of any type 5 or 6 refuse (see Table 1 of Appendix 2 of Part 219 for classifications of refuse) where such refuse is an input material of the process.

§212.12 Hot mix asphalt production plants

(a) The owner or operator of a hot mix asphalt production plant must comply with the following requirements:

(1) Beginning in calendar year 2011, a tune-up must be performed on the dryer burner on an annual basis at any hot mix asphalt production plant that is in operation during that calendar year.

(2) A plan must be submitted to the department by March 1, 2011 which details the introduction or continuation of methods by which to reduce the moisture content of the aggregate stockpile(s). Such methods must be implemented that year, or the first subsequent year the plant is in operation.

(b) (1) Beginning January 1, 2012, the owner or operator of a hot mix asphalt production plant must analyze the economic feasibility of installing a low NO_x burner when it comes time for their current burner to be replaced. This economic analysis must follow an approach acceptable to the department.

(2) By January 1, 2020, all owners or operators of active plants must have submitted the economic feasibility analysis for the installation of a low NO_x burner. A low NO_x burner must be installed for that operating year in all instances in which it proves feasible.

(3) Hot mix asphalt production plants which are in a state of inactivity on January 1, 2020 and have not otherwise complied with the requirements of this subdivision by that date must do so prior to continued operation.

(4) A similar analysis must be submitted for subsequent burner replacements.

(5) A low NO_x burner will be required at any new hot mix asphalt production plant.

(c) For major stationary sources, approved RACT determinations will be submitted by the department to the United States Environmental Protection Agency for approval as separate State Implementation Plan revisions.