CHAPTER 27

AIR POLLUTION CONTROL

Authority

N.J.S.A. 13:1B-3, 13:1B-3(e), 13:1D-9, 13:1D-134 et seq., 26:2C-1 et seq., in particular 26:2C-9b(7)(b), 9.2 and 9.5, 26:2C-8 et seq., specifically 26:2C-8, 8.1 through 8.5, 8.11, and 39:8-61.

Chapter Expiration Date

Chapter 27, Air Pollution Control, is exempt from expiration under Executive Order No. 66 (1978) and N.J.S.A. 52:14B-5.1 pursuant to 42 U.S.C. §§7401 et seq.

Chapter Historical Note

Chapter 27, Air Pollution Control, was adopted and became effective prior to September 1, 1969.

Subchapter 30, Open Market Emissions Trading, was adopted as R.1996 d.303, effective July 1, 1996 (operative August 2, 1996). See: 28 N.J.R. 1147(b), 28 N.J.R. 3414(a).

Subchapter 30, Open Market Emissions Trading, was repealed by R.2004 d.129, effective April 5, 2004 (operative April 25, 2004). See: 35 N.J.R. 3486(a), 36 N.J.R. 1791(a).

Subchapter 31, NO_x Budget Program, was adopted as new rules by R.1998 d.379, effective July 20, 1998 (operative August 16, 1998). See: 29 N.J.R. 3924(b), 29 N.J.R. 4226(a), 30 N.J.R. 2660(a).

Subchapter 26, National Low Emission Vehicle (NLEV) Program, and Subchapter 26 Appendix were repealed and Subchapter 29, Low Emission Vehicle Program, was adopted as new rules by R.2006 d.34, effective January 17, 2006 (operative January 27, 2006). See: 37 N.J.R. 2762(a), 38 N.J.R. 497(b).

Subchapter 30, CAIR NO_x Trading Program, was adopted as new rules by R.2007 d.223, effective July 16, 2007 (operative August 17, 2007). See: 39 N.J.R. 300(a), 39 N.J.R. 2637(a).

Subchapter 32, Diesel Retrofit Program, was adopted as new rules by R.2007 d.235, effective August 6, 2007 (operative September 8, 2007). See: 38 N.J.R. 5244(a), 39 N.J.R. 3352(a).

Subchapter 26, Prevention of Air Pollution from Adhesives, Sealants, Adhesive Primers and Sealant Primers, and Subchapter 34, TBAC Emissions Reporting, were adopted as new rules by R.2008 d.366, effective December 1, 2008 (operative December 29, 2008). See: 39 N.J.R. 4492(a), 40 N.J.R. 6769(a).

Law Review and Journal Commentaries

Air Pollution Regulations and Trends. I. Leo Motiuk, Joan E. Pearson, 133 N.J.Law. 34 (Mag.) (March/April 1990).

Overturning Environmental Regulations: A Primer on Breaching The Regulatory Walls. John A. McKinney, Jr., J. Wylie Donald, 160 N.J.Law. 48 (Mag.) (April 1994).

Limitations on state agency authority to adopt environmental standards more stringent than federal standards: Policy considerations and interpretive problems. Jerome M. Organ, 54 Md.L.Rev. 1373 (1995).

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SUBCHAPTER 4. CONTROL AND PROHIBITION OF PARTICLES FROM COMBUSTION OF FUEL

Subchapter Historical Note

Unless otherwise expressly noted, all provisions of this subchapter were adopted pursuant to authority of N.J.S.A. 26:2C–1 et seq. and were filed on January 27, 1972, as R.1972 d.16 to become effective on March 27, 1972. See: 3 N.J.R. 248(a), 4 N.J.R. 23(b). Revisions to this subchapter were filed on August 5, 1977, as R.1977 d.284 to become effective on October 12, 1977. See: 8 N.J.R. 375(a), 9 N.J.R. 420(a).

7:27–4.1 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings unless the context clearly indicates otherwise.

"Air contaminant" means solid particles, liquid particles, vapors or gases which are discharged into the outdoor atmosphere.

"Control apparatus" means any device which prevents or controls the emission of any air contaminant.

"Department" means the Department of Environmental Protection.

"Direct heat exchanger" means equipment in which heat from the combustion of fuel is transferred to a substance being heated so that the latter is contacted by the products of combustion and may contribute to the total effluent.

"Equipment" means any device capable of causing the emission of an air contaminant into the open air and any stack, chimney, conduit, flue, duct, vent or similar device connected or attached to, or serving the equipment. This shall include equipment in which the preponderance of the air contaminants emitted is caused by the manufacturing process.

"Fuel" means solid, liquid or gaseous materials used to produce useful heat by burning.

"Heat input rate" means the rate at which the aggregate heat content based on the higher heating value of the fuel is introduced into the fuel burning equipment.

"Isokinetic" means a method for sampling air contaminants from the gas stream in a stack or chimney in such a manner that the gas stream enters a sampling probe in the same direction and at the same velocity as the gas stream in a stack or chimney.

"Liquid particles" means particles which have volume but are not of rigid shape and which upon collection tend to coalesce and create uniform homogeneous films upon the surface of the collecting media.

"Manufacturing process" means any action, operation or treatment embracing chemical, industrial, manufacturing, or processing factors, methods or forms including, but not limited to, furnaces, kettles, ovens, converters, cupolas, kilns, crucibles, stills, dryers, roasters, crushers, grinders, mixers, reactors, regenerators, separators, filters, reboilers, columns, classifiers, screens, quenchers, cookers, digesters, towers, washers, scrubbers, mills, condensers or absorbers.

"Marine installation" means equipment for propulsion, power or heating on all types of marine craft and floating equipment.

"Maximum allowable emission rate" means the maximum amount of air contaminant which may be emitted into the outdoor air at any instant in time or during any prescribed interval of time.

"Particles" means any material, except uncombined water, which exists as liquid particles or solid particles at standard conditions.

"Performance test principle" means a concept of measurement as required for determining compliance with a specific standard for the emission of air contaminants.

"Sampling train" means a combination of entrapment devices, instruments, and auxiliary apparatus arranged in a prescribed sequence to selectively separate and collect samples of specified air contaminants.

"Solid particles" means particles of rigid shape and definite volume.

"Stack or chimney" means a flue, conduit or opening designed, constructed, and/or utilized for the purpose of emitting air contaminants into the outdoor air.

"Standard conditions" means or shall be 70 degrees Fahrenheit and one atmosphere pressure (14.7 psia or 760 mm Hg).

7:27–4.2 Standards for the emission of particles

(a) No person shall cause, suffer, allow or permit particles arising from the combustion of fuel to be emitted from any stack or chimney into the outdoor air in excess of the maximum allowable emission rate set forth in the following table. For a heat input rate between any two consecutive rates shown, the maximum allowable emission rate shall be determined by interpolation:

Heat Input Rate (Millions of British Thermal Units per Hour)	Maximum Allowable Emission Rate (Pounds per Hour)
1	00.6
10	06
20	08
30	09
40	10
50	11
60	12
70	13
80	14
90	14.5
100	15
120	16.5
140	17.5
160	18.5
180	19.3
200	20
400	40
600	60
800	80
1,000	100
2,000	200
3,000	300
4,000	400
5,000	500
6,000	600
7,000	700
8,000	800
10,000	1,000

Note: Heat input rate shall be the sum of the heat input rates of all fuel burning equipment discharging through a single stack or chimney.

7:27-4.3 Performance test principle

(a) For purposes of measuring emissions in accordance with the provisions of this subchapter, particles shall be drawn by isokinetic procedures from the stack or chimney and the weight of the particles determined gravimetrically after removal of uncombined water.

(b) The measured emission weight shall be the combined weight of all particles collected and analyzed in accordance with the sampling and analytical procedures set forth in N.J.A.C. 7:27B-1.1 et seq.

7:27-4.4 Emission tests

(a) Any person responsible for the emission of particles, arising from the combustion of fuel shall, when requested by the department, provide such sampling facilities exclusive of instrumentation and sensing devices as may be necessary for the department to determine the rate at which the particles are or may be discharged from the fuel burning operation.

(b) During such testing by the department, the fuel burning operation shall be operated under normal, routine operating conditions or under such other conditions within the capacity of the equipment as may be requested by the department.

(c) The facilities may be either permanent or temporary, at the discretion of the person responsible for their provision, and shall conform to all applicable laws and regulations concerning safe construction and safe practice.

7:27-4.5 (Reserved)

Repealed by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
Section was "Permit to construct, install or alter certificate to operate".

7:27-4.6 Exceptions

(a) The provisions of this subchapter shall not apply:

1. When the heat input rate to the fuel burning equipment is less than 1,000,000 British Thermal Units per hour;

2. To marine installations, vehicles or other movable or portable equipment;

3. To direct heat exchangers.

SUBCHAPTER 5. PROHIBITION OF AIR POLLUTION

Subchapter Historical Note

Unless otherwise expressly noted, all provisions of this subchapter were adopted pursuant to authority of N.J.S.A. 26:2C-1 et seq. and were filed and became effective prior to September 1, 1969. Revisions to this subchapter were filed on August 5, 1977, as R.1977 d.284 to become effective on October 12, 1977. See: 8 N.J.R. 375(a), 9 N.J.R. 420(a). Petition for Rulemaking: Petition to amend provisions regarding public entity odor violations; petition denied. See: 24 N.J.R. 1642(c), 24 N.J.R. 1907(c), 24 N.J.R. 3764(b).

7:27-5.1 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings unless the context clearly indicates otherwise.

"Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants in such quantities and duration as are, or tend to be, injurious to human health or welfare, animal or plant life or property, or would unreasonably interfere with the enjoyment of life or property throughout the State and in such territories of the State as shall be affected thereby and excludes all aspects of employer-employee relationship as to health and safety hazards.

"Economic poisons" means those chemicals used as insecticides, rodenticides, fungicides, herbicides, nematocides or defoliants.

Law Review and Journal Commentaries

Defending Odor Lawsuits Takes a Nose for Nuisance. Albert I. Telsey, 134 N.J.L.J. No. 9, S14 (1993).

7:27-5.2 General provisions

(a) Notwithstanding compliance with other subchapters of this chapter, no person shall cause, suffer, allow or permit to be emitted into the outdoor atmosphere substances in quantities which shall result in air pollution as defined herein.

(b) The provisions of subsection (a) of this section shall not apply to the use of economic poisons.

Public Notice: Air Pollution Investigation Guidelines.
See: 28 N.J.R. 198(a).

Law Review and Journal Commentaries

Defending Odor Lawsuits Takes a Nose for Nuisance. Albert I. Telsey, 134 N.J.L.J. No. 9, S14 (1993).

Case Notes

Swimming pool chemical company failed to meet duty to ensure that hazardous substances stored on property did not escape in a manner harmful to the public when a fire of unknown origin occurred resulting in the release of chemicals into the air and there was no one stationed at plant to alert authorities when the fire erupted. New Jersey Dept. of Environmental Protection v. Alden Leeds, Inc., 153 N.J. 272, 708 A.2d 1161 (N.J. 1998).

Release of air pollutants into outdoor atmosphere during course of fire of unknown origin rendered manufacturer strictly liable. Department of Environmental Protection v. Leeds, 95 N.J.A.R.2d (EPE) 137.

Peach orchard owner was not entitled to air pollution exemption under New Jersey Right to Farm Act. Department of Environmental Protection v. Smith Brokers, Inc. 93 N.J.A.R.2d (EPE) 149.

Wind-blown sand was air contaminant; activities of sand company resulted in air pollution. Division of Environmental Quality v. McCormack Aggregates, 93 N.J.A.R.2d (EPE) 37.

Evidence proved air pollution from sewage plant; penalty assessed. Division of Environmental Quality v. Township of Cedar Grove, 92 N.J.A.R.2d (EPE) 252.

operations, and other operations that are located on a single site or on contiguous or adjacent sites and that are under common control of the same person or persons.

"Facility-wide permit" means a single permit issued by the Department to the owner or operator of a priority industrial facility incorporating the permits, certificates, registrations, or any other relevant Department approvals previously issued to the owner or operator of the priority industrial facility pursuant to the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., the Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq., and the appropriate provisions of the Pollution Prevention Plan prepared by the owner or operator of the priority industrial facility pursuant to N.J.S.A. 13:1D-41 and 42. This term shall have the same meaning as defined for the term "facility-wide permit" at N.J.A.C. 7:1K-1.5; if there is any conflict between the definition at N.J.A.C. 7:1K-1.5 and this one, the definition at N.J.A.C. 7:1K-1.5 shall control.

"Farm" means any land which meets the eligibility requirements of the Farmland Assessment Act of 1964 (N.J.S.A. 54:4-23.1 et seq.) for land deemed in agricultural use.

"Federally enforceable" means any limitation or condition on operation, production, or emissions which can be enforced by the EPA. These limitations and conditions that can be enforced by EPA include, but are not limited to, those established pursuant to:

1. Any standard of performance for new stationary sources (NSPS) promulgated at 40 CFR Part 60 or promulgated under 42 U.S.C. § 7411;

2. Any national emission standard for hazardous air pollutants (NESHAP) promulgated at 40 CFR Part 61, 40 CFR Part 63, or promulgated under 42 U.S.C. § 7412;

3. Any standard or other requirement provided for in a SIP that has been approved by EPA, or promulgated through rulemaking by EPA; or

4. Any permit or order issued pursuant to requirements established at 40 CFR 51, Subpart I (including any preconstruction permit and certificate issued pursuant to N.J.A.C. 7:27-8 or any operating permit issued pursuant to N.J.A.C. 7:27-22); 40 CFR 52.21; 40 CFR Part 70; 40 CFR Part 71; or 40 CFR Part 72.

"Former DER credit user" means one who used Discrete Emission Reduction (DER) credits in the three years immediately preceding August 4, 2003 in compliance with the Open Market Emissions Trading Program rules then promulgated at N.J.A.C. 7:27-30 to satisfy the requirements of N.J.A.C. 7:27-16 or 19.

"Fuel cell system" means an electrochemical device that converts the chemical energy in its fuel directly into electricity and heat. This term also includes any associated fuel processor, such as a reformer, that produces the fuel.

"Gasoline dispensing facility" means a facility consisting of one or more stationary gasoline storage tanks together with dispensing devices used to fill vehicle fuel tanks.

"General permit" means a type of standardized permit and certificate, issued by the Department under N.J.A.C. 7:27-8.8.

"Graphic arts operation" means the application of one or more surface coating formulations non-uniformly across a surface, using one or more printing units, together with any associated drying or curing areas. A single graphic arts operation ends after drying or curing and before other surface coating formulations are applied. For any web line, this term means an entire application system, including any associated drying ovens or areas between the supply roll and take-up roll or folder. This term does not include any surface coating operation.

"Greenhouse gas" or "GHG" means any of the following gases: carbon dioxide (CO_2); methane (CH_4); nitrous oxide (N_2O); certain hydrofluorocarbons (HFC-23, HFC-125, HFC-134a, HFC-143a, HFC-152a, HFC-227ea, HFC-236fa, HFC-4310mee); certain perfluorocarbons (CF_4, C_2F_6, C_4F_{10}, C_6F_{14}); and sulphur hexafluoride (SF_6).

"Group 1 TXS" means an air contaminant that is found on the list of Group 1 TXS at N.J.A.C. 7:27-17.3, which is incorporated by reference herein, together with all amendments and supplements. As of June 12, 1998, the following is the complete list of Group 1 TXS: Benzene (Benzol), Carbon tetrachloride (Tetrachloromethane), Chloroform (Trichloromethane), Dioxane (1,4-Diethylene dioxide; 1,4-Dioxane), Ethylenimine (Aziridine), Ethylene dibromide (1,2-Dibromoethane), Ethylene dichloride (1,2-Dichloroethane), 1,1,2,2-Tetrachloroethane (sym Tetrachloroethane), Tetrachloroethylene (Perchloroethylene), 1,1,2-Trichloroethane (Vinyl trichloride), and Trichloroethylene (Trichlorethene).

"Group 2 TXS" means an air contaminant that is found on the list of Group 2 TXS at N.J.A.C. 7:27-17.3, which is incorporated by reference herein, together with all amendments and supplements. As of June 12, 1998, the following is the complete list of Group 2 TXS: Methylene chloride (Dichloromethane), 1,1,1-Trichloroethane (Methyl chloroform).

"Hazardous air pollutant" or "HAP" means an air contaminant listed in or pursuant to 42 U.S.C. § 7412(b).

"Hazardous waste" means those materials defined as hazardous waste under N.J.A.C. 7:26-8.

"Hazardous waste landfill" means a solid waste facility or part of a facility where hazardous waste is placed in or on land and which is not a land treatment facility, a surface impoundment, an injection well, or a waste pile.

"Identical" means, in relation to the replacement of equipment or control apparatus, that the equipment or control apparatus is of the same type and size as the equipment or control apparatus being replaced, and is used in the same process, with the same materials.

"Incinerator" means any device, apparatus, equipment, or structure using combustion or pyrolysis for destroying, reducing or salvaging any material or substance, but does not include thermal or catalytic oxidizers used as control apparatus on manufacturing equipment.

"Indirect emissions" means a discharge of any air contaminant into the outdoor atmosphere through any opening that is not a stack or chimney directly connected to the equipment.

"Insignificant source" means, for the purposes of this subchapter, any equipment or source operation that does not need a permit and certificate under N.J.A.C. 7:27-8.2.

"Install" or "installation" means to carry out final setup activities necessary to provide equipment or control apparatus with the capacity for use or service. This term includes, but is not limited to, connection of equipment or control apparatus, associated utilities, piping, ductwork or conveyor systems. This term does not include construction, as defined above, nor the reconfiguration of equipment or control apparatus to an alternate configuration specified in a permit application and approved by the Department. This term includes relocation of existing equipment or control apparatus.

"Intermediate product" means one or more desired results of a production process that is made into a product in a subsequent production process at the same industrial facility, without the need for pollution treatment prior to its being made into a product. An intermediate product is not considered nonproduct output. Increases in quantities of intermediate products do not count towards use reduction or nonproduct output reduction goals. This term shall have the same meaning as defined for the term "intermediate product" at N.J.A.C. 7:1K-1.5; if there is any conflict between the definition at N.J.A.C. 7:1K-1.5 and this one, the definition at N.J.A.C. 7:1K-1.5 shall control.

"Laboratory operations" means any action, process, or treatment utilizing chemical, physical, or biological factors to conduct experimental research, tests, or demonstrations.

"Land treatment facility" means a facility, or part of a facility, at which waste is applied onto or incorporated into the soil surface so as to change the physical, chemical, or biological characteristics or composition of the waste.

"Liquid particles" means particles which have volume but are not of rigid shape.

"MACT standard" or "Maximum Achievable Control Technology standard" means a National Emission Standard for a Hazardous Air Pollutant (NESHAP) establishing an emission limitation for a specific category or subcategory of facilities which emit one or more hazardous air pollutants (HAPs), which NESHAP is:

1. Promulgated by EPA pursuant to 42 U.S.C. § 7412; or

2. Determined by the Department on a case-by-case basis pursuant to 42 U.S.C. § 7412(g) or (j).

"Major facility" means a facility which has the potential to emit any of the air contaminants listed below in an amount which is equal to or exceeds the applicable major facility threshold level given below. The major facility threshold levels are as follows:

Air contaminant	Major Facility Threshold Level
Carbon monoxide	100 tons per year
PM-10	100 tons per year
TSP	100 tons per year
Sulfur dioxides	100 tons per year
NO_x	25 tons per year
VOC	25 tons per year
Lead	10 tons per year
Any HAP	10 tons per year
All HAPs, collectively	25 tons per year
Any other air contaminant except CO_2	100 tons per year

"Manufacturing process" means any action, operation or treatment embracing chemical, industrial, manufacturing, or processing factors, methods or forms including, but not limited to, furnaces, kettles, ovens, converters, cupolas, kilns, crucibles, stills, dryers, roasters, crushers, grinders, mixers, reactors, regenerators, separators, filters, reboilers, columns, classifiers, screens, quenchers, cookers, digesters, towers, washers, scrubbers, mills, condensers or absorbers.

"Microturbine" means a combustion turbine with output of 25 kW to 500 kW.

"Modify" or "modification" means any physical change in, or change in the method of operation of, existing equipment or control apparatus that increases the amount of actual emissions of any air contaminant emitted by that equipment or control apparatus or that results in the emission of any air contaminant not previously emitted. This term shall not include normal repair and maintenance. Also, for the purposes of this definition, "air contaminant" shall have the meaning of "category of air contaminants" in a case where the regulatory limit is placed on a grouping of contaminants (such as VOCs) rather than on a single species of contaminant.

"National ambient air quality standard" or "NAAQS" means an ambient air quality standard promulgated at 40 CFR 50.

"NESHAP" means a National Emission Standard for a Hazardous Air Pollutant as promulgated under 40 CFR Part 61 or 40 CFR Part 63.

Amended by R.1985 d.96, effective March 4, 1985 (operative April 5, 1985).
See: 16 N.J.R. 167(a), 17 N.J.R. 587(a).
Substantially amended.
Amended by R.1991 d.109, effective March 4, 1991 (operative March 31, 1991).
See: 22 N.J.R. 292(a), 22 N.J.R. 593(a), 23 N.J.R. 723(a).
Definitions added and technical revisions made.
Amended by R.1992 d.102, effective March 2, 1992 (operative March 28, 1992).
See: 23 N.J.R. 1858(b), 24 N.J.R. 792(a).
Amended "source operation" and "surface cleaner"; added "volatile organic compound VOC" and deleted "mathematical combination" and "volatile organic substance".
Amended by R.1993 d.129, effective March 15, 1993 (operative April 20, 1993).
See: 24 N.J.R. 3459(a), 25 N.J.R. 1231(b).
Added definitions for "carbon monoxide", "federally enforceable", "lead or Pb", "major facility", "oxides of nitrogen or NO_x", "Ozone or O_3", "PM-$_{10}$", "potential to emit", "significant net emission increase", "State implementation plan (SIP)", "sulfur dioxide or SO_2", and "total suspended particulate matter or TSP".
Amended by R.1993 d.428, effective September 7, 1993 (operative October 4, 1993).
See: 24 N.J.R. 4323(a), 25 N.J.R. 4075(b).
Amended by R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Amended by R.1994 d.502, effective October 3, 1994 (operative October 31, 1994).
See: 25 N.J.R. 3963(a), 25 N.J.R. 4836(a), 26 N.J.R. 793(a), 26 N.J.R. 3943(b).
Administrative Correction.
See: 27 N.J.R. 1406(a).
Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
Rewrote the section.
Administrative change.
See: 31 N.J.R. 639(b).
Amended by R.1999 d.242, effective August 2, 1999 (operative August 31, 1999).
See: 30 N.J.R. 2396(a), 31 N.J.R. 2200(a).
Inserted "Fuel cell system".
Amended by R.1999 d.428, effective December 6, 1999 (operative January 8, 2000).
See: 30 N.J.R. 4003(a), 31 N.J.R. 4016(a).
In "Category I", added 5.
Amended by R.2000 d.204, effective May 15, 2000 (operative June 6, 2000).
See: 31 N.J.R. 1671(a), 32 N.J.R. 1808(a).
Rewrote "Greenhouse gas" definition as "Greenhouse gas" or "GHG"; and in "Potential to emit", inserted a new fifth sentence, and rewrote the last sentence.
Amended by R.2002 d.53, effective February 4, 2002 (operative March 12, 2002).
See: 33 N.J.R. 3290(a), 34 N.J.R. 756(a).
Rewrote the section.
Amended by R.2004 d.129, effective April 5, 2004 (operative April 25, 2004).
See: 35 N.J.R. 3486(a), 36 N.J.R. 1791(a).
Added "Former DER credit user"; in "Potential to emit", deleted the fifth sentence and rewrote the last sentence.
Amended by R.2005 d.343, effective October 17, 2005 (operative November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
Added definitions "Brake horsepower", "Energy and Environmental Technology Verification Act", "Microturbine", "Rated power output" and "Technology Acceptance and Reciprocity Partnership".
Amended by R.2005 d.392, effective November 21, 2005.
See: 36 N.J.R. 4607(a), 37 N.J.R. 16(b), 4415(a).
Deleted "carbon dioxide" from "Distillates of air" definition; added "except CO_2" to "Major facility" definition.
Amended by R.2006 d.212, effective June 19, 2006 (operative June 30, 2006).
See: 37 N.J.R. 4728(a), 38 N.J.R. 2691(b).
Added definitions "Application form", "On-specification used oil", "Probe", "Registrant", "Registration", "Registration form", "Renewal", "Renewal application stub", "Space heater" and "Used oil"; and deleted definitions "Category I" and "Category II".
Administrative correction.
See: 38 N.J.R. 5155(b).
Amended by R.2008 d.366, effective December 1, 2008 (operative December 29, 2008).
See: 39 N.J.R. 4492(a), 40 N.J.R. 6769(a).
Rewrote definition "Volatile organic compound".

Case Notes

Temporary operating certificate was license entitling operator to hearing prior to nonrenewal. New Jersey Dept. of Environmental Protection v. Atlantic States Cast Iron Pipe Co., 241 N.J.Super. 591, 575 A.2d 895 (A.D.1990).

7:27-8.2 Applicability

(a) This subchapter applies to certain sources of air contaminant emissions. Some of the sources are pieces of equipment; others are source operations or processes. A source that is required to have a permit and certificate under this subchapter is called a "significant source." A source that is not required to have a permit and certificate under this subchapter is called an "insignificant source."

(b) A significant source located at a facility covered by an operating permit issued by the Department under N.J.A.C. 7:27-22 is not subject to this subchapter. However, the following requirements apply to sources at operating permit facilities:

1. Until an operating permit is issued for a source subject to operating permit requirements, the source remains subject to this subchapter, and any permits or certificates required by this subchapter must be obtained and maintained.

2. If a new source which is subject to operating permit requirements elects under N.J.A.C. 7:27-22.5(g) to obtain a preconstruction permit and certificate under this subchapter prior to obtaining an operating permit, the source shall comply with this subchapter and with any Federal preconstruction requirements that apply; and

3. In some cases, a portion of an operating permit facility (such as a research and development operation) is not subject to operating permit requirements. In such a case, the portion of the facility that is not subject to operating permit requirements would remain subject to this subchapter.

(c) Any equipment or source operation that may emit one or more air contaminants, except carbon dioxide (CO_2), directly or indirectly into the outdoor air and belongs to one of the categories listed below, is a significant source (and therefore requires a preconstruction permit and an operating certificate), unless it is exempted from being a significant source pursuant to (d) or (e) below:

1. Commercial fuel burning equipment, except for a source listed in (c)21 below, that has a maximum rated heat input of 1,000,000 BTU per hour or greater to the burning chamber, including emergency generators;

2. Any source operation of equipment that has the potential to emit any Group 1 or Group 2 TXS (or a combination thereof) at a rate greater than 0.1 pounds per hour (45.4 grams per hour);

3. Dry cleaning equipment;

4. A surface cleaner which uses a cleaning solution containing five percent or more VOCs, HAPs, or VOC and HAP combined and which is:

(2) Conducted a minimum of three consecutive one-hour test runs, in which the average of the test runs shall not exceed the emission limits stated at (f)1i and ii above; and

(3) Converted the results of each test run to pounds per megawatt hour before averaging.

iv. The Department may determine that the manufacturer's testing of a model of the equipment, under (f)2ii above, is not acceptable. The Department's basis for rejecting the manufacturer testing may include, but need not be limited to, inappropriate test methods, invalid test data, or test data that indicate emissions above the specified limits;

3. The owner or operator of the source shall have available on site a statement, certified in accordance with N.J.A.C. 7:27-1.39, by the responsible official, that the equipment or source operation meets all the criteria in (f)1 and 2 above. This certification shall be provided to the Department upon request; and

4. If the Department has reason to believe, as a result of an inspection or otherwise, that the equipment or a source operation is emitting NO_x above the specified limits, the Department, at its discretion, may require the owner or operator of the equipment or a source operation to submit the certified test report and/or supporting test data to the Department. The Department, at its discretion, may also require the owner or operator of a source to perform source emission testing in accordance with N.J.A.C. 7:27-8.4(f).

(g) Control apparatus serving a significant source shall be included in the preconstruction permit and operating certificate for the significant source.

(h) Although an insignificant source does not require a permit, emissions information from an insignificant source may be required on an application under N.J.A.C. 7:27-8.4 if the insignificant source vents to a control device, stack or chimney which also serves a significant source.

(i) A permit and certificate are not required for equipment, control apparatus, or a source operation at a facility which is covered by a facility-wide permit issued by the Department pursuant to N.J.S.A 13:1D-35 et seq. However, the holder of the facility-wide permit must comply with N.J.A.C. 7:27-8.27, Special facility-wide permit provisions.

(j) This subchapter shall not preclude the owner or operator of a facility from voluntarily obtaining a preconstruction permit and operating certificate for a source not otherwise required to obtain a permit.

Amended by R.1985 d.96, effective March 4, 1985 (operative April 5, 1985).
See: 16 N.J.R. 1671(a), 17 N.J.R. 587(a).
Substantially amended.
Amended by R.1991 d.109, effective March 4, 1991 (operative March 31, 1991).
See: 22 N.J.R. 292(a), 22 N.J.R. 593(a), 23 N.J.R. 723(a).
Heading changed from "Permits and certificates required" to "Applicability".
Clarification of types of equipment and control apparatus reported in permit and certificate process.
Added (a)17, (b)1 and 2.
Amended by R.1992 d.102, effective March 2, 1992 (operative March 28, 1992).
See: 23 N.J.R. 1858(b), 24 N.J.R. 792(a).
VOC parameters added at (a)9 and (a)15i.
Amended by R.1994 d.502, effective October 3, 1994 (operative October 31, 1994).
See: 25 N.J.R. 3963(a), 25 N.J.R. 4836(a), 26 N.J.R. 793(a), 26 N.J.R. 3943(b).
Administrative change in (a)15.
See: 26 N.J.R. 4184(a).
Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
Rewrote the section.
Amended by R.1999 d.242, effective August 2, 1999 (operative August 31, 1999).
See: 30 N.J.R. 2396(a), 31 N.J.R. 2200(a).
In (d), added 11.
Amended by R.1999 d.428, effective December 6, 1999 (operative January 8, 2000).
See: 30 N.J.R. 4003(a), 31 N.J.R. 4016(a).
Rewrote (c)13.
Amended by R.2002 d.53, effective February 4, 2002 (operative March 12, 2002).
See: 33 N.J.R. 3290(a), 34 N.J.R. 756(a).
Rewrote (c) and (d); added new (e) and (f); recodified existing (e) through (g) as (g) through (i).
Amended by R.2005 d.343, effective October 17, 2005 (operative November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
In (c), deleted "or" preceding "(e)" and added "or (f)" following "(e)"; in (c)1, added ", except for a source listed in (c)21 below," and ", including emergency generators"; in (c)19ii(4), deleted "and"; substituted "; and" for "." at the end of (c)20, and added (c)21; rewrote (d); added (f); recodified former (f)-(i) as (g)-(j).
Amended by R.2005 d.392, effective November 21, 2005.
See: 36 N.J.R. 4607(a), 37 N.J.R. 16(b), 4415(a).
Added ", except carbon dioxide (CO_2)," to introductory paragraph of (c).
Amended by R.2006 d.212, effective June 19, 2006 (operative June 30, 2006).
See: 37 N.J.R. 4728(a), 38 N.J.R. 2691(b).
Substituted "; and" for a period at the end of (d)13; and added (d)14.
Administrative correction.
See: 38 N.J.R. 5155(b).

Case Notes

Orders to cease violation in failure to obtain a permit and certificate to install and operate furnace boosting equipment were upheld. Midland Glass Co., Inc. v. Dept. of Environmental Protection, 136 N.J.Super. 194, 345 A.2d 353 (App.Div.1975), certification dismissed 70 N.J. 152, 358 A.2d 199 (1976).

Both "smog hog"/electrostatic precipitator and "Binks" spray booth were control apparatus requiring permits and operating certificates. Affiliated Manufacturers, Inc. v. State of New Jersey, 92 N.J.A.R.2d (EPE) 186.

7:27-8.3 General provisions

(a) No person may construct, reconstruct, install, or modify a significant source or control apparatus serving the significant source without first obtaining a preconstruction permit under this subchapter.

(b) No person shall operate (nor cause to be operated) a significant source or control apparatus serving the significant source without a valid operating certificate.

(c) No permittee may take any action which requires a permit revision, compliance plan change, seven-day-notice change, amendment, or change to a batch plant permit, under any applicable provision at N.J.A.C. 7:27-8.17 through 8.23, without complying with that applicable provision.

(d) Any person holding a permit or certificate shall make said permit or certificate, together with any amendments, seven-day-notices, or other documents related to the permit and certificate, readily available for Department inspection on the operating premises.

(e) No person shall use or cause to be used any equipment or control apparatus unless all components connected or attached to, or serving the equipment or control apparatus, are functioning properly and are in use in accordance with the preconstruction permit and certificate and all conditions and provisions thereto.

(f) A preconstruction permit or certificate shall not be transferable either from the location authorized in the preconstruction permit or certificate in effect to another location, or from any one piece of control apparatus or equipment to another piece of control apparatus or equipment.

(g) Once a permit and certificate is issued, the permittee is fully responsible for compliance with this subchapter and with the permit and certificate, including adequate design, construction, and operation of the source, even if employees, contractors, or others work on or operate the permitted source. If the Department issues any other requirement with the force of law, such as an order, which applies to the source, the permittee is also responsible for compliance with that requirement.

(h) Preconstruction permits and certificates issued under this subchapter do not in any way relieve the applicant from the obligation to obtain necessary permits from other governmental agencies and to comply with all other applicable Federal, State, and local rules and regulations.

(i) A person conducting only normal repair or maintenance of control apparatus or equipment, as defined at N.J.A.C. 7:27-8.1, need not comply with (a), (b) or (c) above.

(j) No person holding any preconstruction permit or certificate shall suffer, allow, or permit any air contaminant, including an air contaminant detectable by the sense of smell, to be present in the outdoor atmosphere in such quantity and duration which is, or tends to be, injurious to human health or welfare, animal or plant life or property, or would unreasonably interfere with the enjoyment of life or property. This shall not include an air contaminant which occurs only in areas over which the owner or operator has exclusive use or occupancy. In determining whether an odor unreasonably interferes with the enjoyment of life or property, the Department shall consider all of the relevant facts and circumstances, including, but not limited to, the character, severity, frequency, and duration of the odor, and the number of persons affected thereby. In considering these and other relevant facts and circumstances, no one factor shall be dispositive, but each shall be considered relevant in determining whether an odor interferes with the enjoyment of life or property, and, if so, whether such interference is unreasonable considering all of the circumstances.

(k) (Reserved)

(*l*) (Reserved)

(m) The Department and its representatives have the right to enter and inspect any facility or property in accordance with N.J.A.C. 7:27-1.31.

(n) There shall be an affirmative defense to liability for penalties for a violation of a preconstruction permit or certificate, occurring as a result of an equipment malfunction, an equipment startup, an equipment shutdown, or during the performance of necessary equipment maintenance. The affirmative defense shall be asserted and established as required by P.L. 1993, c.89 (adding N.J.S.A. 26:2C-19.1 through 2C-19.5) and any rules that the Department promulgates thereunder, and shall meet all of the requirements thereof. There shall also be an affirmative defense to liability for penalties or other sanctions for noncompliance with any technology based emission limitation in the preconstruction permit or certificate, if the noncompliance was due to an emergency as defined at N.J.A.C. 7:27-22.1, provided that the affirmative defense is asserted and established in compliance with 40 CFR 70.6(g) and meets all the requirements thereof.

(*o*) On and after April 25, 2004, no permittee may use DER credits to comply with a VOC or NO_x permit limit established pursuant to this subchapter. Notwithstanding (c) above, a former DER credit user who used DER credits to comply with a NO_x RACT limit established pursuant to N.J.A.C. 7:27-19 and who would continue to require the use of DER credits to comply with that limit, may, on and after April 25, 2004 use NO_x budget allowances, as defined by the provisions of N.J.A.C. 7:27-31, to comply with that NO_x RACT limit provided that:

1. The use of such NO_x budget allowances conforms with the requirements at N.J.A.C. 7:27-19.27; and

2. The permittee files a seven-day-notice as provided at N.J.A.C. 7:27-8.20.

Amended by R.1985 d.96, effective March 4, 1985 (operative April 5, 1985).
See: 16 N.J.R. 1671(a), 17 N.J.R. 587(a).
Substantially amended.
Amended by R.1991 d.109, effective March 4, 1991 (operative March 31, 1991).
See: 22 N.J.R. 292(a), 22 N.J.R. 593(a), 23 N.J.R. 723(a).
Replaced (b) and (c). Added (j).
Clarification of procedural requirements for permit process.
Amended by R.1993 d.129, effective March 15, 1993 (operative April 20, 1993).
See: 24 N.J.R. 3459(a), 25 N.J.R. 1231(b).
New subsection (k) added.

Amended by R.1993 d.428, effective September 7, 1993 (operative October 4, 1993).
See: 24 N.J.R. 4323(a), 25 N.J.R. 4075(b).
Amended by R.1994 d.502, effective October 3, 1994 (operative October 31, 1994).
See: 25 N.J.R. 3963(a), 25 N.J.R. 4836(a), 26 N.J.R. 793(a), 26 N.J.R. 3943(b).
Public Notice: Temporary enforcement response policy and permit amnesty program.
See: 26 N.J.R. 4225(b).
Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
Rewrote the section.
Amended by R.2000 d.204, effective May 15, 2000 (operative June 6, 2000).
See: 31 N.J.R. 1671(a), 32 N.J.R. 1808(a).
In (k), inserted "approval by the Department of a" following "No" in the first sentence, and changed N.J.A.C. reference in the second sentence; rewrote (l); and added (o).
Amended by R.2002 d.53, effective February 4, 2002 (operative March 12, 2002).
See: 33 N.J.R. 3290(a), 34 N.J.R. 756(a).
In (a), substituted "or control apparatus serving the significant source" for "that is not covered by a permit and certificate"; in (b), inserted "or control apparatus serving the significant source" preceding "without".
Amended by R.2004 d.129, effective April 5, 2004 (operative April 25, 2004).
See: 35 N.J.R. 3486(a), 36 N.J.R. 1791(a).
Reserved (k) and (l); rewrote (o).

Law Review And Journal Commentaries

New Rules Establish Clean Air Act Standards, 132 N.J.L.J. No. 8, S10 (1992).

State Operating Permits Bring Major changes to New Jersey's Air Pollution Control Program. Paul H. Schneider, Peter L. Benza, 160 N.J.Law. 20 (Mag.) (April 1994).

Case Notes

Temporary operating certificate was license entitling operator to hearing prior to nonrenewal. New Jersey Dept. of Environmental Protection v. Atlantic States Cast Iron Pipe Co., 241 N.J.Super. 591, 575 A.2d 895 (A.D.1990).

Orders to cease violation of failure to obtain a permit and certificate to install and operate furnace boosting equipment were upheld. Midland Glass Co., Inc. v. Dept. of Environmental Protection, 136 N.J.Super. 194, 345 A.2d 353 (App.Div.1975), certification dismissed 70 N.J. 152, 358 A.2d 199 (1976).

Permit requirement for structural changes. D.E.P. v. Midland Glass Co., 145 N.J.Super. 108, 366 A.2d 1343 (App.Div.1976), certification denied 73 N.J. 65, 372 A.2d 330 (1977).

Failure to fulfill stack testing conditions set forth in permits for asphalt plants warranted imposition of civil penalties. Department of Environmental Protection v. Hamilton, 95 N.J.A.R.2d (EPE) 63

Violations of Solid Waste Management Act warranted imposition of civil penalties totaling $204,400. Department of Environmental Protection v. Standard Tank Cleaning, 95 N.J.A.R.2d (EPE) 31.

Incineration company violated permit and certificate; penalties imposed based upon current regulations. New Jersey Department of Environmental Protection v. Trofe Incineration Inc. 93 N.J.A.R.2d (EPE) 177.

Storage of hazardous chemical and use of reactor without proper permit; penalty. Department of Environmental Protection, Div. of Environmental Quality v. Polymer Systems Corp., 93 N.J.A.R.2d (EPE) 133.

Perforation of gasoline pump nozzle "vapor boot"; air pollution penalty assessed. New Jersey Department of Environmental Protection v. Columbus Texaco, 92 N.J.A.R.2d (EPE) 235.

Both "smog hog"/electrostatic precipitator and "Binks" spray booth were control apparatus requiring permits and operating certificates. Affiliated Manufacturers, Inc. v. State of New Jersey, 92 N.J.A.R.2d (EPE) 186.

Use of temporary certificate application as emissions limitations under certificate was not improper; stack tests established violations. U.S. Intec., Inc. v. Department of Environmental Protection, 92 N.J.A.R.2d (EPE) 167.

Attaching control apparatus to ovens and kilns without appropriate permit constituted air pollution violation; penalty imposed. Certech, Inc. v. Division of Environmental Quality, 92 N.J.A.R.2d (EPE) 21.

7:27-8.4 How to apply, register, submit a notice, or renew

(a) This subchapter applies to:

1. Application for a preconstruction permit and operating certificate;

2. Application for a preconstruction permit and operating certificate for an environmental improvement pilot test;

3. Application for a preconstruction permit and operating certificate revision;

4. Application for a compliance plan change;

5. Registration of one or more sources under a general permit;

6. Registration of one of more used oil space heaters;

7. Notice of a seven-day-notice change;

8. Notice of an amendment to a preconstruction permit and operating certificate;

9. Notice of an amendment to a preconstruction permit and operating certificate for an environmental improvement pilot test;

10. Notice of an amendment to a registration;

11. Renewal of an operating certificate; and

12. Renewal of a registration.

(b) The actions listed at (a)1 through 12 above shall be submitted in accordance with (c) below on forms obtained from the Department. These forms, and information about these actions, may be obtained in the following ways:

1. In paper form, by contacting the Department at:

Bureau of Preconstruction Permits
Air Quality Permitting Element
Division of Air Quality
Department of Environmental Protection
401 East State Street, Second Floor
PO Box 027

Trenton, New Jersey 08625-0027
Telephone: (609) 292-6716 or 1-800-441-0065
Website: http://www.state.nj.us/dep/aqpp; or

2. In electronic form, through the Department's Remote AIMS Data Input User System (RADIUS) or Electronic New Jersey Environmental Management System (e-NJEMS), which can be accessed through the Department's website at the address in (b)1 above.

(c) A completed electronic or paper application form, registration form, notice or renewal application stub and renewal fee payment shall be submitted as follows:

1. Prior to January 1, 2008, a completed application form or notice shall be submitted to the Department on paper in accordance with (c)6 below, electronically other than via the Internet in accordance with (c)6 below, or electronically via the Internet, if available, in accordance with (c)7 below.

2. On or after January 1, 2008, a completed application form or notice shall be submitted to the Department electronically other than via the Internet in accordance with (c)6 below, or electronically via the Internet, if available, in accordance with (c)7 below.

3. Prior to January 1, 2010, a completed registration form shall be submitted to the Department on paper in accordance with (c)6 below, electronically other than via the Internet in accordance with (c)6 below, or electronically via the Internet, if available, in accordance with (c)7 below.

4. On or after January 1, 2010, a completed registration form shall be submitted to the Department electronically via the Internet, if available, in accordance with (c)7 below.

5. A completed renewal application stub and renewal fee payment shall be submitted on paper in accordance with (c)6 below, electronically other than via the Internet in accordance with (c)6 below, or electronically via the Internet in accordance with (c)7 below, and in accordance with all other rules in this subchapter regarding renewals including, but not limited to, N.J.A.C. 7:27-8.4(a), (f) and (n); 8.7(e) and (f); 8.13(b)1 and 2; 8.14(d); and 8.16(a)5.

6. A submission on paper, or on a removable electronic medium using one of the non-Internet-based electronic methods listed at http://www.state.nj.us/dep/aqpp, shall be sent via the postal service, a delivery service, or otherwise delivered, to the address listed on the application form, registration form, renewal application stub or listed in the non-Internet-based electronic method. If a person wishes to document the date upon which a completed application form, registration form, notice or renewal application stub and renewal fee payment is submitted, the person may submit the application form, registration form, notice or renewal application stub and renewal fee payment in a way that will provide documentation of the submittal date, such as by certified mail.

7. An Internet-based electronic submission shall be through an Internet-based electronic method listed at http://www.state.nj.us/dep/aqpp. If a person wishes to document the date of the Internet-based electronic submission, the person may print the appropriate website confirmation screen.

(d) An application, registration or notice shall contain such details regarding the equipment or control apparatus as necessary to determine that the equipment or control apparatus is designed to operate without causing a violation of any relevant State or Federal laws or regulations. In addition, if a source is required to document advances in the art of air pollution control (or SOTA) under N.J.A.C. 7:27-8.11, Standards for issuing a permit, the Department shall require information necessary to determine compliance with the SOTA requirement in accordance with N.J.A.C. 7:27-8.12, State of the art. Information required under this subsection may include description of processes, raw materials used, operating procedures, physical and chemical nature of any air contaminant, volume of gas discharged, and such other information as the Department considers necessary.

(e) All information submitted to the Department shall be public information except that which is designated confidential in accordance with N.J.S.A. 26:2C-9.2 and N.J.A.C. 7:27-1. To claim information submitted as part of an application, registration or notice as confidential information, the applicant shall clearly mark the information as required at N.J.A.C. 7:27-1.6. The Department shall handle the confidentiality claim in accordance with N.J.A.C. 7:27-1.6 through 1.30.

(f) Before an operating certificate, or any renewal thereof, is approved, the Department may require the applicant to conduct such testing as is necessary, at the discretion of the Department, to verify that the kind and amount of air contaminants emitted from the equipment or control apparatus are in compliance with the limits established in the preconstruction permit and certificate and that only the air contaminants approved in the preconstruction permit are being emitted. If such testing is required, the applicant shall:

1. Submit a source-specific testing protocol to the Department, if such a protocol is required in the conditions of approval of the preconstruction permit or certificate. The protocol shall be submitted at least 60 days prior to the anticipated date of the testing, except where the Department determines that a different submittal date is needed to allow for adequate testing;

2. Obtain approval of any required source-specific testing protocol from the Department in advance of conducting the testing;

3. Conduct the testing in accordance with a standard testing procedure acceptable to the Department or the approved source-specific testing protocol approved in advance by the Department;

7:27-8.19 Compliance plan changes

(a) The following actions require prior Department approval of a compliance plan change:

1. A decrease in the frequency of testing, monitoring, recordkeeping or reporting, to below the frequency specified in the permit and certificate;

2. A change in monitoring method;

3. A change in a level, rate, or limit for an operational parameter if:

i. The change would cause the source to operate outside of the range set by the permit for that parameter;

ii. The parameter is required under the permit and certificate to be tested, monitored, recorded, or reported to the Department; and

iii. The level, rate, or limit is not an emission limit; and

4. A reduction in a source's potential to emit, through any of the actions listed at i through iii below. The permittee may take these actions without contacting the Department, but the reduction in potential to emit does not take effect until the Department approves the compliance plan change, making the emission decrease Federally enforceable. Until Department approval, the source's potential to emit remains unchanged. The following types of actions may be taken to reduce potential to emit under this paragraph:

i. A decrease in a maximum allowable emission rate;

ii. A decrease in maximum allowable hours of operation per time period (number of batches per time period for batch operations); or

iii. A decrease in maximum allowable production rate (production amount per batch for batch operations).

(b) The applicant may not proceed with a compliance plan change until the Department issues a written approval of the change, except for emission decreases that are not reflected in a change to a source's potential to emit made under (a)4 above.

New Rule, R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).

7:27-8.20 Seven-day-notice changes

(a) A seven-day-notice change allows a permittee to proceed with a change seven days after the notice of the seven-day-notice change is submitted to the Department. A person acting under the authority of a seven-day-notice change does so at risk. Should the Department determine that an action was incorrectly processed as a seven-day-notice change, and should have been processed as a compliance plan change or permit revision, the permittee may be subject to penalties for noncompliance with this subchapter.

(b) A seven-day-notice may be used for the following:

1. A change made to a permitted source which meets all three of the following requirements:

i. The action is a physical or operational change that is outside the scope of activities allowed by the permit;

ii. The action has the potential to result in an increase in actual emissions, but will not increase emissions over the allowable limits in the permit and certificate; and

iii. The action will not alter stack parameters or characteristics so as to cause the ground level concentration of an air contaminant to increase in that portion of the atmosphere, external to buildings, to which the general public has access;

2. Notice indicating that an applicant plans to act at risk under the authority of N.J.A.C. 7:27-8.24 or 8.25; or

3. Notice of intent to use NO_x budget allowances, as defined by the provisions of N.J.A.C. 7:27-31, by a former DER credit user to comply with a NO_x RACT limit in accordance with N.J.A.C. 7:27-19.27. A notice of intent to use NO_x budget allowances shall be filed at least seven days before the start of the calendar quarter for which the NO_x budget allowances are to be used.

(c) A permittee shall submit a seven-day-notice for construction or installation of a new insignificant source (as defined at N.J.A.C. 7:27-8.1), if the emissions from the insignificant source shall be released through the same control device as emissions from an existing, permitted significant source.

(d) A permittee shall not under (b)1 above use a seven-day-notice for a change which shall:

1. Result in emissions exceeding permit limits; or

2. Result in emission of a new air contaminant at a level which would cause the source's potential to emit to exceed reporting thresholds in Table A or B in Appendix 1.

(e) The Department shall separately evaluate each change submitted under (b)1 above to determine its effect on actual emissions. If a change, evaluated alone, would cause an increase in actual emissions (but not to a level over permit allowables), it shall be processed through a seven-day-notice, regardless of whether other, simultaneous changes might reduce emissions to compensate for the increase. For example, if a permittee plans two changes, one increasing emissions (but not to a level over permit allowables), and one reducing emissions by the same amount, the change which increases emissions shall be processed through a seven-day-notice. Similarly, the Department shall separately evaluate

each change submitted under (b)1 above to determine its effect on allowable emissions. If a change, evaluated alone, would cause a permit limit to be exceeded, it may not be processed through a seven-day-notice, regardless of whether other, simultaneous changes might reduce emissions to compensate for the increase. For example, if a permittee plans two changes, one increasing emissions over a permit limit, and one reducing emissions by the same amount, the change which increases emissions may not be processed through a seven-day-notice. Instead, the change shall be submitted as a permit revision under N.J.A.C. 7:27-8.18.

(f) The Department shall send an acknowledgment when it receives a notice of a seven-day-notice change. However, the acknowledgment only indicates the date upon which the Department received the notice. It does not mean that the Department has reviewed or approved the notice. Therefore, if the notice is incomplete or deficient, the Department's acknowledgment does not in any way relieve the owner or operator from liability for penalties for any unauthorized activities.

(g) If all of the requirements of this section are met, the permittee may begin the actions proposed in the notice of a seven-day-notice change starting seven days after the notice has been submitted to the Department.

(h) The permittee shall maintain a copy of each notice of a seven-day-notice change with the permit and certificate maintained at the facility.

New Rule, R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
Amended by R.2000 d.204, effective May 15, 2000 (operative June 6, 2000).
See: 31 N.J.R. 1671(a), 32 N.J.R. 1808(a).
Rewrote (b); in (d) and (e), inserted references to (b)1; and deleted a former (i).
Amended by R.2004 d.129, effective April 5, 2004 (operative April 25, 2004).
See: 35 N.J.R. 3486(a), 36 N.J.R. 1791(a).
In (b), rewrote 3.
Amended by R.2006 d.212, effective June 19, 2006 (operative June 30, 2006).
See: 37 N.J.R. 4728(a), 38 N.J.R. 2691(b).
In (a), inserted "seven-day-notice" preceeding "change is submitted" and "change" preceeding "does so"; in (f), substituted "it receives a notice of a" for "a" and "change" for ", including the appropriate fee, is received"; and in (g) and (h), inserted "notice of a" and "change".

7:27-8.21 Amendments

(a) An amendment allows a permittee or a registrant to proceed with a change to a permitted source, or to its permit or certificate, or to a registration, provided that the permittee or registrant submits a notice of the change within 120 days after the start of the change. This subchapter refers to such a notice as a notice of amendment.

(b) A permittee shall notify the Department of the following changes as an amendment:

1. A change in the permit and certificate information which allows the Department to identify and contact the permittee, including company name or mailing address; division name; plant name or address; name or address of any owner's agent; or name or telephone number of the on-site facility manager, any additional plant contact, or of any responsible official (as defined at N.J.A.C. 7:27-1.4);

2. A transfer of ownership or operational control of the source or the facility;

3. A change to the name, number, or designation given to any equipment or stack in the permit or certificate;

4. Any of the following changes to a permitted source's stack or chimney or the use thereof, if the change complies with EPA stack height regulations at 40 CFR Part 51:

i. A change in the number of stacks or chimneys serving the source, if the change does not result in any discharge height less than that of the tallest stack or chimney existing prior to the change;

ii. A decrease in the diameter of a stack or chimney, if the exhaust is vented upward;

iii. The replacement of an existing stack or chimney with a taller stack or chimney, if this results in an effective stack height which is no less than that existing before the change; or

iv. An increase in the exit temperature or volume of gas emitted from a stack or chimney;

5. The use in a permitted source of a new raw material not specified in the permit (including a change in the contents of a storage tank or container), or a change in the source's use of a raw material outside the limits in the permit, if the change shall not cause any of the following:

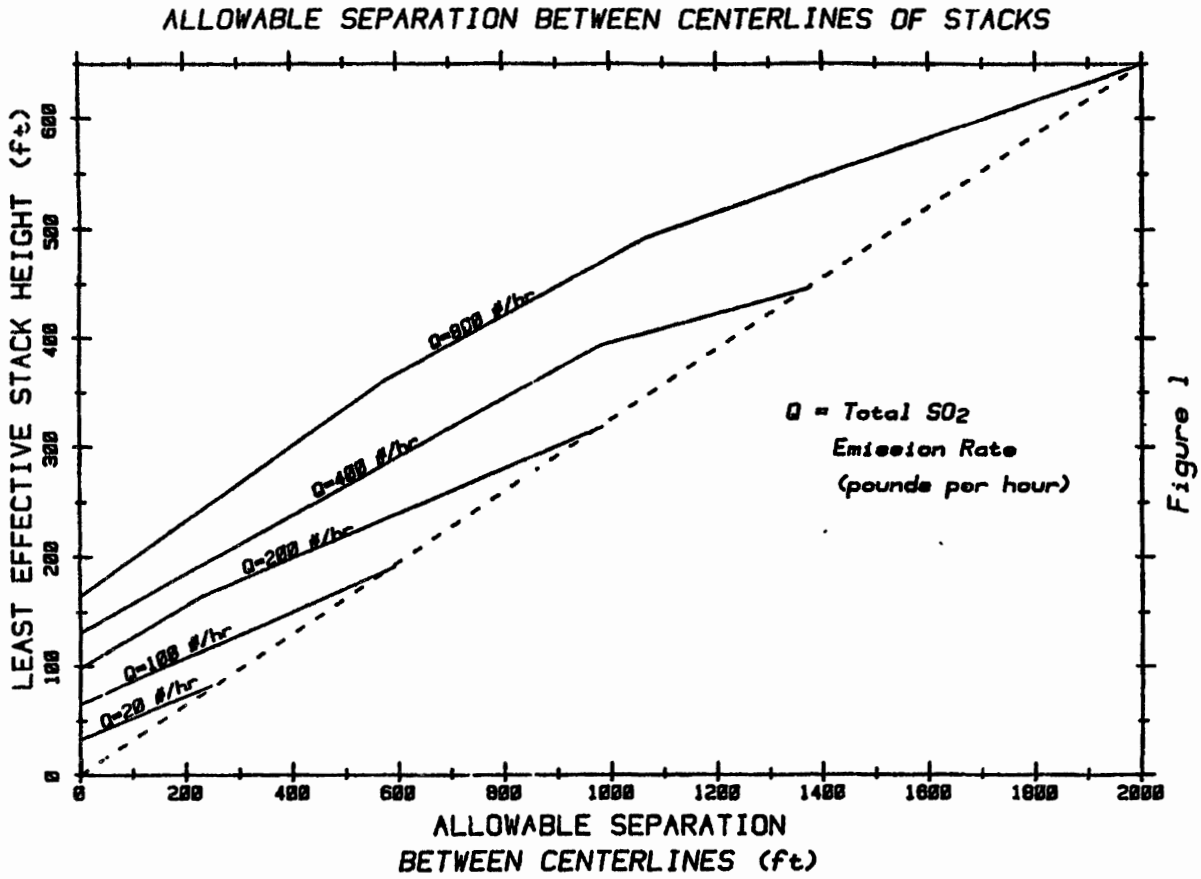
i. An increase in actual emissions;

ii. Emission of a new air contaminant not specified in the permit and certificate, at a level that meets or exceeds the applicable reporting threshold in Appendix 1, Tables A and B; or

iii. The source to become subject to a requirement that did not previously apply;

6. Replacement of an entire permitted source with a replacement source which performs the same function as the replaced source and which, for each air contaminant listed in Table A and B of Appendix 1 that the replacement source may emit, has a potential to emit the air contaminant in an amount that is less than the applicable SOTA threshold level in Appendix 1, Tables A and B;

7. Correction of a typographical error, unless the correction would result in an increase in the actual or allowable emissions. If the correction would result in such an increase, the permittee shall:



R.1982 d.456, effective December 6, 1982 (operative February 4, 1983).
See: 13 N.J.R. 870(a), 14 N.J.R. 1452(a).
Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
Rewrote (a)5.

SUBCHAPTER 10. SULFUR IN SOLID FUELS

Authority

N.J.S.A. 13:1D–1 et seq.

Subchapter Historical Note

Rules concerning sulfur in coal were originally codified in this subchapter and were filed and became effective prior to September 1, 1969. Amendments to this subchapter were accepted on July 6, 1978 as R.1978 d.220, to become effective on September 15, 1978. See: 10 N.J.R. 98(a), 10 N.J.R. 328(b). Further amendments were adopted as R.1981 d.185, effective June 4, 1981. See: 12 N.J.R. 571(a), 13 N.J.R. 341(a).

7:27–10.1 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

"Anthracite coal" means coal that is classified as anthracite according to the American Society for Testing and Materials Standard Specification for Classification of Coals by Rank, ASTM D 388–77.

"Approved stack-gas cleaning process" means a process which removes sulfur dioxide from the products of combustion of solid fuel and which has been approved by the Department.

"Bituminous coal" means coal that is classified as bituminous according to the American Society for Testing and Materials Standard Specification for Classification of Coals by Rank, ASTM D 388–77.

"Coal" means anthracite coal, bituminous coal, coke, lignite, nonbanded coal, and subbituminous coal.

"Coke" means a fused, cellular, porous structure that remains after free moisture and the major portion of the volatile materials have been distilled from bituminous coal and other carbonaceous material by the application of heat in the absence of air or in the presence of a limited supply of air.

"Control apparatus" means any device which prevents or controls the emissions of any air contaminant.

"Lignite" means coal that is classified as lignite A or B according to the American Society for Testing and Materials Standard Specification for Classification of Coals by Rank, ASTM D 388–77.

"Nonbanded coal" means coal that is classified as nonbanded according to the American Society for Testing and Materials Standard Definition of Terms Relating to Megascopic Description of Coal and Coal Beds and Microscopical Description and Analysis of Coal, ASTM D 2796–77.

"Potential combustion emission rate" means the theoretical emission rate that would result from the combustion of a fuel in an uncleaned state without control apparatus.

"Reconstruction" means the replacement of components of an existing facility to such an extent that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct an entirely new comparable facility.

"Resource recovery facility" means a facility that combusts more than 75 percent non-fossil fuel based on the moving average of heat input during 3–month periods.

"Solid fuel" means solid material or any substance derived from solid material used or to be used for the purpose of creating useful heat and includes, but is not limited to, coal, gasified coal, liquified coal, solid solvent-refined coal, municipal solid waste, refuse-derived fuel, and wood.

"Stack or chimney" means a flue, conduit or opening designed, constructed, and/or utilized for the purpose of emitting air contaminants into the outdoor air.

"Steam generating unit" means any furnace, boiler, or other device used for combustion fuel for the purpose of producing steam.

"Subbituminous coal" means coal that is classified as subbituminous according to the American Society for Testing and Materials Standard Specification for Classification of Coals by Rank, ASTM D 388–77.

"Sulfur dioxide (SO_2)" means a colorless gas at standard conditions, having a molecular composition of one sulfur atom and two oxygen atoms.

"Zone One" means Atlantic, Cape May, Cumberland, and Ocean Counties.

"Zone Two" means Hunterdon, Sussex, and Warren Counties.

"Zone Three" means Burlington, Camden, Gloucester, Mercer, and Salem Counties.

"Zone Four" means Bergen, Essex, Hudson, Middlesex, Monmouth, Morris, Passaic, Somerset, and Union Counties.

As amended, R.1981 d.185, eff. June 4, 1981.
See: 12 N.J.R. 571(a), 13 N.J.R. 341(a).
Substantially amended.

7:27–10.2 Sulfur contents standards

(a) No person shall store, offer for sale, sell, deliver or exchange in trade, for use in New Jersey, solid fuel which contains sulfur in excess of the percentages by weight set forth in Table 1, except as provided otherwise in this Subchapter.

(b) No person shall use in New Jersey, solid fuel which contains sulfur in excess of the percentages by weight set forth in Table 1.

TABLE 1
EXISTING SOLID FUEL BURNING UNITS

Type Fuel	Maximum Allowable Percent Sulfur by Weight (Dry Basis)			
	Zone One	Zone Two	Zone Three	Zone Four
Anthracite Coal or Coke	0.8	0.8	0.8	0.8
All other solid fuels	1.0	1.0	0.2	0.2

(c) The provisions of (a) and (b) above shall not apply to solid fuel whose combustion causes sulfur dioxide (SO_2) emissions from any stack or chimney into the outdoor atmosphere which are demonstrated to the Department as not exceeding, at any time, those quantities of sulfur dioxide expressed in pounds per 1,000,000 British Thermal Units. (BTU) gross heat input, set forth in Table 2.

TABLE 2
EXISTING SOLID FUEL BURNING UNITS

Type Fuel	Maximum Allowable SO_2 Emissions (pounds/million BTU)			
	Zone One	Zone Two	Zone Three	Zone Four
Anthracite Coal and Coke	1.2	1.2	1.2	1.2
All other solid fuels	1.5	1.5	0.3	0.3

(d) Any solid fuel-fired steam generating unit which is located in Zone Three or Zone Four, having a rated hourly capacity of greater than 200,000,000 British Thermal Units (BTU) gross heat input and any group of units at one facility which is located in Zone Three or Zone Four, having a combined rated hourly capacity of greater than 450,000,000 British Thermal Units (BTU) gross heat input, and which were in operation prior to May 6, 1968, shall be subject to the standards specified in Table 1 for Zone One.

(e) Any person responsible for the use of bituminous coal who believes that bituminous coal containing a maximum allowable percent sulfur by weight as set forth in Table 1 cannot be used in a specific steam generating unit may submit data to the Department setting forth justification for a less restrictive percent of sulfur content by weight in bituminous coal. The Department may authorize the use of a less restrictive percent of sulfur by weight in bituminous coal. Any less restrictive percent of sulfur content by weight in bituminous coal authorized by the Department shall not exceed 1.5 percent, except as provided in (f) below.

(f) The Department may authorize the use of bituminous coal not exceeding a maximum sulfur content of 3.5 percent by weight (dry basis) at existing facilities in Zone One if:

1. The person responsible for the use of bituminous coal demonstrates that bituminous coal, containing one percent sulfur or less by weight and suitable for use in the specific steam generating unit, is not reasonably available in sufficient quantities; and

2. Sulfur dioxide levels in the ambient atmosphere will at no time exceed or jeopardize the ambient air quality standards set forth in N.J.A.C. 7:27–13; and

3. The sulfur content of the bituminous coal burned at the facility represents the minimum sulfur content coal which can be used by the facility and is reasonably available in sufficient quantity; and

4. The person responsible for the use of bituminous coal agrees to such monitoring and reporting requirements as the Department may deem appropriate to ensure compliance with the conditions set forth in this subsection; and

5. The person responsible for the use of bituminous coal submits to the Department for such authorization an application which considers and addresses as a minimum, in addition to the above, the following criteria:

i. Physical surroundings of the coal-fired steam generating unit;

ii. Population density of the surrounding area;

iii. Dispersion characteristics of the source;

iv. Topography of the immediate vicinity; and

v. Aesthetic and nuisance effects.

(g) Authorizations granted pursuant to (f) above shall be valid for a period not to exceed five years from the date of issuance and may be renewed upon application to the Department, setting forth reasons and justifications for such renewal, including a demonstration of continued conformance with the provisions of (f) above.

As amended, R.1981 d.185, effective June 4, 1981.
See: 12 N.J.R. 571(a), 13 N.J.R. 341(a).
Substantially amended.
Administrative correction to (c), Table 2.
See: 21 N.J.R. 2991(a).

7:27–10.3 Expansion, reconstruction or construction of solid fuel burning units

(a) No person shall expand or reconstruct an existing solid fuel-fired steam generating unit or construct a new solid fuel-fired steam generating unit having a rated hourly capacity that exceeds, or would exceed, as a result of expansion, construction, and/or reconstruction, 250,000,000 British Thermal Units (BTU) gross heat input unless it is demonstrated to the Department that:

1. The sulfur dioxide emissions caused by the combustion of solid fuel from any stack or chimney into the outdoor atmosphere, except as provided under (a)2 or (a)3 below, do not exceed 0.60 pounds of sulfur dioxide per 1,000,000 British Thermal Units (BTU) gross heat input and 30 percent of the potential combustion emission rate of sulfur dioxide determined as a 30–day rolling average; or

2. The sulfur dioxide emissions from a unit which combusts anthracite coal exclusively do not exceed 1.20 pounds of sulfur dioxide per 1,000,000 British Thermal Units (BTU) gross heat input determined as a 30–day rolling average; or

3. The sulfur dioxide emissions, if the unit is a resource recovery facility, do not exceed 1.20 pounds of sulfur dioxide per 1,000,000 British Thermal Units (BTU) gross heat input determined as a 30–day rolling average.

(b) Compliance with the standards of (a) above shall be determined in accordance with the provisions of 40 CFR Part 60 Subpart Da.

(c) No person shall expand or reconstruct an existing solid fuel-fired steam generating unit or construct a new solid fuel-fired steam generating unit, not subject to the provisions of (a) above, having a rated hourly capacity that equals or exceeds, or would equal or exceed as a result of expansion, construction, and/or reconstruction, 1,000,000 British Thermal Units (BTU) gross heat input unless it is demonstrated to the Department that:

1. The sulfur dioxide emissions, caused by the combustion of solid fuel, excluding coke and anthracite coal, from any stack or chimney into the outdoor atmosphere can be controlled to levels that do not exceed at any time 0.30 pounds of sulfur dioxide per 1,000,000 British Thermal Units (BTU) gross heat input; or

2. The solid fuel, excluding coke and anthracite coal, used to fire such a facility will at no time contain more than 0.20 percent sulfur by weight; or

3. Anthracite coal or coke used to fire such a facility will at no time contain more than 0.8 percent sulfur by weight; or

4. The sulfur dioxide emissions, if the unit is a resource recovery facility, do not exceed 1.20 pounds of sulfur dioxide per 1,000,000 British Thermal Units (BTU) gross heat input determined as a 30–day rolling average.

As amended, R.1981 d.185, effective June 4, 1981.
See: 12 N.J.R. 571(a), 13 N.J.R. 341(a).
Substantially amended.

7:27–10.4 Exemptions

(a) The provisions of this subchapter shall not apply to coal used by ocean-going vessels.

(b) In any case in which it is demonstrated to the department that a bona fide pilot installation of an approved stack-gas cleaning process is to be made, the use of nonconforming solid fuel to the extent necessary, in the judgment of the Department, to evaluate the effectiveness of the process will not be prohibited by this subchapter.

(c) Nonbanded coal containing not more than 1.0 percent sulfur by weight may be burned solely for heating purposes in one or two family residences only in combustion equipment in use for such purposes prior to October 1, 1971.

As amended, R.1981 d.185, effective June 4, 1981.
See: 12 N.J.R. 571(a), 13 N.J.R. 341(a).
(b): "solid fuel" was "coal".
(c): Anthracite exemption deleted.

SUBCHAPTER 11. INCINERATORS

7:27–11.1 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings unless the context clearly indicates otherwise.

"Auxiliary fuel" means fuel other than waste materials used to attain temperatures sufficiently high to dry and ignite waste materials, to maintain ignition, or to effect complete combustion of combustible solids, vapors and gases.

"Common incinerator" means an incinerator designed and used to burn waste materials of Types 0, 1, 2 and 3 only, in all capacities not exceeding 2,000 pounds per hour of waste material input.

"Control apparatus" means any device which prevents or controls the emission of any air contaminant.

"Department" means the State Department of Environmental Protection.

"Existing incinerator" means an incinerator purchased, acquired or used before the effective date of this subchapter.

"Incinerator" means any device, apparatus, equipment or structure used for destroying, reducing or salvaging by fire any material or substance including but not limited to refuse, rubbish, garbage, trade waste, debris or scrap or a facility for cremating human or animal remains.

"Liquid particles" means particles which have volume but are not of rigid shape and which upon collection tend to coalesce and create uniform homogeneous films upon the surface of the collecting media.

"Multiple chamber incinerator" means an incinerator with two or more refractory-lined combustion chambers in series physically separated by refractory walls, interconnected by gas passages, and employing adequate design parameters necessary for maximum combustion of the waste materials.

"Municipal incinerator" means an incinerator owned or operated by government or by a person who provides incinerator service to government or others, and designed and used to burn waste materials of any and all types, 0 to 6 inclusive.

"New incinerator" means an incinerator purchased or constructed after the effective date of this Subchapter.

"Particles" means any material, except uncombined water, which exists in a finely divided form as liquid particles or solid particles at standard conditions.

"Pathological waste incinerator" means an incinerator designed and used to burn Type 4 waste materials, primarily human and animal remains, in all burning capacities. Crematoriums are included in this category.

"Ringelmann smoke chart" means the "Ringelmann Scale for Grading the Density of Smoke" published by the United States Bureau of Mines or any chart, recorder, indicator or device for the measurement of smoke density which is approved by the Department as the equivalent of the Ringelmann Scale.

"Single flue-fed incinerator" means an incinerator provided with a single flue which serves as both the charging chute and the flue to transport products of combustion to the atmosphere.

"Smoke" means and includes small gas-borne and airborne particles arising from a process of combustion in sufficient number to be observable.

"Solid particles" means particles of rigid shape and definite volume.

"Special incinerator" means a municipal, pathological waste, or trade waste incinerator of any burning capacity, or any incinerator with a burning capacity in excess of 2,000 pounds per hour.

"Standard conditions" means 70 degrees Fahrenheit and one atmosphere pressure (14.7 psia or 760 mm Hg).

"Trade waste incinerator" means an incinerator designed and used to burn waste material primarily of Types 5 and 6, either separately or together with waste materials of Types 0, 1, and 3.

APPENDIX

The following table highlights the provisions of N.J.A.C. 7:27-15.5(g) to show generally the exhaust emissions test or OBD inspection to be administered to each category of vehicle inspected or reinspected:

Test/model year idle	1980 and older all	1981-1995 GVWR > 8500	1996 and newer* GVWR > 8500
2,500 RPM	—	all-wheel drive, low mileage, etc. school bus	all-wheel drive, low mileage, etc. school bus
ASM5015	—	all others not covered above	all others not covered
OBD (after 6/1/2003	—	—	all OBD-equipped and eligible

*Note: On and after June 1, 2003, an OBD-equipped and eligible motor vehicle will receive an OBD inspection.

New Rule, R.2003 d.47, effective January 21, 2003 (operative February 18, 2003).
See: 34 N.J.R. 1811(a), 35 N.J.R. 429(a).

SUBCHAPTER 16. CONTROL AND PROHIBITION OF AIR POLLUTION BY VOLATILE ORGANIC COMPOUNDS

Subchapter Historical Note

Subchapter 16 was adopted as R.1975 d.377, effective March 1, 1976. See: 7 N.J.R. 47(c), 8 N.J.R. 15(b). The subchapter was amended by R.1979 d.414, effective December 17, 1979. See: 10 N.J.R. 477(b), 11 N.J.R. 544(b). Further amendments were filed as R.1982 d.3, effective February 1, 1982 (operative, March 1, 1982). See: 13 N.J.R. 127(a), 14 N.J.R. 145(b). See section annotations for further rulemaking activity.

7:27-16.1 Definitions

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise.

"Actual emissions" means the rate at which an air contaminant is actually emitted, either directly or indirectly, to the outdoor atmosphere, in units of mass per calendar year, seasonal period, or other time period specified in this subchapter.

"Agitator" means an apparatus with an external seal used to shake, stir, or mix material in an enclosed vessel.

"Air contaminant" means any substance, other than water or distillates of air, present in the atmosphere as solid particles, liquid particles, vapors or gases.

"Airless cleaning system" means a solvent cleaning machine that operates under vacuum and seals at a differential pressure of 0.50 pounds per square inch or less, prior to the introduction of solvent or solvent vapor into the cleaning chamber, and maintains this differential pressure under vacuum during all cleaning and drying cycles.

"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 it exits from the nozzle opening.

"Air-tight cleaning system" means a solvent cleaning machine that seals at a differential pressure of 0.50 pounds per square inch or less, prior to the introduction of solvent or solvent vapor into the cleaning chamber, and maintains this differential pressure during all cleaning and drying cycles.

"Applicable VOC" means any VOC which has a vapor pressure or sum of partial pressures of organic substances of 0.02 pounds per square inch (1.0 millimeters of mercury) absolute or greater at standard conditions.

"Asphalt" means a solid, semisolid, or liquid material, produced by mixing bituminous substances together with gravel, crushed rock or similar materials, and used commonly as a coating or paving.

"ASTM" means the American Society for Testing and Materials.

"Automated parts handling system" means, with respect to a solvent cleaning machine, a mechanical device that carries parts and/or baskets containing parts at a controlled speed from the initial loading of soiled or wet parts through the removal of the cleaned or dried parts.

"Automobile or light duty truck surface coating operation" means the application, flash-off, and curing of the primer, topcoat, and repair coat on the main body and other exterior sheetmetal of any passenger car or passenger car derivative capable of seating 15 or fewer passengers, or any motor vehicle rated at 8,500 pounds (3,856 kilograms) gross vehicle weight or less which is designed primarily for purposes of transportation of property, or a derivative of such vehicle including, but not limited to, pick-ups, vans, and window vans. This term includes the entire coating application system, including all spray booths, flash-off areas, and ovens in which surface coating formulations within the same spray primer, topcoat, or repair operation category are applied, dried and cured.

"Automotive elastomeric coating" means a coating designed for application over surfaces of flexible mobile equipment and mobile equipment components, such as elastomeric bumpers.

"Automotive impact resistant coating" means a coating designed to resist chipping caused by road debris.

"Automotive jambing clear coat" means a fast-drying, ready-to-spray clear coat applied to surfaces such as door jambs and trunk and hood edges to allow for quick closure.

"Automotive lacquer" means a thermoplastic coating applied directly to the bare metal surfaces of mobile equipment and mobile equipment components which dries primarily by solvent evaporation, and which is resoluble in its original solvent.

"Automotive low-gloss coating" means a coating which exhibits a gloss reading less than or equal to 25 on a 60(glossmeter.

"Automotive multi-colored topcoat" means a topcoat that exhibits more than one color, is packaged in a single container, and camouflages surface defects on areas of heavy use, including, but not limited to, cargo beds and other surfaces of trucks and other utility vehicles.

"Automotive pretreatment" means a primer that contains a minimum of 0.5 percent acid, by weight, that is applied directly to the bare metal surfaces of mobile equipment and mobile equipment components to provide corrosion resistance and to promote adhesion of subsequent coatings.

"Automotive primer-sealer" means a coating applied to mobile equipment and mobile equipment components prior to the application of a topcoat to provide corrosion resistance, to promote adhesion of subsequent coatings, to promote color uniformity, and to promote the ability of the undercoat to resist penetration by the topcoat.

"Automotive primer-surfacer" means a coating applied to mobile equipment and mobile equipment components prior to the application of a topcoat for the purpose of:

1. Filling surface imperfections in the substrate;
2. Providing corrosion resistance; and
3. Promoting adhesion of subsequent coatings.

"Automotive specialty coating" means a coating which has been determined by the Department to have only specialized, relatively low-volume uses. This term includes, but is not limited to, elastomeric coatings, adhesion promoters, low gloss coatings, bright metal trim repair coatings, jambing clear coats, impact resistant coatings, rubberized asphaltic underbody coatings, uniform finish blenders, or weld-through primers applied to automotive surfaces and lacquer topcoats applied to a historic motor vehicle.

"Automotive topcoat" means a coating or a series of coatings applied over an automotive primer-surfacer, automotive primer-sealer or existing finish on the surfaces of mobile equipment and mobile equipment components for the purpose of protection or beautification.

"Automotive touch up repair and refinish" means an application of automotive topcoat to cover minor finishing imperfections which are equal to or less than one inch in diameter.

"Background concentration" means, with respect to the measurement of the emission of VOC from a component, the concentration of VOC in the ambient air as determined within the facility and at least one meter upwind of the component being tested.

"Ballasting" means the loading of water or other liquid into a marine tank vessel's cargo tank to obtain proper propeller, rudder, and hull immersion.

"Batch" means the material retained in a batch operation, measured at any instant prior to, during, or at the completion of the conversion.

"Batch cycle emission rate" means the total emissions of air contaminants per batch divided by the batch cycle time in hours.

"Batch cycle time" means the total elapsed time per batch in any single manufacturing process vessel, including all phases of the operation during which the vessel contains process materials, excluding time waiting for removal from the vessel.

"Batch operation" means a type of manufacturing process in which fixed amounts of one or more process materials are introduced into a manufacturing process vessel where they are retained for a prescribed amount of time during which they are converted. Starting materials for a batch are not introduced into the vessel until the previous batch has been removed.

"Batch mix asphalt plant" means an asphalt plant where the aggregate and asphalt cement or other binder are mixed in equipment other than a rotary dryer.

"Batch vapor cleaning machine" means a vapor cleaning machine in which the individual parts or a set of parts that are being cleaned move through the entire cleaning cycle before new parts are introduced into the cleaning machine. The term includes, but is not limited to, solvent cleaning machines, such as ferris wheel cleaners or cross rod machines, that clean multiple loads simultaneously and that are manually loaded.

"Blowdown event" means the non-emergency release of natural gas from a pipeline for the purposes of inspection, maintenance, or repair and where, in the absence of control, more than 2,000 pounds of VOC could be released to the atmosphere.

"Boiler serving an electric generating unit" means a steam generating unit used for generating electricity including a unit serving a cogeneration facility.

"Brake horsepower" or "bhp" means a measure of mechanical power generated by a reciprocating engine determined by a brake attached to the shaft coupling.

"British thermal unit" or "BTU" means the quantity of heat required to raise the temperature of one avoirdupois pound of water one degree Fahrenheit at 39.1 degrees Fahrenheit.

"Calendar day" means the 24 hour period from 12 o'clock midnight to 12 o'clock midnight the following day.

"Can coating" means exterior and interior spray coating in two-piece can lines; interior and exterior coating in sheet coating lines for three-piece cans; side seam spray coating and interior spray coating in can fabricating lines for three-piece cans; and sealing compound application and sheet coating in end coating lines.

"Capture efficiency" means the amount of VOC entering a capture system and delivered to a control device expressed as a ratio of the total VOC generated by a source of VOC.

"CARB" means the California Air Resources Board.

"Carbon adsorber" means a bed of activated carbon into which an air/solvent, gas/vapor or liquid stream is routed and which adsorbs certain compound(s) found in the stream onto the carbon.

"Carbon monoxide" or "CO" means a colorless, odorless, tasteless gas at standard conditions, having a molecular composition of one carbon atom and one oxygen atom.

"Cartridge filtration system" means a system in which perforated canisters containing filtration paper and/or activated carbon are used in a pressurized system to remove solid particles and fugitive dyes from soil-laden solvent.

"Catalytic oxidizer" means a type of control apparatus which reduces the emission of air contaminants by causing the air contaminant molecules to decompose by oxidation, accomplished by preheating the gases being emitted to a predetermined temperature, which is less than required for thermal oxidation, and contacting the preheated gases with catalysts to promote decomposition.

"Certificate" means either an operating certificate or a temporary operating certificate.

"CFR" means the Code of Federal Regulations.

"Chemical plant" means any facility, or any part thereof, classified within the Standard Industrial Code (SIC) Major Group 28, "Chemical and Allied Products."

"Clear coating" means a coating which lacks color and opacity or is transparent and uses the undercoat as a reflectant base or undertone color and any coating used as an interior protective lining on any cylindrical metal shipping container of greater than one gallon capacity.

"Clear topcoat" means the final coating, which contains binders by not opaque pigments and which is specifically formulated to form a transparent or translucent solid protective film on wood furniture.

"CO" means carbon monoxide.

"Coating of flat wood paneling" means the coating of hardwood, plywood, particle board, and hardboard paneling, excluding the coating of exterior siding, tile board, or particle board used in furniture manufacturing.

"Coating of miscellaneous metal parts and products" means the application of any coating, excluding an adhesive, to any metal part or product including, but not limited to, large and small farm machinery, small appliances, office machinery, vending machines, industrial machinery, metal-covered doors, door frames, and electrical machinery.

"Coating of wood furniture" means the application of any surface coating formulation to any furnishing made of wood or a composite of wood including, but not limited to, kitchen cabinets, equipment cabinets, household furniture and office furniture.

"Coil coating" means the coating of any flat metal sheet or strip available in rolls or coils.

"Cold cleaning machine" means a solvent cleaning machine, containing and/or using an unheated liquid which contains greater than five percent VOC or five percent HAP by weight, into which parts are placed for the purpose of removing dirt, grease, oil or other contaminants and coatings from the surfaces of the parts. This term includes both immersion cold cleaning machines and remote reservoir cold cleaning machines. The term does not include vapor cleaning machines and machines which do not have a solvent/air interface, such as airless and air-tight cleaning systems.

"Combined cycle combustion turbine" means a combustion turbine that recovers heat from the turbine exhaust gases to heat water or generate steam.

"Combustion source" means a source operation or item of equipment which combusts fuel.

"Combustion turbine" means an internal combustion engine fueled by liquid or gaseous fuel, in which blades are driven by combustion gases to generate mechanical energy in the form of a rotating shaft that drives an electric generator or other industrial equipment.

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

"Component" means, with respect to leak detection and repair, any part of a source operation, including any equipment and control apparatus, from which emissions of air contaminants may be released into the ambient air. This term includes, but is not limited to, any agitator, valve, flange, fitting, gasket, seal, joint, pump, compressor, pressure relief device, diaphragm, manhole, hatch, sight-glass, instrument

connection or other connection, meter, or associate equipment. This term does not include a designed emission point of a stack or chimney.

"Compressor" means a device used to compress gases or vapors by the addition of energy, and includes all associated components used to make connections or seals.

"Conductive ink" means an ink used in screen printing which contains material that permits electric current to flow through printed lines or patterns.

"Conservation vent" means any valve designed and used to reduce evaporation losses of any VOC by limiting the amount of air admitted to, or vapors released from, the vapor space of a closed storage vessel.

"Construction ballast" means the filling of an underground storage tank with any VOC, including gasoline, to provide stability during construction.

"Construction engine" means a mobile engine used for construction at a site for a limited time period. Construction engine includes a mobile electric generator that is used until regular electric power lines are available to replace the function of the electric generator at the construction site. Construction engine does not include:

1. An engine attached to a foundation;

2. An engine (including any replacement engines) at the same location for more than 12 months;

3. An engine (including any replacement engines) at a seasonal source for at least 90 days per year for at least two years; or

4. An engine that is moved from one location to another in an attempt to circumvent the residence time criteria in 2 or 3 above.

"Control apparatus" means any device which prevents or controls the emission of any air contaminant directly or indirectly into the outdoor atmosphere.

"Conveyorized surface cleaner" means a surface cleaner through which the parts to be cleaned are moved by means of a continuous, automatic system.

"Custom topcoating" means, with respect to automobiles and light duty trucks, the application of surface coating formulations, except during original equipment manufacturing, to the main body or other exterior areas of any passenger car or any motor vehicle capable of seating 15 or fewer passengers or any motor vehicle rated at 8,500 pounds (3,856 kilograms) gross weight or less which is designed for purposes of transportation of property, or a derivative of such vehicle including, but not limited to, pick-ups, vans, and window vans, to achieve a finish that meets individual specifications, including, but not limited to, custom color, design, or gloss. It shall not include the use of adhesion promoters, zinc phosphate pretreatments, uniforming finishes or blenders, specialty primers for plastics, or low reflective accessory coatings.

"Cutback asphalt" means any paving asphalt which has been liquefied by blending with petroleum solvents, or produced directly from the distillation of petroleum having vaporization properties similar to the blended and liquefied asphalt.

"Day" means calendar day.

"Delivery vessel" means any vehicle designed and constructed or converted to be capable of transporting liquid VOC cargo such as gasoline or fuel oil. This term includes, but is not limited to, tank trucks, tank trailers, railroad tank cars, and marine tank vessels.

"Department" means the New Jersey Department of Environmental Protection.

"Destruction efficiency" means the amount of VOC destroyed or removed by a control device expressed as a ratio of the total VOC entering the device.

"Development" means investigations in a laboratory or pilot plant directed toward the structuring or establishment of methods of manufacture or of specific designs of salable substances, devices or procedures, based upon previously discovered facts, scientific principles or substances. Development shall not include production for sale of established products through established processes; nor shall it include production in plant, works or semi-works equipment for distribution through market-testing channels.

"Difficult to monitor component" means any component located over 15 feet above ground when access is required from the ground, or any component located 9.6 feet away from a platform when access is required from a platform.

"Dilution gas" means air or gas from any source whatsoever added to the source gas emitted from a source operation.

"Distillates of air" means helium (He), nitrogen (N_2), oxygen (O_2), neon (Ne), argon (Ar), krypton (Kr), and xenon (Xe).

"DOT" means the United States Department of Transportation.

"Double seal floating roof" means a floating roof with two complete and separate seal-envelope combinations, one above the other, containing an enclosed space between them. At least one of the seals must be supported by a mechanism which maintains constant seal contact with the inner surface of the vessel walls, despite surface and altitude irregularities.

"Down time" means, with respect to a solvent cleaning machine, the period when a solvent cleaning machine is not cleaning parts and the sump heating coils, if present, are turned off.

"Drum mix asphalt plant" means an asphalt plant where the asphalt cement or other binder is added to the aggregate while the aggregate is still in the rotary dryer.

"Dwell" means, with respect to the operation of a solvent cleaning machine, the holding of parts after cleaning within the freeboard area and above the solvent vapor zone of a solvent cleaning machine, to allow solvent to drain from the parts or the basket holding the parts back into the solvent cleaning machine.

"Dwell time" means, with respect to the operation of a batch vapor cleaning machine or an in-line vapor cleaning machine, the period of time which begins when a parts basket is placed above the vapor zone of the vapor cleaning machine and which ends when solvent dripping ceases.

"Electric distribution company" means a public utility, as the term is defined in N.J.S.A. 48:2-13, that transmits or distributes electricity to end users within this State.

"Electric distribution system" means that portion of an electric system, which delivers electricity from transformation points on the transmission system to points of connection at a customer's premises. An electric distribution system generally carries less than 69 kilovolts of electricity.

"Electric generating unit" means a combustion or steam generating source used for generating electricity that delivers all or part of its power to the electric power distribution grid for commercial sale.

"Emergency" means any situation that arises from sudden and reasonably unforeseeable events beyond the control of an owner or operator of a facility, such as an unforeseen system capacity shortage caused by an act of God, that requires immediate corrective action to prevent system collapse or to restore normal operations at the facility.

"Emergency generator" means a combustion source that:

1. Is located at a facility and produces mechanical or thermal energy, or electrical power exclusively for use at the facility;

2. Is the source of mechanical or thermal energy, or electrical power during an emergency when the primary source of energy is unavailable; and

3. Is operated only:

i. During the performance of normal testing and maintenance procedures, as recommended in writing by the manufacturer and/or as required in writing by a Federal or State law or regulation;

ii. When there is power outage or the primary source of mechanical or thermal energy fails because of an emergency; or

iii. When there is a voltage reduction issued by PJM and posted on the PJM internet website (www.pjm.com) under the "emergency procedures" menu.

"Emission statement" means a report of the actual annual emissions of a facility submitted by the owner or operator to the Department pursuant to the requirements of N.J.A.C. 7:27-21.

"Emulsified asphalt" means asphalt which has been liquefied by mixing with water and an emulsifying agent.

"EPA" means the United States Environmental Protection Agency.

"Equipment" means any device capable of causing the emission of an air contaminant either directly or indirectly to the outdoor atmosphere, and any stack or chimney, conduit, flue, duct, vent or similar device connected or attached to, or serving the equipment. This term includes, but is not limited to, a device in which the preponderance of the air contaminants emitted is caused by a manufacturing process.

"Exclusion rate" means that rate at or below which the emission of an air contaminant into the outdoor atmosphere is not required to be controlled.

"Exempt organic substance" means an organic substance which is one of the chemical compounds specifically not included in the term "volatile organic compound" or "VOC" as defined in this section.

"External floating roof" means a movable roof in an otherwise open top storage vessel consisting of a floating deck resting on the surface of the liquid contents, a continuous seal supported against the inner surface of the tank shell, and an envelope closing the gap between the floating deck and the seal, the entire deck-seal-envelope combination free to rise and fall with the surface of the liquid during filling and emptying of the storage vessel.

"Extreme performance coating" means a coating formulated for and exposed to harsh environmental conditions including, but not limited to: outside weather conditions all of the time, or temperatures consistently above, 95(C, or temperatures consistently below 0(C, or solvents, detergents, abrasives or scouring agents; or corrosive atmospheres or fluids.

"Fabric coating" means the application of any surface coating formulation, except ink and plastisol, to a textile substrate in a fabric coating line.

"Fabric printing operation" means the decorative enhancement of knit or woven cloth including webs, sheets and towels, by applying a pattern or colored design with inks, dyes, or print pastes by techniques including, but not limited to, roller, flat screen, rotary screen, and silk screen printing.

"Facility" means the combination of all structures, buildings, equipment, storage tanks, source operations, and

other operations located on one or more contiguous or adjacent properties owned or operated by the same person. For the purposes of this definition, each natural gas pipeline compressor or pump station and each section of natural gas pipeline between such compressor or pump station shall constitute a separate natural gas pipeline facility.

"Facility-wide permit" means a single permit issued by the Department to the owner or operator of a priority industrial facility incorporating the permits, certificates, registrations, or any other relevant Department approvals previously issued to the owner or operator of the priority industrial facility pursuant to the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., the Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq., and the appropriate provisions of the Pollution Prevention Plan prepared by the owner or operator of the priority industrial facility pursuant to N.J.S.A. 13:1D-41 and 42. This term shall have the same meaning as defined for the term "facility-wide permit" at N.J.A.C. 7:1K-1.5; if there is any conflict between the definition at N.J.A.C. 7:1K-1.5 and this one, the definition at N.J.A.C. 7:1K-1.5 shall control.

"Federally enforceable" means all limitations and conditions on operation, production, or emissions that can be enforced by EPA. The foregoing limitations and conditions that can be enforced by EPA include, but are not limited to, those established in:

1. Any standards of performance for new stationary sources (NSPS) promulgated at 40 CFR 60;

2. Any national emission standard for hazardous air pollutants (NESHAP) promulgated at 40 CFR 61;

3. Any provision of an applicable SIP;

4. Any permit issued pursuant to requirements established at 40 CFR 51, Subpart I; 40 CFR 52.21; 40 CFR 70; or 40 CFR 71; or

5. Any permit or order issued pursuant to the Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq., or this chapter.

"Fill pipe" means a device through which liquid is transferred into a receiving vessel.

"First attempt at repair" means rapid action taken for the purpose of stopping or reducing a leak. First attempts at repair include, but are not limited to, the following practices where practicable: tightening of packing gland nuts, tightening of flanges, and ensuring that the seal flush is operating at design pressure and temperature.

"Fitting" means a component used to attach or connect pipes or piping details including, but not limited to, flanges and threaded connections.

"Flare" means a device used for the destruction of waste or by-product gases by passing them through a flame and then directly into the outdoor atmosphere. Thermal oxidizers are not flares.

"Flexographic printing operation" means a system of transferring images onto a substrate through first applying ink to an inking roller which in turn transfers the ink onto the raised image areas of a rubber or elastomeric plate secured to a second roller, which then transfers the ink onto the substrate.

"Floating roof" means an external or internal pontoon type or double-deck type roof resting on the surface of the liquid contents in a storage vessel, and equipped with a mechanism providing one or more tight seals in the space between the floating roof rim and the vessel shell throughout the entire vertical travel distance of the roof, or any other floating type mechanism approved by the Department for the purpose of preventing air contaminants from being discharged into the outdoor atmosphere.

"Former DER credit user" means one who used Discrete Emission Reduction (DER) credits in the three years immediately preceding August 4, 2003 in compliance with the Open Market Emissions Trading Program rules then promulgated at N.J.A.C. 7:27-30 to satisfy the requirements of N.J.A.C. 7:27-16 or 19.

"Fountain solution" means an aqueous solution used in graphic arts operations to dampen the plate and prevent the non-image areas of the plate from accepting the hydrophobic inks used.

"Freeboard height" means, with respect to a solvent cleaning machine, the vertical distance determined as follows:

1. For a cold cleaning machine, the distance from the solvent-containing liquid to the top edge of the machine; or

2. For a vapor cleaning machine, the distance from the top of the solvent vapor layer to the top edge of the machine.

"Freeboard ratio" means, with respect to a solvent cleaning machine, a ratio of the machine's freeboard height to the width of its tank (that is, to the tank's narrower dimension at the tank lip).

"Freeboard refrigeration device" means a set of secondary coils mounted in the freeboard area of a solvent cleaning machine that carries a refrigerant or other chilled substance to provide a chilled air blanket above the solvent vapor. This term includes a solvent cleaning machine's primary condenser, if it is capable of maintaining a temperature in the center of the chilled air blanket of not more than 30 percent of the boiling point for the solvent used.

"Fuel" means solid, liquid or gaseous materials used to produce useful heat by burning.

"Fugitive emissions" means any emissions of an air contaminant released directly or indirectly into the atmosphere which do not pass through a stack or chimney.

"Gaseous leak" means the emission of applicable VOC directly or indirectly to the atmosphere as a gas or vapor from a hole, crevice, or other opening in a component, other than an emission that is in accordance with the component's design during normal operations.

"Gaseous service" means contact with applicable VOC that is in the gaseous state at operating conditions.

"Gasoline" means any petroleum distillate or petroleum distillate/oxygenated blend having a Reid vapor pressure of four pounds per square inch (207 millimeters of mercury) absolute or greater, and commonly or commercially known or sold as gasoline.

"Gasoline dispensing facility" means a facility consisting of one or more stationary gasoline storage tanks together with dispensing devices used to fill vehicle fuel tanks.

"Glass coating" means the application of any surface coating formulation to a glass surface, such as those of glass lamps or bulbs.

"Graphic arts operation" means the application of one or more surface coating formulations across portions of a surface using one or more rotogravure or flexographic printers used to produce published material and packaging for commercial or industrial purposes, or any rotogravure or flexographic printers used to produce vinyl or urethane coated fabric or sheets, or any sheet-fed gravure, screen printing, or fabric printing operations together with any associated drying or curing areas. A single graphic arts operation ends after drying or curing and before other surface coating formulations are applied. For any web line, this term means an entire application system, including any associated drying ovens or areas between the supply roll and take-up roll or folder. This term does not include any surface coating operation.

"Gravure printing operation (sheet-fed)" means a system of transferring images onto a substrate through first applying ink to a cylinder into the surface of which small, shallow cells have been etched forming a pattern, then wiping the lands between the cells free of ink with a doctor blade, and finally contacting the substrate, which is fed in single sheets, onto the cylinder so that the surface of the substrate is pressed into the cells, transferring the ink to the substrate. This term does not include proof presses which are being used to check the quality of the image formation of newly engraved or etched gravure cylinders.

"Hatch" means a system, including a cover which may be opened or closed, that provides access to the interior of a tank or other enclosed container.

"Hazardous air pollutant" or "HAP" means an air contaminant listed in or pursuant to subsection (b) of section 112 of the Clean Air Act (42 U.S.C. § 7412).

"Historic motor vehicle" means any motor vehicle which is at least 25 years old and which is owned as a collectors item and used solely exhibition and education purposes by the owner.

"Hydrocarbons" or "HC" means any compound or mixture of compounds whose molecules consist of atoms of hydrogen and carbon only.

"Idle time" means, with respect to a solvent cleaning machine, the period when a solvent cleaning machine is not actively cleaning parts, but the sump heating coil, if present, is turned on.

"Immersion cold cleaning machine" means a cold cleaning machine in which the part or parts to be cleaned are immersed in the solvent during the cleaning process.

"Incinerator" means any device, apparatus, equipment, or structure using combustion or pyrolysis to oxidize, reduce or salvage any material or substance. "Incinerator" does not include thermal or catalytic oxidizers used as control apparatus on equipment, but it does include (without limitation) any thermal destruction facility which is a resource recovery facility, as such terms are defined in N.J.A.C. 7:26-1.4.

"Indirect emissions" means a discharge of any air contaminant into the outdoor atmosphere through any opening that is not a stack or chimney directly connected to the equipment.

"Industrial/commercial/institutional boiler" or "ICI boiler" means an indirect heat exchanger that generates steam to supply heat to an industrial, commercial, or institutional operation. This term does not include boilers that serve electric generating units.

"Industrial wastewater treatment system" means any structure or structures by means of which industrial liquid waste or sludges are subjected to any treatment process requiring the issuance of an individual NJPDES permit regulated by the Department pursuant to the New Jersey Pollutant Discharge Elimination System Permit Program, N.J.A.C. 7:14A, under the authority of the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq.

"Ink transfer" means a decal, printed using screen printing onto a special release carrier, that will be transferred from the carrier to a substrate. Final transfer of the decal to the substrate may or may not occur at the screen printing facility.

"In-line vapor cleaning machine" means a vapor cleaning machine that uses an automated parts handling system, typically a conveyor, to automatically provide a supply of

parts to be cleaned and which is fully enclosed except for the conveyor inlet and exit portals.

"Internal combustion engine" means either a reciprocating engine or a combustion turbine in which power, produced by heat and/or pressure from combustion is converted to mechanical work.

"KW" or "kW" means kilowatt.

"Laboratory operations" means any action, process, or treatment utilizing chemical, physical, or biological factors to conduct experimental research, tests, or demonstrations.

"Large appliance coating" means the application of any coating to the component parts of large appliances including, but not limited to, doors, cases, lids, panels, and interior supports of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dish washers, trash compactors, air conditioners, and other associated products.

"Leak" means a gaseous leak or a liquid leak of applicable VOC.

"Leather coating" means the application of any surface coating formulation to a leather substrate in a leather coating line.

"Light liquid" means a fluid with vapor pressure greater than 0.044 pounds per square inch absolute (2.27 millimeters of mercury) at 68(F.

"Light liquid service" means contact with a fluid that is 10 percent or greater by weight light liquid.

"Liquid leak" means the release of liquid applicable VOC from a hole, crevice, or other opening in a component subject to N.J.A.C. 7:27-16, other than a release of liquid VOC in accordance with the component's design during normal operations. The presence of a drop, drip, accumulation, pool, or other visible evidence of a liquid, applicable VOC demonstrates that a liquid leak has occurred.

"Liquid particles" means particles which have volume but are not of rigid shape.

"Liquid service" means contact with applicable VOC that is in the liquid state at operating conditions.

"Lithographic printing operation" means printing by a planographic method in which the image and nonimage areas are on the same geometric plane.

"Local exhaust ventilation" means a system for capturing air contaminants within 36 inches (91.4 centimeters) of the points at which they emerge from a source operation.

"Magnet wire coating" means the application of electrically insulating varnish or enamel to aluminum or copper wire.

"Major VOC facility" means any facility which has the potential to emit 25 or more tons of VOC per year.

"Manufacturing process" means any action, operation or treatment embracing chemical, industrial, manufacturing, or processing factors, methods or forms including, but not limited to, furnaces, kettles, ovens, converters, cupolas, kilns, crucibles, stills, dryers, roasters, crushers, grinders, mixers, reactors, regenerators, separators, filters, reboilers, columns, classifiers, screens, quenchers, cookers, digesters, towers, washers, scrubbers, mills, condensers, or absorbers.

"Manufacturing process vessel" means any container wherein a manufacturing process, or any part thereof, takes place.

"Marine tank vessel" means any tugboat, tanker, freighter, passenger ship, barge, boat, ship, or watercraft, which is specifically constructed or converted to be capable of carrying liquid cargo in tanks.

"Marine terminal" means any facility, or part thereof, at which liquid cargo is loaded into or unloaded out of marine tank vessels.

"Maximum gross heat input rate" means the maximum amount of fuel a combustion source is able to combust in a given period as stated by the manufacturer of the combustion source. This term is expressed in BTUs per hour, based on the highest BTU value of the fuels combusted.

"Metal furniture coating" means the coating in a metal furniture coating line of any metal part which will be assembled with other metal, wood, fabric, plastic, or glass parts to form a piece of furniture.

"Mobile equipment" means equipment which may be driven or is capable of being driven or pulled on a roadway including, but not limited to, automobiles, trucks, including truck cabs, truck bodies and truck trailers, buses, motorcycles, camper shells, mobile cranes, bulldozers, street cleaning machines, golf carts, ground support vehicles used in support of aircraft activities at airports, and farm equipment.

"MW" means megawatt.

"Natural gas/gasoline processing plants" means facilities engaged in the separation of natural gas liquids from field gas and/or fractionation of the liquids into natural gas products such as ethane, propane, butane, and natural gasoline. Excluded from the definition are compressor stations, dehydration units, sweetening units, field treatment, underground storage, liquefied natural gas units, and field gas gathering systems unless these facilities are located as a gas plant.

"New Jersey's coastal waters" means the Atlantic Ocean area and all areas under tidal influence within three nautical miles (5,566 meters) of the mean high water line as measured from the New Jersey coast, except that, if at any point along

the line of measurement, within or beyond three nautical miles (5,566 meters), there is a meeting of waters under the exclusive jurisdiction of any other State or the United States of America, New Jersey's jurisdiction shall end at that point. Any point of measurement shall be taken from a point of New Jersey land, permanent or nonpermanent, and extended azimuthally to a distance of three nautical miles (5,566 meters) or to the point where another State or the United States of America has jurisdiction.

"Offset lithography" means a planographic method of printing in which the image and nonimage areas are on the same plane and where the ink is transferred from an image plate on one cylinder to an image blanket on a different cylinder. The ink is finally transferred from the image blanket to the surface to be printed.

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

"Open burning" means any fire from which the products of combustion are emitted directly into the open air, and are not by design directed through a stack or chimney.

"Open top tank" means any vessel in which a manufacturing process, or any part thereof, takes place during which there is an opening to the atmosphere greater than 25 percent of the surface area of any liquid substance contained therein.

"Operating certificate" means a "Certificate to Operate Control Apparatus or Equipment" issued by the Department pursuant to the Air Pollution Control Act of 1954, specifically N.J.S.A. 26:2C-9.2, which is valid for a period of five years from the date of issuance, unless sooner revoked by the Department.

"Operating permit" means the permit described in Title V of the Federal Clean Air Act, 42 U.S.C. §§ 7661 et seq., and in N.J.A.C. 7:27-22. This term shall include a general operating permit which is applicable facility wide, but does not include a general operating permit which applies only to a part of a facility. Where a general operating permit applies only to a part of a facility, the general operating permit shall be incorporated into the operating permit. This term also includes an operating permit issued for a temporary facility; for a facility subject to a MACT or GACT standard pursuant to N.J.A.C. 7:27-22.26; or for a component of a facility pursuant to N.J.A.C. 7:27-22.5(j).

"Order" means any and all orders issued by the Department including, but not limited to, administrative orders and administrative consent orders.

"Other wastewater treatment system" means any structure or structures by means of which liquid waste or sludges (other than industrial liquid waste or sludges) are subjected to any treatment process requiring the issuance of an individual NJPDES permit pursuant to the New Jersey Pollutant Discharge Elimination System Permit Program, N.J.A.C. 7:14A, under the authority of the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq.

"Paper coating" means:

1. The application of any coating, excluding plastisol, uniformly distributed across the web, which is put on paper, or on pressure-sensitive tapes regardless of the substrate, including paper, fabric, or plastic film;

2. Related web coating processes on plastic film including, but not limited to, typewriter ribbons, photographic film, and magnetic tape; or

3. Decorative coating on metal foil including, but not limited to, gift wrap and packaging.

This term does not include any graphic arts operation.

"Pipe coating" means the application of any coating to a pipe comprised of any material except plastic.

"Partial pressure" means the pressure exerted by a specified component in a mixture of gases.

"Particles" means any material, except uncombined water, which exists as liquid particles or solid particles at standard conditions.

"Penetrating prime coat" means a low-viscosity liquid asphalt applied to a surface in order to prepare it for paving with an asphalt concrete.

"Permit" means preconstruction permit, operating permit, or facility-wide permit.

"Person" means any individual or entity and shall include, without limitation, corporations, companies, associations, societies, firms, partnerships, and joint stock companies, and shall also include, without limitation, all political subdivisions of any State or any agencies or instrumentalities thereof.

"Petroleum distillate" means any mixture of VOC produced by condensing vapors of petroleum during distillation, including, but not limited to, naphthas, aviation gasoline, motor gasoline, kerosene, diesel oil, domestic fuel oil, and petroleum solvents.

"Petroleum solvent dry cleaning" means a process in which textile and fabric articles are washed in a solution of organic material, and then dried by exposure to a heated air stream. The organic material is produced by petroleum distillation and is comprised of a hydrocarbon range of 8 to 12 carbon atoms per organic molecule.

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

"PJM" means PJM Interconnection, LLC, or any successor to PJM as the Regional Transmission Organization, approved by the Federal Energy Regulatory Commission (FERC), serving a region that includes New Jersey as well as all or parts of other states.

"Planography" means any method of printing from a flat surface.

"Plastic part" means a piece made from a substance that has been formed from a natural or synthetic resin through the application of pressure or heat or both.

"Plastisol" means a surface coating formulation that is a dispersion of finely divided polymeric resin in a high boiling solvent or softening agent that is added to increase flexibility or toughness and includes plastisols to which volatile solvent has been added.

"Platform" means any elevated horizontal surface, either temporary or permanent, used for the purpose of gaining access to a component.

"Positive pressure ventilation" means any ventilation system in which pressurized air from a compressed air manifold, fan, or similar device is blown into a work area.

"Potential to emit" means the maximum capacity of a source operation or a facility to emit an air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of a source operation or a facility to emit an air contaminant, including control apparatus and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is Federally enforceable. If there is no Federally enforceable limitation on the hours of operation of a source operation, then any determination of the maximum design capacity shall be based on a presumption of operation at 8760 hours per year. This term includes the fugitive emissions emitted by the source operation or facility as calculated in a manner consistent with the provisions of N.J.A.C. 7:27-21 and current guidance issued by the Department pursuant thereto.

"Pollution prevention" shall have the same meaning as defined for this term at N.J.A.C. 7:1K-1.5.

"Ppm" means parts per million.

"Ppmvd" means parts per million by volume, dry basis. This is the number of parts in a mixture, by volume, which are of the specified substance, not including the number of parts contributed by water.

"Power outage" means an interruption in the provision of electricity to customers because normally available sources of electrical energy are unavailable, provided the unavailability is due to circumstances beyond the control of the customer.

"Preconstruction permit" means a legally valid permit, authorizing construction, installation, reconstruction, or modification of a significant source, issued by the Department under N.J.A.C. 7:27-8 pursuant to the New Jersey Air Pollution Control Act and in particular N.J.S.A. 26:2C.

"Pressure relief device" means a type of component which is installed for safety to relieve elevated pressure within equipment, or within a conduit or duct serving equipment. Such a component is designed to release material contained within the system when the pressure within the system exceeds a set level.

"Pressure relief valve" means a type of pressure relief device which consists of a valve that automatically opens when the pressure within the system exceeds a set level and closes when the pressure drops below that level.

"Primary condenser" means, with respect to a vapor cleaning machine, a series of circumferential cooling coils located in the machine through which a chilled substance is circulated or recirculated to provide continuous condensation of rising solvent vapors, to create a concentrated vapor zone.

"Process emission rate" means the mass rate of air contaminants emitted from the final source operation of a process, exclusive of any type of control apparatus or product recovery device.

"Process unit shutdown" means a regularly scheduled work practice or operational procedure that stops production from a process unit or part of a process unit for 24 hours or such other longer time as the owner or operator of the unit establishes to be necessary for the removal of the process material so that repairs to the unit can be carried out in a safe manner. The use of spare equipment without stopping production is not a process unit shutdown.

"Psi" means pounds per square inch.

"Pump" means a device used to transport fluids by the addition of energy, and includes all associate components used to make connections or seals.

"Rated power output" means the maximum electrical or equivalent mechanical power output stated on the nameplate affixed to an engine or the International Standard Organization (ISO) rated electrical or equivalent mechanical power stated on the nameplate affixed to a turbine by the manufacturer.

"Receiving vessel" means any vessel into which an applicable VOC is introduced including, but not limited to, storage tanks, delivery vessels, and manufacturing process vessels.

"Reciprocating engine" means an internal combustion engine in which a rotating crankshaft is driven by reciprocating motion of piston(s).

"Reduce room draft" means, with respect to the operation of a solvent cleaning machine, to decrease the flow or

movement of air across the top of the freeboard area of the solvent cleaning machine to less than 50 feet per minute (15.2 meters per minute) by methods including, but not limited to, redirecting fans and/or air vents, moving the machine to a corner or other area in the room where there is less flow or movement of air, or constructing a partial or complete enclosure around the machine.

"Refinishing" means, with respect to automobiles and light duty trucks, the recoating of the main body or other exterior areas of any passenger car or passenger car derivative capable of seating 15 or fewer passengers or any motor vehicle rated at 8,500 pounds (3,856 kilograms) gross weight or less which is designed primarily for purposes of transportation, of property, or a derivative of such vehicle including, but not limited to, pick-ups, vans, and window vans. It shall not include the use of adhesive promoters, zinc phosphate pretreatments, uniforming finishes or blenders, specialty primers for plastics, or low reflective accessory coatings.

"Regenerative cycle combustion turbine" means a combustion turbine that recovers heat from its exhaust gases and uses that heat to preheat the inlet combustion air which is fed into the combustion turbine.

"Regulated leak" means any gaseous leak of applicable VOC at a concentration or level above any applicable limit established in Tables 18A and 18B and any liquid leak of an applicable VOC.

"Reid vapor pressure" or "RVP" means the absolute vapor pressure of a petroleum product in pounds per square inch (or kilopascals) at 100 degrees Fahrenheit ((F) (37.8 degrees Celsius ((C)) as measured by "Method 3 Evacuated Chamber Method" promulgated at 40 CFR 80, Appendix E; or any other equivalent test method approved in advance in writing by the Department and the EPA.

"Remote reservoir cold cleaning machine" means a cold cleaning machine in which liquid solvent is pumped into a sink-like work area where the cleaning of parts occurs, and from which the solvent is immediately drained back into an enclosed container or reservoir, so that no solvent is allowed to pool in the work area.

"Repair" means, with respect to a VOC leak, a corrective action taken to eliminate the leak or reduce the leak to below regulated levels.

"Research" means investigations directed toward the discovery of facts, scientific principles, reactions, or substances.

"Rotogravure printing operation (web-fed)" means a system of transferring images onto a substrate through first applying ink to a cylinder into the surface of which small, shallow cells have been etched forming an image or a pattern, then wiping the lands between the cells free of ink with a doctor blade, and finally contacting the substrate, which is fed from a continuous roll, over the cylinder so that the surface of the substrate is pressed into the cells, transferring the ink to the substrate. This term does not include proof presses which are being used to check the quality of the image formation of newly engraved or etched gravure cylinders.

"Rupture disc" means a type of pressure relief device which is designed to fracture, rupture, or burst under pressure when the pressure within the system exceeds a set level. Such a device is commonly a diaphragm held between flanges, which under conditions of normal operation remains intact and prevents gases from being released from the system.

"Screen printing operation" means a system of transferring images onto a substance in which the printing ink passes through a fabric to which a stencil has been applied. The openings in the stencil determine the form and dimensions of the imprint.

"Seal-envelope combination" means a barrier to the passage of VOC vapors between a floating roof and the inner surface of a storage vessel wall, consisting of a seal which maintains constant contact with the wall as the floating roof rises and descends with the level of the stored VOC, and a membrane, diaphragm, fabric, or blanket, known as an envelope, which spans the gap between the floating roof and the seal and which is vapor-tight.

"Sealer" means coatings containing binders that seal a wood surface prior to application of subsequent coatings.

"Semitransparent stain" means stains that contain dyes and/or semitransparent pigments and are formulated to enhance wood grain and to change the color of the surface, but not to conceal the surface; including sap stain, toner, nongrain raising stains, pad stain, spatter stain, and other semitransparent stains.

"Simple cycle combustion turbine" means a combustion turbine that does not recover heat from its exhaust gases.

"Small appliances" means devices used primarily in households and offices including, but not limited to, fans, mixers, blenders, dehumidifiers, toasters, toaster-ovens, slow pot cookers, food processors, portable heaters, lamps, typewriters, staplers, and paper punches.

"Solid particles" means particles of rigid shape and definite volume.

"Solvent/air interface" means, with respect to a solvent cleaning machine, the interface between the concentrated solvent vapor layer and the air. For a vapor cleaning machine, this contact point is defined as the plane at the mid-line height of the primary condenser coils. For a cold cleaning machine, this contact point is defined as the plane of contact between the liquid solvent and the air.

"Solvent cleaning machine" means a device or piece of equipment that uses solvent, in a liquid or vapor state, to remove contaminants, such as dirt, grease, oil, and coatings, from the surfaces of materials. Types of solvent cleaning ma-

chines include, but are not limited to, vapor cleaning machines, cold cleaning machines, and airless and air-tight cleaning systems.

"Solvent recovery dryer" means a class of dry cleaning dryers that employs a condenser to liquefy and recover solvent vapors evaporated in a closed-loop, recirculating stream of heated air.

"Source gas" means air or gases passed through, or generated by, a source operation and discharged from the source operation.

"Source operation" means any process or any identifiable part thereof that emits or can reasonably be anticipated to emit any air contaminant either directly or indirectly into the outdoor atmosphere. A source operation may include one or more pieces of equipment or control apparatus.

"Special purpose screen printing inks and coatings" means inks and coatings used in screen printing which are used to print ink transfers, or are designed to resist or withstand any of the following: more than two years of outdoor exposure, exposure to chemicals, solvents, acids, detergents, oil products or cosmetics, temperatures in excess of 170 degrees Fahrenheit, vacuum forming, embossing or molding.

"Stack or chimney" means a flue, conduit or opening designed, constructed or utilized for the purpose of emitting any air contaminant into the outdoor atmosphere.

"Standard conditions" means 70 degrees Fahrenheit ((F) (21.1 degrees Celsius ((C)) and one atmosphere pressure (14.7 pounds per square inch absolute or 760.0 millimeters of mercury).

"Standard Industrial Classification Code" or "SIC Code" means the system devised by the United States Office of Management and Budget to classify establishments according to the type of economic activity in which they are engaged.

"State implementation plan" or "SIP" means a plan for the attainment of any NAAQS, prepared by a state and approved by the EPA pursuant to Section 110 of the Clean Air Act (42 U.S.C., § 1857 et seq.).

"Stationary combustion turbine" means any simple cycle combustion turbine, regenerative cycle combustion turbine, or combustion turbine portion of a combined cycle steam/electric generating system that:

1. Is not self-propelled, but may be mounted on a vehicle for portability; or

2. Is self-propelled on tracks at a facility, but does not in the course of its normal operation leave the facility.

"Stationary reciprocating engine" means an internal combustion engine that is a reciprocating engine that remains for more than 30 days at a single site (for example, any building, structure, facility, or installation), and:

1. Is not self-propelled, but may be mounted on a vehicle for portability; or

2. Is self-propelled on tracks at a facility, but does not in the course of its normal operation leave the facility. This term does not include mobile electric generators being used by the military, locomotive engines or construction engines.

"Steam generating unit" means any furnace, boiler, or other device which combusts fuel for the purpose of producing steam.

"Storage tank" means any tank, reservoir, or vessel which is a container for liquids or gases, wherein:

1. No manufacturing process, or part thereof, other than filling or emptying takes place; and

2. The only treatment carried out is that necessary to prevent change from occurring in the physical condition or the chemical properties of the liquids or gases deposited into the container. Such treatment may include recirculating, agitating, maintaining the temperature of the stored liquids or gases, or replacing air in the vapor space above the stored liquids or gases with an inert gas in order to inhibit the occurrence of chemical reaction.

"Submerged fill pipe" means a fill pipe whose point of discharge into the receiving vessel is entirely submerged when the liquid level is no more than 6 inches (15.2 centimeters) above the vessel bottom or, in the case of a top or side-entering fill pipe, when the liquid level is no more than three times the inside radius of the fill pipe plus 5 inches (12.7 centimeters), but no more than 42 inches (106.7 centimeters), above the vessel bottom.

"Superheated vapor system" means, with respect to a vapor cleaning machine, a system that heats the solvent vapor to a temperature that is at least ten degrees Fahrenheit above the solvent's boiling point. In such a system parts are held in the superheated vapor and then exit the machine.

"Surface cleaner" means a device to remove unwanted foreign matter from the surfaces of non-porous or non-absorbent materials by using VOC solvents in liquid or vapor state.

"Surface coating formulation" means the material used to form a protective, functional, or decorative film including, but not limited to, paint, varnish, ink, or adhesive, applied to or impregnated into a substrate. This term includes such material whether used in a surface coating or graphic arts operation.

"Surface coating formulation as applied" or "coating as applied" means the volume, in gallons or liters, of any surface coating formulation used in a surface coating operation, including any diluents or thinners added.

"Surface coating operation" means the application of one or more surface coating formulations across an entire surface, using one or more coating applicators, together with any associated drying or curing areas. A single surface coating operation ends after drying or curing and before other surface coating formulations are applied. For any web coating line, this term means an entire coating application system, including any associated drying ovens or areas between the supply roll and take-up roll, that is used to apply surface coating formulations onto a continuous strip or web. This term does not include any graphic arts operation.

"Synthetic organic chemical or polymer" means one or more of the substances listed in Appendix I.

"Tablet coating" means the application of any surface coating formulation to a formed pharmaceutical product.

"Tank" means any container whose walls are constructed of material which is rigid and self-supporting.

"Temporary operating certificate" means an operating certificate with a term shorter than five years, issued pursuant to N.J.A.C. 7:27-8.7(d).

"Thermal oxidizer" means a type of control apparatus which reduces the emission of air contaminants by subjecting the gases being emitted to elevated temperatures which cause the air contaminant molecules to decompose within an enclosed space. For the purposes of this subchapter, this term includes catalytic and non-catalytic thermal oxidizers.

"Toxic substance" or "TXS" means a substance listed in Table 1 of N.J.A.C. 7:27-17.3.

"Transfer efficiency" means the percent by weight, on a dry basis, of the total coating solids applied to an object which adhere to the object.

"Transfer operation" means the moving of any substance from any storage tank, manufacturing process vessel, or delivery vessel into any receiving vessel.

"Unihose" means, with respect to a gasoline dispenser at a gasoline dispensing facility, a dispenser which has only one hose and one nozzle per dispenser side which is used for dispensing all grades of gasoline.

"Urethane coating" means the application of any surface coating formulation, except plastisol, to urethane coated fabric or urethane sheets that are more than 0.002 inches (50 micrometers) thick, except resilient floor covering and flexible packaging.

"Vacuum service" means equipment operating at an internal pressure which is at least 0.725 pounds per square inch (37.5 millimeters of mercury) below ambient pressure.

"Valve" means a device that regulates or isolates the fluid flow in a pipe, tube, or conduit by means of an external actuator.

"Vapor" means the gaseous form of substances which, under standard conditions, are in the solid or liquid state and which can be changed to these states by either increasing the pressure or decreasing the temperature.

"Vapor balance system" means a system for controlling vapor losses during the transfer of a VOC liquid from one vessel to another vessel or tank by means of the simultaneous counter-transfer of displaced vapors from the receiving vessel to the vessel supplying the liquid.

"Vapor cleaning machine" means a solvent cleaning machine that uses either solvent vapor generated by boiling liquid solvent or heated liquid solvent as part of the cleaning or drying cycle. This term includes both batch vapor cleaning machines and in-line vapor cleaning machines, but does not include cold cleaning machines and machines which do not have a solvent/air interface, such as airless and air-tight cleaning systems.

"Vapor control system" means a system for preventing the emission of organic vapors into the outdoor atmosphere.

"Vapor-mounted primary seal" means a seal-envelope combination which is mounted so that underneath the seal there is an annular vapor space which is bounded by the bottom of the seal, the vessel wall, the liquid surface, and the floating roof.

"Vapor pressure" means the pressure of the vapor phase of a substance, or the sum of the partial pressures of the vapor phases of individual substances in a mixture of substances, when in equilibrium with the non-vapor phase of the substance or substances.

"Vapor-tight" means not capable of allowing the passage of gases at the pressures encountered.

"Vapor up control switch" means, with respect to a vapor cleaning machine, a thermostatically controlled switch which shuts off or prevents condensate from being sprayed when there is no vapor. On in-line vapor cleaning machines the switch also prevents the conveyor from operating when there is no vapor.

"Vinyl coating" means the application of any surface coating formulation, except ink and plastisol, to vinyl-coated fabric or vinyl sheets.

"Volatile organic compound" or "VOC" means a volatile organic compound as that term is defined by the EPA at 40 CFR 51.100(s), as supplemented or amended, which is incorporated by reference herein.

"Voltage reduction" means a reduction in customer supply voltage of at least five percent by an electric distribution company in order to reduce load on an electric distribution system.

"Working mode cover" means, with respect to a solvent cleaning machine, any cover or other element of the ma-

chine's design that shields the machine's openings from outside air disturbances while parts are being cleaned in the machine.

"Wash coat" means a coating containing binders that raise wood surfaces, prevent undesired staining, and control penetration.

"Worst case operating conditions" means the conditions of operation which result in the maximum VOC emission rate for any hour period for a continuous operation or the maximum VOC batch cycle emission rate for a batch operation, considering any enforceable limitations on the operation including those set forth in any applicable rule or regulation, permit, or operating certificate.

Amended by R.1986 d.379, effective September 22, 1986 (operative October 18, 1986).
See: 17 N.J.R. 1969(a), 18 N.J.R. 1936(a).
Substantially amended.
Amended by R.1988 d.44, effective January 19, 1988 (operative February 21, 1988).
See: 19 N.J.R. 1938(a), 20 N.J.R. 186(b).
Added definition "Gasoline dispensing facility".
Amended by R.1989 d.62, effective February 6, 1989.
See: 20 N.J.R. 1866(a), 21 N.J.R. 321(a).
Added "barges as tankers" to "Delivery vessel" and added definition "marine delivery vessel".
Amended by R.1989 d.331, effective June 19, 1989 (operative July 24, 1989).
See: 20 N.J.R. 3052(a), 21 N.J.R. 1669(b).
Added definition for "custom topcoating of automobiles and light duty trucks", amended "refinishing of automobiles and light duty trucks" by referencing those coatings and finishes to be excluded and change number of passenger seating from 12 to 15 in "surface coating of automobiles and light-duty trucks".
Public Notice: Petition for rulemaking concerning a Volatile Organic Substance.
See: 22 N.J.R. 1632(c).
Public Notice: Action on Petition for rulemaking concerning a Volatile Organic Substance.
See: 22 N.J.R. 2041(a).
Public Notice: Amend definition of volatile organic compounds to exclude four halogenated chlorofluorocarbons.
See: 22 N.J.R. 3165(c).
Amended by R.1992 d.102, effective March 2, 1992 (operative March 28, 1992).
See: 23 N.J.R. 1858(b), 24 N.J.R. 792(a).
Amended definitions for "air contaminant", "conservation vent", "control apparatus", "conveyorized surface cleaner", "department", "equipment", "facility", "freeboard chiller", "freeboard height", "gasoline", "liquid particles", "particles", "person", "petroleum distillate", "receiving vessel", "reid vapor pressure", "seal-envelope combination", "source operation", "stack or chimney", "standard conditions", "storage tanks", "surface coating of automobiles and light-duty trucks", "surface cleaners", "surface coating formulation" and "surface coating operation"; added new definitions for "capture efficiency", "certificate", "destruction efficiency", "distillates of air", "EPA", "exempt organic substance", "indirect emissions", "operating certificate", "partial pressure", "permit", "surface coating formulation as applied", "temporary operating certificate", "vapor pressure", "volatile organic compound (VOC)", and "worst case operating conditions"; deleted definitions for "high performance architectural coating" and "volatile organic substances".
Administrative corrections to "cutback asphalt", "Department", "fabric printing operation", "graphic arts", "storage tank" and "vapor balance system".
See: 24 N.J.R. 1889(a).
Amended by R.1993 d.666, effective December 20, 1993 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 25 N.J.R. 4551(a), 25 N.J.R. 6002(a).
Amended by R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Administrative Correction.
See: 27 N.J.R. 1406(a).
Amended by R.1995 d.255, effective May 15, 1995 (operative June 19, 1995).
See: 26 N.J.R. 4478(a), 27 N.J.R. 1979(b).
Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
Inserted "Facility-wide permit", "Operating permit", and "Preconstruction permit"; and rewrote "Permit".
Administrative change.
See: 31 N.J.R. 639(b).
Amended by R.2003 d.224, effective June 2, 2003 (operative June 29, 2003).
See: 34 N.J.R. 2489(a), 35 N.J.R. 2509(a).
Rewrote the section.
Amended by R.2004 d.129, effective April 5, 2004 (operative April 25, 2004).
See: 35 N.J.R. 3486(a), 36 N.J.R. 1791(a).
In the introductory paragraph, substituted "when used in this subchapter, have the same meanings" for "when used in this subchapter, shall have the meanings"; added "Former DER credit user".
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
Added definitions "Brake horsepower", "Boiler serving an electric generating unit", "Combustion turbine", "Construction engine", "Electric distribution company", "Electric distribution system", "Electric generating unit", "Emergency", "Emergency generator", "Industrial/commercial/institutional boiler", "Internal combustion engine", "KW", "MW", "PJM", "Power outage", "Rated power output", "Reciprocating engine" and "Voltage reduction"; rewrote definitions "Combined cycle gas combustion turbine", "Regenerative cycle gas combustion turbine", "Simple cycle gas combustion turbine", "Stationary gas combustion turbine" and "Stationary internal combustion reciprocating engine"; deleted definitions "Gas turbine", "Non-utility boiler", and "Utility boiler".
Amended by R.2005 d.392, effective November 21, 2005.
See: 36 N.J.R. 4607(a), 37 N.J.R. 16(b), 4415(a).
Deleted "carbon dioxide" from "Distillates of air" definition.
Administrative corrections.
See: 38 N.J.R. 5155(b).
Amended by R.2008 d.366, effective December 1, 2008 (operative December 29, 2008).
See: 39 N.J.R. 4492(a), 40 N.J.R. 6769(a).
Rewrote definition "Volatile organic compound".

Law Review and Journal Commentaries

Air Pollution Law Changes Target Nitrogen Oxides. Neale R. Bedrock, 136 N.J.L.J. No. 8, S17 (1994).

Explaining the facts of BACT, RACT and GACT. Neale R. Bedrock, 138 N.J.L.J. No. 8, S4 (1994).

Case Notes

Regulations prescribing implementation schedule for stage II vapor recovery system were valid. American Petroleum Institute v. New Jersey Dept. of Environmental Protection, 230 N.J.Super. 563, 554 A.2d 3 (A.D.1989).

7:27-16.1A Purpose, scope, applicability, and severability

(a) This subchapter establishes requirements and procedures concerning the control and prohibition of air pollution by volatile organic compounds (VOC). The general purposes of this subchapter are as follows:

1. To require any stationary source operation or group of source operations located at a facility to utilize reasonably available control technology (RACT) to control VOC emissions. RACT is the lowest emission limitation that a particular source is capable of meeting by the application of air pollution control technology and/or pollution prevention measures which are reasonably available considering technological and economic feasibility. Specific applicability thresholds are provided throughout the subchapter. Carbon monoxide limits are included for combustion sources, in order to control VOC emissions, which are also products of incomplete combustion; and

2. To establish standards and emission limits for certain vessels which contain VOCs and which may be carried or transported or are otherwise capable of being moved, including delivery vessels.

(b) As set forth at N.J.A.C. 7:27–17.4(c), this subchapter's requirements for the implementation of control measures, including, but not limited to requirements for the installation and use of control apparatus, or the use of compliant coatings, shall apply with full force to Group II TXS until the Department amends this rule in response to EPA rulemaking or otherwise.

(c) Whenever persons, equipment, control apparatus or any VOC subject to the provisions of this subchapter are also subject to the provisions of any other subchapters of this chapter, the requirements of the relevant provisions of this subchapter and all subchapters of this chapter will apply.

(d) Whenever a VOC subject to the emission rate provisions of this subchapter is also subject to the emission rate provisions of any other subchapters of the chapter, the relevant provisions of the subchapter requiring the lowest allowable rate will apply.

(e) Each owner and each operator of any equipment or source operation subject to this subchapter is responsible for ensuring compliance with all requirements of this subchapter. If there is more than one owner or operator of the equipment or source operation, each owner and each operator is jointly and severally liable for any penalties for violations of this subchapter.

(f) On and after April 25, 2004, no owner or operator of a source operation subject to a VOC emissions limit under this subchapter may comply with the limit through the use of discrete emission reduction (DER) credits.

(g) Any former DER credit user who used DER credits to comply with a VOC emissions limit established in this subchapter, and who would continue to require the use of DER credits to comply with that limit, shall achieve compliance with that limit by April 25, 2005 and maintain compliance with that limit thereafter. In the case of these former DER credit users, only, deadlines related to the VOC emissions limit compliance deadline that are set forth elsewhere in this subchapter are modified as follows:

1. The permit application submission deadline established at N.J.A.C. 7:27–16.7(k)1 is July 25, 2004;

2. The compliance deadline established at N.J.A.C. 7:27–16.7(k)2 is April 25, 2005;

3. The compliance deadline established at N.J.A.C. 7:27–16.8(d) is April 25, 2005;

4. The compliance demonstration deadline established at N.J.A.C. 7:27–16.8(e) is October 25, 2005;

5. The compliance deadline established at N.J.A.C. 7:27–16.9(d) is April 25, 2005;

6. The compliance demonstration deadline established at N.J.A.C. 7:27–16.9(e) is October 25, 2005;

7. The compliance deadline established at N.J.A.C. 7:27–16.10(c) is April 25, 2005;

8. The compliance demonstration deadline established at N.J.A.C. 7:27–16.10(d) is October 25, 2005;

9. The compliance deadline established at N.J.A.C. 7:27–16.11(c) is April 25, 2005;

10. The compliance demonstration deadline established at N.J.A.C. 7:27–16.11(d) is October 25, 2005;

11. The compliance deadline established at N.J.A.C. 7:27–16.13(a) is April 25, 2005;

12. The source operation demonstration submission deadline established at N.J.A.C. 7:27–16.17(b)1 is July 25, 2004;

13. The compliance deadline established at N.J.A.C. 7:27–16.17(b)2 is April 25, 2005;

14. The emission reduction deadline established at N.J.A.C. 7:27–16.17(f)2 is April 25, 2005;

15. The Control Measure Plan preparation deadline established at N.J.A.C. 7:27–16.21(a) is July 25, 2004;

16. The emission reduction deadline established at N.J.A.C. 7:27–16.21(b) is April 25, 2005; and

17. The compliance demonstration deadline established at N.J.A.C. 7:27–16.23(b) and (c) is October 25, 2005.

(h) The provisions of (g) above do not apply to a former DER credit user:

1. Whose only use of DER credits was in satisfaction of either the settlement of a penalty imposed pursuant to N.J.A.C. 7:27A–3.10 or an Administrative Consent Order entered into with the Department; or

2. To extend a deadline contained in an Administrative Consent Order (ACO) entered into with the Depart-

ment prior to January 1, 2003, unless compliance with the ACO requires the use of VOC DER credits.

(i) If any provision of this subchapter or the application thereof to any person or circumstance is adjudicated to be invalid or unenforceable to any extent, the remainder of this subchapter or its application to any person or circumstance other than those that are the subject of the adjudication shall continue to be unaffected by the adjudication.

Recodified from 7:27–16.11 and amended by R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Amended by R.1996 d.303, effective July 1, 1996 (operative August 2, 1996).
See: 28 N.J.R. 1147(b), 28 N.J.R. 3414(a).
Added (f) and designated former (f) as (g).
Amended by R.2003 d.224, effective June 2, 2003 (operative June 29, 2003).
See: 34 N.J.R. 2489(a), 35 N.J.R. 2509(a).
Rewrote (a).
Amended by R.2004 d.129, effective April 5, 2004 (operative April 25, 2004).
See: 35 N.J.R. 3486(a), 36 N.J.R. 1791(a).
Rewrote (f); added a new (g) and (h); recodified former (g) as (i).

7:27–16.2 Stationary storage tanks

(a) The provisions of this section shall apply to stationary storage tanks.

(b) No person shall cause, suffer, allow, or permit the following:

1. The storage of any applicable VOC in any stationary storage tank that has a maximum capacity of 2,000 gallons (7,570 liters) or greater and is exposed to the rays of the sun unless:

i. The external surface of the tank is painted and maintained white, except that this provision shall not apply to words and logograms applied to the external surface of the storage tank for purposes of identification provided such symbols do not cover more than 20 percent of the external surface area of the tank's sides and top or more than 200 square feet (18.6 square meters), whichever is less; or

ii. An equivalent method of emission control approved by the Department is used; or

2. The storage of any applicable VOC in any stationary storage tank having a maximum capacity of 10,000 gallons (37,850 liters) or greater unless such stationary storage tank is equipped with control apparatus as determined in accordance with the procedures for using Table 2A or as approved by the Department as being equally or more effective in preventing the emission of a VOC into the outdoor atmosphere.

Procedure for Using Table 2A

Step 1: Determine the vapor pressure at standard conditions in pounds per square inch absolute of the VOC to be stored.
Step 2: Select the appropriate line in Table 2A for the vapor pressure determined in Step 1.
Step 3: Determine the maximum tank capacity in thousands of gallons.
Step 4: Find the tank capacity range classification for the vapor pressure determined under Step 1.
Step 5: Determine the control requirements in accordance with the following:
Range I: No control apparatus required under this subsection.
Range II: Conservation vent required.
Range III: Floating roof required.

TABLE 2A
DETERMINANTS OF TYPE CONTROL APPARATUS REQUIRED FOR STORAGE OF VOLATILE ORGANIC COMPOUNDS

Vapor Pressure in PSIA @ 70°F		Tank Capacity in Thousands of Gallons			
		Range I	Range II		Range III
Greater than	But not Greater than	Not Greater than	Greater than	But not Greater than	Greater than
*0.02	0.03	4,500	4,500	14,000	14,000
0.03	0.04	4,500	4,500	11,000	11,000
0.04	0.06	3,500	3,500	8,000	8,000
0.06	0.08	2,500	2,500	6,000	6,000
0.08	0.10	2,000	2,000	4,500	4,500
0.10	0.15	1,600	1,600	3,500	3,500
0.15	0.2	1,050	1,050	2,500	2,500
0.2	0.3	750	750	1,600	1,600
0.3	0.4	550	550	1,250	1,250
0.4	0.5	475	475	1,075	1,075
0.5	0.6	400	400	900	900
0.6	0.7	350	350	750	750
0.7	0.8	300	300	650	650
0.8	1.0	260	260	550	550
1.0	1.2	210	210	475	475
1.2	1.4	190	190	400	400
1.4	1.6	170	170	350	350
1.6	1.8	150	150	300	300
1.8	2.1	125	125	260	260
2.1	2.4	110	110	225	225
2.4	2.7	100	100	200	200
2.7	3.0	90	90	180	180
3.0	3.5	80	80	160	160
3.5	4.0	70	70	145	145
4.0	4.5	60	60	130	130
4.5	5.0	50	50	115	115
5.0	5.5	50	50	105	105
5.5	6.0	50	50	95	95
6.0	6.5	40	40	85	85
6.5	7.0	40	40	75	75
7.0	7.5	40	40	70	70
7.5	8.0	35	35	65	65
8.0	8.5	35	35	60	60
8.5	9.5	30	30	55	55
9.5	10.5	25	25	50	50
10.5	11.5	20	20	45	45
11.5	13.0	10	10	40	40

* Any VOC which has a vapor pressure of 0.02 pounds per square inch absolute at standard conditions is included in this line.

(c) No person shall cause, suffer, allow, or permit the storage of any VOC having a vapor pressure of greater than 13.0 pounds per square inch absolute (672 millimeters of mercury) at the actual temperature existing at or near the liquid surface in any stationary storage tank having a maximum capacity of 1,000 gallons (3,785 liters) or greater unless such tank is equipped with a vapor control system to reduce the rate of VOC emissions to the outdoor atmosphere by at least 90 percent by weight of the uncontrolled VOC emissions from the tank.

(d) No person shall cause, suffer, allow, or permit the storage of any VOC in any stationary storage tank subject to the provisions of either (b) above in Ranges II and III or (c) above and equipped with gauging and/or sampling systems unless such systems are vapor-tight except when gauging or sampling is taking place.

(e) The provisions of (b) and (c) above shall not apply to a stationary storage tank in Range II located underground at a depth of no less than eight inches (20.3 centimeters) below the surface measured to the highest point of the tank shell, or installed in other manner approved by the Department as being equally or more effective in preventing the emission of any VOC into the outdoor atmosphere.

(f) The provisions of (b) above shall not apply to a stationary storage tank, if the tank is:

1. Maintained under a controlled elevated temperature; or

2. Equipped with a vapor control system reducing by at least 98 percent the weight of VOC emissions to the outdoor atmosphere.

(g) Any stationary storage tank in Range III as determined from Table 2A, constructed or installed on or after December 17, 1979, shall be provided with a double seal floating roof or other control apparatus approved by the Department as being equally or more effective in preventing the emission of any VOC into the outdoor atmosphere.

(h) No person shall cause, suffer, allow, or permit the storage of any VOC in any stationary storage tank equipped with an external floating roof, unless any such storage tank containing a VOC having a vapor pressure of 1.0 pounds per square inch absolute (50 millimeters of mercury) or greater at standard conditions and having a maximum capacity of 20,000 gallons (75,700 liters) or greater is equipped with a double seal-envelope combination or equipment approved by the Department as being equally or more effective in preventing the emission of any VOC into the outdoor atmosphere. For the secondary seal, the gap area of gaps exceeding one-eighth inch (0.32 centimeters) in width between the seal and the tank wall shall not exceed 1.0 square inch per foot (6.5 square centimeters per 0.3 meters) of tank diameter. Any secondary seal shall be intact, with no visible holes, tears or other openings.

(i) No person shall cause, suffer, allow, or permit the storage of any VOC in any stationary storage tank equipped with an external floating roof unless all openings in such roof, excluding emergency roof drains, are covered when not in active use.

(j) Any delivery vessel that contains any applicable VOC and is located at a facility and is vented to the atmosphere for more than 30 consecutive days shall be considered a stationary storage tank for the purposes of this section.

(k) Any person responsible for the emission of any applicable VOC from any storage tank pursuant to this section shall maintain, for each tank, records specifying each VOC stores and the vapor pressure of each VOC at standard conditions.

Amended by R.1986 d.379, effective September 22, 1986 (operative October 18, 1986).
See: 17 N.J.R. 1969(a), 18 N.J.R. 1936(a).
Substantially amended.
Amended by R.1989 d.331, effective June 19, 1989 (operative July 24, 1989).
See: 20 N.J.R. 3052(a), 21 N.J.R. 1669(b).
(h) repealed and replaced, establishing separate provisions prior to and after June 15, 1990 and at (i) adding "prior to June 15, 1990".
Amended by R.1992 d.102, effective March 2, 1992 (operative March 28, 1992); (n) (operative October 1, 1992).
See: 23 N.J.R. 1858(b), 24 N.J.R. 792(a).
EPA identified deficiencies addressed by adding recordkeeping requirements.
Amended by R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Amended by R.2003 d.224, effective June 2, 2003 (operative June 29, 2003).
See: 34 N.J.R. 2489(a), 35 N.J.R. 2509(a).
Rewrote (a) and (b).

7:27–16.3 Gasoline transfer operations

(a) This section shall apply to any gasoline transfer operation and to the storage, transportation, and dispensing of gasoline for the refueling of vehicles or for use in any other type of operation including, but not limited to, agricultural, aviation, industrial, commercial, construction, and marine operations.

(b) This section shall not apply to the following:

1. The loading of gasoline as cargo into a marine tank vessel. Marine tank vessel loading operations that occur in New Jersey or in New Jersey coastal waters are subject to the provisions at N.J.A.C. 7.27–16.5;

2. The transfer of gasoline into a stationary storage tank during construction ballasting; and

3. The transfer of gasoline into or from portable fuel containers.

(c) No person shall cause, suffer, allow, or permit the transfer of gasoline into a receiving vessel having a maximum capacity of 2,000 gallons (7,570 liters) or greater, unless the following requirements are met:

1. The transfer is made:

i. Through a submerged fill pipe. If the receiving vessel is a stationary storage tank (either above ground or underground), the submerged fill pipe shall be permanently affixed to the tank; or

ii. By some other means approved by the Department as being equally or more effective in reducing total applicable VOC emissions into the outdoor atmosphere during transfer; or

2. The manufacturing process vessel was installed before December 17, 1979.

(d) No person shall cause, suffer, allow, or permit the transfer of gasoline from a delivery vessel into any stationary storage tank having a maximum capacity of 2,000 gallons (7,570 liters) or greater unless:

1. The storage tank is equipped and operating with one of the following emission controls:

i. A vapor control system that:

(1) Reduces the total applicable VOC emissions into the outdoor atmosphere by no less than 98 percent of the concentration of applicable VOC by volume in the air-vapor mixture displaced during the transfer of gasoline; and

(2) Includes a pressure/vacuum relief valve on each atmospheric vent which remains closed during the gasoline transfer; or

ii. A floating roof; and

2. The storage tank meets the requirements of N.J.A.C. 7:27–16.2.

(e) Except as provided in (f) and (h) below, no person shall cause, suffer, allow, or permit the transfer of gasoline into any gasoline laden vehicular fuel tank, unless the following requirements are met:

1. The transfer is made using a vapor control system that is approved by the Department and that:

i. Reduces the total applicable VOC emissions into the outdoor atmosphere by no less than 95 percent of the concentration of applicable VOC by volume in the air-vapor mixture displaced during the transfer of gasoline; and

ii. Prevents overfilling and spillage;

2. If the transfer is made at a gasoline dispensing facility, the vapor recovery system shall be one of the following:

i. A system that was certified by CARB prior to July 25, 2001;

ii. A system that has been certified by CARB on or after July 25, 2001;

iii. A system that was certified by CARB prior to July 25, 2001; and any replacement parts/equipment/components and any subsequent construction modifications:

(1) Are approved in an Executive Order or approval letter issued by CARB on or after July 25, 2001; and

(2) Do not decrease the VOC emission control efficiency of the system; or

iv. A system that is equivalent for the purpose of VOC emission control to a CARB certified system and that is approved by the Department and EPA;

3. At a gasoline dispensing facility which was constructed on or after June 29, 2003, and for which a construction permit was issued by the Department after June 29, 2003, each dispensing device at a gasoline dispensing facility which dispenses more than one grade of gasoline shall utilize a unihose system for dispensing gasoline; and

4. Each dispensing device at a gasoline dispensing facility shall meet the following requirements:

i. Each nozzle shall have a check valve located in the nozzle;

ii. At a facility with a vacuum assist vapor control system, each nozzle shall be equipped with a splash-guard that prevents spillage during refueling; and

iii. Each dispensing device and its nozzle(s) shall be designed to be compatible, such that:

(1) The nozzle together with its vapor boot fits into the housing in which it is hung on the dispensing device; and

(2) The nozzle's vapor check valve remains in the closed position when the nozzle is properly hung on the dispensing device.

(f) Notwithstanding (e) above, the provisions of (e) above shall not apply as follows:

1. The provisions of (e) above shall not apply to the transfer of gasoline into a vehicular fuel tank at a gasoline dispensing facility if:

i. The facility is located at a marina and used exclusively for the refueling of marine vehicles;

ii. The maximum capacity of each gasoline stationary storage tank at the facility is less than 2,000 gallons (7,570 liters);

iii. The vehicle being refueled is an aircraft; or

iv. The facility meets the following:

(1) The facility does not have, and has never had, for any 12–month period subsequent to February 6, 1989, an average monthly throughput of greater than 10,000 gallons (37,850 liters), determined in accordance with (g) below; and

(2) If the gasoline dispensing facility commenced operation after June 29, 2003, the facility does not have any stationary storage tanks which are subject to the requirements of (d) above; and

2. The provisions of (e)4 above shall not apply to dispensing devices at a gasoline dispensing facility until June 29, 2005, if construction of the dispensing device commenced prior to June 29, 2003; or a permit for the construction of the dispensing device was issued by the Department prior to June 29, 2003.

(g) For the purposes of (f)1iv above or (h) below, the average monthly throughput of a gasoline dispensing facility shall be an average of the facility's monthly throughputs between September 1, 1986, and August 31, 1987, or during any subsequent period of 12 consecutive months.

(h) If a gasoline dispensing facility, which has been exempt from the provisions of (e) above pursuant to (f)1ii, but which on or after March 28, 1992, becomes subject to (e) above because the facility's average monthly throughput increases such that it exceeds 10,000 gallons (37,850 liters) during at least one 12–month period, the owner or operator shall ensure that no gasoline is dispensed at the facility unless the requirements of (e) above are met in accordance with the following schedule:

1. Within three months of the facility's having an average monthly throughput of more than 10,000 gallons of gasoline, the owner or operator shall submit to the Department a completed application for a permit and certificate, pursuant to N.J.A.C. 7:27–8, for the construction, installation, and operation of a vapor control system and any other modifications needed for the facility to meet the requirements of (e) above;

2. Within nine months of the facility's having an average monthly throughput of more than 10,000 gallons of gasoline, the owner or operator shall commence construction to comply with (e) above, in accordance with the permit issued by the Department pursuant to N.J.A.C. 7:27–8; and

3. Within 18 months of the facility's having an average monthly throughput of more than 10,000 gallons of gasoline, the owner or operator shall achieve compliance with (e) above.

(i) The owner or operator of a gasoline dispensing facility shall perform the following tests:

1. The owner or operator shall demonstrate the facility's vapor control system is performing properly, as follows:

i. Each of the tests set forth in Table 3A below, that are applicable to the facility, shall be conducted in accordance with the schedule for testing given in the table.

ii. The tests required to be performed pursuant to (i)1i above shall be conducted utilizing the applicable CARB test method cited in Table 3A (except that the Static Pressure Performance Test shall be modified as indicated in Table 3A) which are incorporated herein by reference or utilizing some other method approved by the Department and USEPA. A copy of any CARB procedure cited in Table 3A may be downloaded from CARB's website at http://www.arb.ca.gov/vapor or obtained from the Department at the following address:

New Jersey Department of Environmental Protection
Bureau of Technical Services
PO Box 437
380 Scotch Road
West Trenton, NJ 08525-0437

iii. A vapor control system shall be deemed to have passed a test conducted pursuant to (i)1i above if it meets the performance standards and specifications which are set forth in CARB's Vapor Recovery Certification Procedure (CP-201), as amended, and which are applicable to the test. A copy of CARB's Vapor Recovery Certification Procedure may be downloaded from CARB's website at http://www. arb.ca.gov/vapor or obtained from the Department at the following address:

New Jersey Department of Environmental Protection
Bureau of Technical Services
PO Box 437
380 Scotch Road
West Trenton, NJ 08525-0437

iv. If the vapor control system at a facility fails any test required to be performed pursuant to (i)1i above, the owner or operator shall have the system repaired and retested within 14 days of failure of the test.

v. If the vapor control system fails any retesting required to be performed pursuant to (i)1iv above, the following procedures shall be followed:

(1) The owner or operator shall notify the Department in writing within 72 hours of the failure. Such notification shall be submitted to the applicable regional office of the Department at the following address:

New Jersey Department of Environmental Protection
Bureau of Minor Source Investigation
Central Regional Office Air and Environmental Quality
Compliance and Enforcement
Horizon Center, PO Box 407
Robbinsville, NJ 08625-0407

(2) The owner or operator shall have the system repaired and retested in accordance with a compliance plan approved by the Department;

2. Upon the request of the Department, the owner or operator shall demonstrate the efficiency of the facility's vapor control system in reducing the total applicable VOC emissions released from the facility into the outdoor atmosphere, as required pursuant to (d)1i(1) and/or (e)1i above, in accordance with test procedures approved by the Department; and

3. A record of the performance of each of the tests, and of the results obtained, shall be maintained in accordance with (s) below.

Table 3A
Methods for Testing Performance of Gasoline Dispensing Facilities

Test	Applicability	Required Testing Schedule	Test Method (CARB Citation)
Static Pressure Performance Test	Applies to any facility required to have a vapor control system under (e) above	Within 90 days from the date of installation of the system and at least once in every 12 month period thereafter	CARB TP-201.3, including all subsequent revisions thereto, which are incorporated herein by reference except that the vapor control system shall be tested at two inches of water column
Pressure Vacuum Valve Test	Applies to any facility required to have a vapor control system under (e) above	Within 90 days from the date of installation of the system and at least once in every 12 month period thereafter	CARB TP-201.2B, including all subsequent revisions thereto, which are incorporated herein by reference
Dynamic Backpressure Performance Test	Applies to any facility required to have a vapor control system under (e) above	Within 90 days from the date of installation of the system and at least once in every 36 month period thereafter	CARB TP-201.4, including all subsequent revisions thereto, which are incorporated herein by reference
Air to Liquid Volume Ratio Test	Applies to any facility with a vacuum assist vapor control system under (e) above	Within 90 days from the date of installation of the system and at least once in every 12 month period thereafter	CARB TP-201.5, including all subsequent revisions thereto, which are incorporated herein by reference

(j) No person shall cause, suffer, allow, or permit a delivery vessel having a maximum capacity of 2,000 gallons (7,570 liters) or greater, except if it is a railroad tank car or marine tank vessel, to contain gasoline unless:

1. The delivery vessel sustains a pressure change of less than three inches of water (six millimeters of mercury) in five minutes when pressurized to 18 inches of water

(34 millimeters of mercury) and evacuated to six inches of water (11 millimeters of mercury);

2. Pressure and vacuum tests are performed on the delivery vessel at least once in every 12-month period, in accordance with test procedures specified by the Department, to determine whether or not the requirements of (j)1 above are met;

3. A certification is affixed to the delivery vessel in a prominent location, which indicates the identification number of the vessel and the date the vessel last passed the pressure and vacuum tests; and

4. A record of certification is kept with the delivery vessel at all times and made available upon request by the Department. The record of certification shall include the name and address of the delivery vessel owner; the delivery vessel identification number; and, for each test performed, the test method used, the testing location, date of test, tester's name and signature, and test results.

(k) No person shall cause, suffer, allow, or permit a transfer of gasoline, to or from a delivery vessel, if the transfer is subject to the provisions of (d) above, and (*l*) or (m) below, and if the delivery vessel being loaded is under a pressure in excess of 18 inches of water (34 millimeters of mercury) gauge or the delivery vessel being unloaded is under a vacuum in excess of six inches of water (11 millimeters of mercury) gauge.

(*l*) Except as provided in (p) below, no person shall cause, suffer, allow, or permit the transport or transfer of gasoline in a delivery vessel having a maximum capacity of 2,000 gallons (7,570 liters) or greater unless such vessel is vapor-tight at all times while containing any VOC except during:

1. Emergency conditions;

2. Gauging; or

3. Venting through a vapor control system approved by the Department.

(m) No person shall cause, suffer, allow, or permit the transfer of gasoline or any other substance into a gasoline vapor laden delivery vessel having a maximum capacity of 2,000 gallons (7,570 liters) or greater, unless:

1. The transfer operation is conducted at a gasoline loading facility equipped with a vapor control system which meets the requirement of (n) below, the vapor control system is properly connected to the delivery vessel, and the vapor control system is properly operated throughout the duration of the transfer operation; or

2. The delivery vessel is being used for the purpose of holding gasoline from a storage tank during a period in which the storage tank is undergoing repair or maintenance and the duration of this use is limited to less than one month.

(n) No person shall cause, suffer, allow, or permit the transfer or loading of gasoline or any other substance into any gasoline vapor laden delivery vessel except at a gasoline loading facility that is equipped and operating with a vapor control system in accordance with the following provisions:

1. At a facility where the daily loading rate does not exceed 15,000 gallons (56,775 liters) of gasoline per day, as determined in accordance with (n)3 below, the facility shall be equipped and operating with a vapor balance system or some other vapor control system of equal or higher efficiency. Such vapor balance system shall not have a vent that is open to the atmosphere during transfer and shall not return the vapors to a tank equipped with a floating roof;

2. At a facility where the daily loading rate exceeds, or may exceed, 15,000 gallons (56,775 liters) of gasoline per day, as determined in accordance with (n)3 below, the facility shall be equipped and operating with a vapor control system which:

i. Prevents applicable VOC emissions to the outdoor atmosphere from exceeding the maximum allowable emissions as determined from Table 3B below; or

ii. Reduces the total applicable VOC emissions to the outdoor atmosphere by no less than 90 percent by weight; and

3. For the purposes of (n)1 and 2 above, a gasoline loading facility's daily loading rate shall be its average daily rate during the month in which the facility had its highest monthly throughput in the last 12 months of operation.

TABLE 3B

EMISSION STANDARDS FOR GASOLINE LOADING FACILITIES LOADING MORE THAN 15,000 GALLONS (56,775 LITERS) PER DAY

Concentration of Applicable VOC in Gas Displaced from Delivery Vessel, Volume Percent		Maximum Allowable Emissions per Volume Unit Loaded	
Greater Than	But Not Greater Than	Pounds per Ten Thousand Gallons	Milligrams per Liter
50	—	6.7	80
40	50	5.8	70
30	40	5.0	60
20	30	4.2	50
15	20	3.8	45
0	15	3.3	40

(*o*) Except as provided in (p) below, no person shall cause, suffer, allow, or permit any transfer of gasoline, subject to the provisions of (d), (e), (m), or (n) above, if:

1. The delivery vessel being loaded or unloaded, or the vapor control system or other equipment serving the transfer operation, has:

i. A vapor leak which results in a concentration of applicable VOC greater than or equal to 100 percent of the lower explosive limit of propane, when measured at a distance of 1.0 inch (2.54 centimeters) or less from the location of the leak; or

ii. A liquid leak;

2. Any component of the delivery vessel designed for preventing the release of gasoline vapors is not installed and operating as designed; or

3. Commencing or continuing the transfer would result in a liquid gasoline spill.

(p) A delivery vessel subject to the provisions of (j) above that is found to be in violation of (*l*) or (*o*) above shall be:

1. Repaired and a new certification, in accordance with (j)3 and 4 above, shall be affixed to the delivery vessel within 15 days; or

2. Removed from service until (*l*) and (*o*) above are met in full.

(q) No person shall cause, suffer, allow, or permit the transfer of gasoline at a gasoline loading facility, into or from a delivery vessel, or at a gasoline dispensing facility, which is required to have a vapor control system pursuant to (d)1i, (e)1i, (m), or (n) above unless:

1. The vapor control system is designed to meet the applicable requirements in (d), (e), (m), or (n) above;

2. All hoses, piping, connections, fittings and manholes serving the vapor control system are vapor tight and leak free, except when gauging or sampling is being performed;

3. The vapor control system, including any component thereof, is maintained in proper operating condition and kept free of defects that could impair the effectiveness of the system;

4. The vapor control system is constructed out of materials that will not become degraded when exposed to any grade of gasoline which may be stored, transferred, and/or dispensed; and

5. The vapor control system is operated properly whenever gasoline is stored, transferred, and/or dispensed.

(r) (Reserved)

(s) The owner or operator of a gasoline dispensing facility shall maintain the following records at the facility:

1. A record of the monthly throughput of gasoline;

2. If the facility is required to test a vapor control system pursuant to (i) above:

i. Documentation of the performance of each test required pursuant to (i) above, including the date, name of the testing company and the test method used; and

ii. A record of the results of each test performed pursuant to (i) above.

(t) The owner or operator of a gasoline loading facility with a vapor control system pursuant to (n) above shall maintain the following records at the facility:

1. On a daily basis, record the total quantity, in gallons or liters, loaded into delivery vessels at the facility;

2. On a continuous basis or at a frequency approved by the Department in writing:

i. For any thermal oxidizer used to control the emission of applicable VOCs, record the operating temperature at the exit of the combustion chamber and the carbon monoxide concentration in the flue gas emitted to the outdoor atmosphere; or

ii. For a vapor control system using carbon or other adsorptive material, record the concentration of the total applicable VOCs in the flue gas emitted to the outdoor atmosphere; or, provided that the owner or operator confirms daily that the automatic switching between carbon beds is functioning in accordance with permit conditions, record the date of carbon bed replacement; and

3. Upon the request of the Department and at the frequency specified by the Department, record any other operating parameter relevant to the prevention or control of air contaminant emissions from the facility.

Amended by R.1986 d.379, effective September 22, 1986 (operative October 18, 1986).
See: 17 N.J.R. 1969(a), 18 N.J.R. 1936(a).
Substantially amended.
Amended by R.1988 d.44, effective January 19, 1988 (operative February 22, 1988).
See: 19 N.J.R. 1938(a), 20 N.J.R. 186(b).
Substantially amended.
Amended by R.1989 d.62, effective February 6, 1989.
See: 20 N.J.R. 1866(a), 21 N.J.R. 321(a).
Added (e)4; repealed (n); renumbered (*o*)-(q) as (n)-(p); added new (q).
Amended by R.1989 d.595, effective December 4, 1989 (operative January 7, 1990).
See: 21 N.J.R. 1960(a), 21 N.J.R. 3748(c).
Compliance date of February 28, 1991 established.
Amended by R.1992 d.102, effective March 2, 1992 (operative March 28, 1992); (w)1., (operative October 1, 1992); (w)2-3, (operative April 1, 1993).
See: 23 N.J.R. 1858(b), 24 N.J.R. 792(a).

Addressed EPA-identified deficiencies; added recordkeeping requirement; strengthened verification of conformance with CTG requirements for the transfer of gasoline into storage tanks.
Administrative correction to (i).
See: 24 N.J.R. 1889(a).
Amended by R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Administrative Correction.
See: 26 N.J.R. 4793(a).
Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
In (r)1, deleted a reference to a Permit to Construct, Install, or Alter Control Apparatus or Equipment.
Amended by R.2003 d.224, effective June 2, 2003 (operative June 29, 2003).
See: 34 N.J.R. 2489(a), 35 N.J.R. 2509(a).
Rewrote the section.

Case Notes

Regulations prescribing implementation schedule for stage II vapor recovery system were valid. American Petroleum Institute v. New Jersey Dept. of Environmental Protection, 230 N.J.Super. 563, 554 A.2d 3 (A.D.1989).

7:27-16.4 VOC transfer operations, other than gasoline

(a) On and after July 26, 1994, the provisions of this section shall apply to any transfer of an applicable VOC, except:

1. The transfer of gasoline. Gasoline transfer operations are subject to the provisions of N.J.A.C. 7:27-16.3; and

2. The loading of applicable VOC as cargo into a marine tank vessel. Marine tank vessel loading operations occurring in New Jersey or in New Jersey's coastal waters are subject to the provisions of N.J.A.C. 7:27-16.5.

(b) No person shall cause, suffer, allow or permit the transfer of any applicable VOC into any receiving vessel having a maximum capacity of 2,000 gallons (7,570 liters) or greater unless such transfer is made through a submerged fill pipe or by other means approved by the Department as being equally or more effective in preventing the emission of any VOC into the outdoor atmosphere during transfer. Such submerged fill pipe shall be permanently affixed to any underground storage tank of 2,000 gallons (7,570 liters) or greater total capacity into which the VOC is transferred. This subsection shall not apply to a transfer to a manufacturing process vessel installed before December 17, 1979.

(c) On and after May 31, 1995, no person shall cause, suffer, allow, or permit the transfer of any applicable VOC from a delivery vessel into any stationary storage tank having a maximum capacity of 2,000 gallons (7,570 liters) or greater and having a total calculated annual emission rate over 1,000 pounds of applicable VOC as determined pursuant to (d) below unless the storage tank is equipped with and operating one of the following control apparatus:

1. A vapor control apparatus which reduces by no less than 90 percent the concentration of applicable VOC in the air-vapor mixture displaced during the transfer of applicable VOC;

2. A floating roof; or

3. A vapor balance system with:

i. All atmospheric vents positively closed during transfer;

ii. A conservation vent adjusted to remain closed during transfer; or

iii. A hole of ⅛ inch (6.4 millimeters) or less in diameter in the cap on the atmospheric vent.

(d) For the purposes of (c) above, the total calculated annual emission rate for each tank shall be determined in accordance with the following procedure:

1. Calculate the emission factor for each applicable VOC as follows:

$$EF = 0.000024 \times VP \times MW$$

Where:

EF	=	the emission factor for each applicable VOC being transferred;
VP	=	the vapor pressure (psia) of each applicable VOC. If the VOC is heated, this term is the vapor pressure of the VOC at the temperature at the point of transfer; if the VOC is not heated, this term is the vapor pressure of the VOC at standard conditions;
MW	=	the molecular weight of the applicable VOC; and
0.000024	=	a constant to convert units;

2. Determine the calculated annual emission rate by multiplying each emission factor calculated in (d)1 above, by the annual quantity, in gallons, of each applicable VOC transferred from delivery vessels into the tank. Sum the calculated annual emission rates for each applicable VOC transferred. For a storage tank for which a permit is in effect, the annual quantity of each applicable VOC transferred shall be considered to be the maximum quantity allowed by the permit. For a storage tank for which no permit is in effect, the annual quantity of applicable VOC transferred shall be the quantity that was transferred during the previous calendar year (from January 1 through December 31); and

3. Compare the total calculated annual emission rate to 1,000 pounds. If the total calculated annual emission rate for the tank is less than 1,000 pounds, this section does not require the use of any control apparatus, except as specified in (b) above. Otherwise, one of the control apparatus described in (c) above must be used.

1. Any surface coating operation or graphic arts operation located at a major VOC facility and having the potential to emit three pounds per hour or more of VOC shall instead be subject to the provisions of N.J.A.C. 7:27–16.17;

2. On or after June 29, 2004, any refinishing of mobile equipment at mobile equipment repair and refinishing facilities. Thereafter, such refinishing operations shall be subject to the requirements at N.J.A.C. 7:27–16.12 and the refinishing requirements in Table 7A shall no longer be applicable; and

3. Any surface coating operation or graphic arts operation exempted under (*l*) below.

(b) (Reserved)

(c) No person shall cause, suffer, allow, or permit the use of any surface coating operation or graphic arts operation subject to this section, unless:

1. The VOC content of any surface coating formulation as applied does not exceed the applicable maximum allowable VOC content if any, specified in Table 7A, 7B, 7C, or 7D; or

2. Until March 28, 1994, the surface coating operation is included in a mathematical combination of sources which was approved by the Department prior to March 28, 1992.

3. If more than one surface coating formulation subject to the same maximum allowable VOC content limit as set forth in Table 7A, 7B, 7C, or 7D is applied by a single surface coating or graphic arts operation and one or more of any such formulation are not in compliance with any limit specified in the applicable table, the daily weighted mean of the VOC content of the surface coating formulations as applied does not exceed the applicable maximum allowable VOC content as set forth in the applicable Table. This daily weighted mean shall be calculated using the following equation:

$$\text{Daily mean VOC content} = \frac{\sum_{i=1}^{n} (C_i)(V_i)}{\sum_{i=1}^{n} (V_i)}$$

where n = number of surface coating formulations subject to the same maximum allowable VOC content standard, applied in one day;

i = subscript denoting an individual surface coating formulation;

(C_i) = maximum actual VOC content per volume of each surface coating formulation (minus water) applied in one day, in pounds per gallon or kilograms per liter; and

(V_i) = volume of each surface coating formulation (minus water) applied in one day, in gallons or liters; or

4. The surface coating or graphic arts operation is served by VOC control apparatus satisfying the requirements listed in (c)4i through iii below:

i. The control apparatus for any surface coating operation prevents no less than 90 percent by weight of the VOC content in the surface coating formulation as applied each hour from being discharged directly or indirectly into the outdoor atmosphere; or

ii. The control apparatus for any graphic arts operation meets the collection and control requirements set forth in (h) below; or

iii. The VOC emissions from the surface coating or graphic arts operation are controlled by the control apparatus so that the operation results in an hourly VOC emission rate no greater than the maximum allowable hourly emission rate calculated on a solids as applied basis in accordance with the following equation:

$$\text{Maximum allowable hourly rate} = \frac{\left(1-\frac{y}{d}\right)(z)(x)}{\left(1-\frac{x}{d}\right)}$$

where x = maximum allowable VOC content per volume of surface coating formulation (minus water), in pounds per gallon (lb/gal) or kilograms per liter (kg/l) as set forth in Table 7A, 7B, 7C, or 7D of this section;

d = density of the VOC of the applied surface coating formulation in pounds per gallon (lb/gal) or kilograms per liter (kg/l);

y = VOC content of the applied surface coating formulation (minus water) in pounds per gallon (lb/gal) or kilograms per liter (kg/l); and

z = volume of the surface coating formulation(minus water) applied per hour in gallons per hour (gal/hr) or liters per hour (l/hr); or

iv. For a surface coating or graphic arts operation that applies more than one surface coating formulation subject to the same maximum allowable VOC content limit as set forth in the applicable table, the control apparatus collects and prevents VOC from being discharged into the outdoor atmosphere so that the actual daily emissions are less than the allowable daily emissions as calculated below:

$$\text{Actual daily emissions} = (1-\eta_c\eta_d)(VOC_a)(V)$$

where VOC_a = daily mean VOC content of the surface coating formulations as calculated by (c)3 above;

V = total daily volume of the surface coating formulations, as applied;

η_c = capture efficiency, i.e. the ratio of the VOC collected by the control apparatus to the VOC in the surface coating formulations as applied, as determined by a method approved by the Department and EPA; and

η_d = destruction efficiency of the control apparatus, i.e. the ratio of the VOC prevented from being discharged into the outdoor atmosphere to the VOC collected by the control apparatus, as determined by a method approved by the Department and EPA; and

$$\text{Allowable daily emissions} = \frac{\left(1-\frac{VOC_a}{d}\right)(V)(x)}{\left(1-\frac{x}{d}\right)}$$

where x = maximum allowable VOC content per volume of surface coating formulation (minus water), in pounds per gallon (lb/gal) or kilograms per liter (kg/l) as set forth in Table 7A, 7B, 7C, or 7D of this section;

d = density of the VOC of the applied surface coating formulation in pounds per gallon (lb/gal) or kilograms per liter (kg/l);

V = total daily volume, in gallons or liters, of the surface coating formulations (minus water) as applied per day; and

VOC_a = daily mean VOC content of the applied surface coating formulations as calculated by (c)3 above.

(d) No person shall cause, suffer, allow, or permit the installation of any surface coating or graphic arts operation to apply a surface coating formulation which does not contain water deliberately added in a planned proportion unless a coating application system having a transfer efficiency of 60 percent or greater, or as otherwise approved by the Department, is used.

(e) The provisions of (c) and (d) above and (h), (i), and (j) below shall not apply to any individual surface coating or graphic arts operation in which the total surface coating formulations containing VOC are applied:

1. At rates not in excess of one half gallon per hour and two and one half gallons per day; or

2. For the purpose of developing new surface coating formulations or new equipment for use in surface coating or graphic arts operations, or for the purpose of performing research preceding such development provided such surface coating formulations are applied at rates not in excess of two gallons per hour and three gallons per day.

(f) The owner or operator of any automobile or light duty truck surface coating operation may, as an alternative to complying, pursuant to (c) above, with the content limits set forth in Table 7A, comply with the provisions of Table 7C pertaining to spray prime and spray topcoat surface coating formulations, provided that the transfer efficiency of the spray coating operation is determined in accordance with a method approved by the Department and the EPA.

TABLE 7A

AUTOMOBILE OR LIGHT DUTY TRUCK SURFACE COATING OPERATIONS AT ORIGINAL EQUIPMENT MANUFACTURING FACILITIES CONTROL CRITERIA AND COMPLIANCE DATES

Type of Operation	Maximum Allowable VOC Content per Volume of Coating (Minus Water): Pounds per Gallon	Maximum Allowable VOC Content per Volume of Coating (Minus Water): Kilogram per Liter	Final Compliance Date
Prime			
Electrophoretic dip prime	1.2	0.14	December 31, 1982
Spray Prime	2.8	0.34	December 31, 1984
Topcoat			
Spray Topcoat	2.8	0.34	December 31, 1986
Repair	4.8	0.58	December 31, 1986
Custom Topcoating	5.0	0.60	June 15, 1990
Refinishing			
Base Coat	6.0	0.75	June 15, 1990
Clear Coat	4.4	0.54	June 15, 1990
All others	5.0	0.60	June 15, 1990

TABLE 7B

MISCELLANEOUS SURFACE COATING OPERATIONS CONTROL CRITERIA AND COMPLIANCE DATES

Type of Operation	Maximum Allowable VOC Content per Volume of Coating (Minus Water): Pounds per Gallon	Maximum Allowable VOC Content per Volume of Coating (Minus Water): Kilogram per Liter	Final Compliance Date
Group I			
Can Coating			December 31, 1981
Sheet basecoat	2.8	0.34	
Two-piece can exterior			
Two- and three-piece can interior body spray, two-piece and exterior	4.2	0.51	
Side-seam spray	5.5	0.66	
End sealing compound	3.7	0.44	
Coil Coating	2.6	0.31	December 31, 1981
Fabric Coating	2.9	0.35	December 31, 1981
Vinyl Coating	3.8	0.45	December 31, 1981
Paper Coating	2.9	0.35	December 31, 1981
Metal Furniture Coating	3.0	0.36	December 31, 1981
Magnet Wire Coating	1.7	0.20	December 31, 1981
Large Appliance Coating	2.8	0.34	December 31, 1981
Coating of Miscellaneous Metal			December 31, 1983
Parts and Products			
Clear Coating	4.3	0.52	
Air-dried Coating	3.5	0.42	
Extreme Performance Coating	3.5	0.42	
All other coatings	3.0	0.36	
Coating of Flat Wood Paneling			December 31, 1983
Printed hardwood plywood panels and particleboard panels	2.7	0.32	
Natural finish hardwood plywood	3.3	0.40	
Hardwood panels	3.6	0.43	
Group II			
Leather Coating	5.8	0.70	December 31, 1987
Urethane Coating	3.8	0.45	December 31, 1987
Tablet Coating	5.5	0.66	December 31, 1987

Type of Operation	Maximum Allowable VOC Content per Volume of Coating (Minus Water) Pounds per Gallon	Kilogram per Liter	Final Compliance Date
Glass Coating	3.0	0.36	December 31, 1987
Coating of Wood Furniture			December 31, 1987
Semitransparent stain	6.8	0.82	
Wash Coat	6.1	0.73	
Opaque Stain	4.7	0.56	
Sealer	5.6	0.67	
Pigment Coat	5.0	0.60	
Clear Topcoat	5.6	0.67	
Group III			
Pipe Coating for Metal and Concrete Pipe			
Clear coating	4.3	0.52	May 31, 1995,
Air-dried coating	3.5	0.42	except
Extreme performance coating	3.5	0.42	December 31, 1983 for metal pipe
All other coatings	3.0	0.36	coating

TABLE 7C
ALTERNATIVE MAXIMUM ALLOWABLE VOC CONTENT IN COATINGS WITH MINIMUM TRANSFER EFFICIENCIES REQUIRED FOR SPRAY COATING OPERATIONS

Maximum Allowable VOC Content per Volume of Coating (minus water) Pounds per Gallon	Kilograms per Liter	Minimum Transfer Efficiency Required
3.0	0.36	34
3.2	0.38	37
3.4	0.41	42
3.6	0.43	47
3.8	0.46	52
4.0	0.48	58
4.2	0.50	65

NOTE: Each combination of VOC content and transfer efficiency in Table 7C is equivalent to a daily emission of 15.1 pounds of VOC per gallon of solids deposited, minus water. Verification of this equivalent emission rate using the methods prescribed in the "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light Duty Truck Topcoat Operations" (EPA 4593–88–018) shall satisfy compliance with Table 7C.

TABLE 7D
GRAPHIC ARTS OPERATIONS

Part A
COMPLIANCE DATES

Type of Graphic Arts Operation	Final Compliance Date
Rotogravure printing operations (web-fed) and flexographic printing operations which produces published material or packaging for commercial or industrial purposes [1]	December 31, 1981
Rotogravure printing operations (web-fed) and flexographic printing operations on vinyl or urethane coated fabric or sheets [1]	December 31, 1987
Fabric printing operations [1]	December 31, 1987
Gravure printing operations (sheet-fed)	May 31, 1995
Screen printing operations	May 31, 1995

Part B
CONTROL CRITERIA FOR GRAPHIC ARTS SOURCE OPERATIONS EXCEPT SCREEN PRINTING OPERATIONS

Basis	Control Criteria Maximum Allowable volume percent VOC in volatile fraction of surface coating formulations or fountain solutions (VOC plus water) as applied.
Surface coating formulations [2] that contain water (except fountain solutions):	25.0%

Basis	Control Criteria Maximum Allowable VOC Content per volume of surface coating formulation (minus water) Pounds per Gallon	Kilograms Per Liter
Surface coating formulations [2] that do not contain water:	2.9	0.35
Fountain solutions:	5.0%, if the temperature of the fountain solution is 55°F or less; or 3.0%, if the temperature of the fountain solution is higher than 55°F	

Part C
CONTROL CRITERIA FOR SCREEN PRINTING OPERATIONS

Basis	Control Criteria Maximum Allowable VOC content per volume of surface coating formulations [2] Pounds per Gallon	Kilograms per Liter
Substrate Category: [3]		
Paper	3.3	0.40
Glass and Ceramic	3.3	0.40
Metal	3.3	0.40
Rigid and Flexible Plastic	3.3	0.40
Reflective Sheeting	3.3	0.40
Pressure Sensitive Decals	3.3	0.40
Wood	3.3	0.40
Fabric	2.9	0.35
Surface Coating Formulation:		
Conductive Ink	8.5	1.03
Special Purpose Screen Printing Inks and Coatings	6.7	0.81

[1] Control apparatus serving certain graphic arts operations of this type which were constructed prior to July 26, 1994 may have compliance dates on or after July 26, 1994, pursuant to the provisions of (p) below.

[2] This term includes inks and coatings; see definition of "surface coating formulation."

[3] Except where conductive ink and special purpose screen printing inks and coatings are used.

(g) The owner or operator of any metal furniture or large appliance surface coating operation may, as an alternative to complying with the applicable maximum allowable VOC content limits per volume of surface coating formulation (minus water) set forth in Group I of Table 7B, pursuant to (c)1 above, apply to the Department for an alternative maximum allowable VOC content limit per volume of surface coating formulation, provided such person can demonstrate to the satisfaction of the Department and the EPA that the surface coating formulation is applied at a transfer efficiency of greater than 60 percent.

(h) Except as provided in (p) below, the owner or operator of any rotogravure, sheet-fed gravure, flexographic, fabric, or screen printing operation may, as an alternative to complying with the control criteria requirements set forth in Table 7D, pursuant to (c)1 above, install and use control apparatus which:

1. Collects at least 75 percent by volume of the source gas emitted from a rotogravure or gravure printing operation (sheet-fed), including associated dryers, and prevents from being discharged into the outdoor atmosphere:

i. At least 95 percent by volume of the VOC collected on an hourly basis if a thermal oxidizer is used to control emissions, except as provided in (p) below; or

ii. At least 90 percent by volume of the VOC collected on an hourly basis if a carbon adsorption

system or any other control device is used to control emissions;

2. Collects at least 70 percent by volume of the source gas emitted from a flexographic printing operation, including associated dryers, and prevents from being discharged into the outdoor atmosphere:

i. At least 95 percent by volume of the VOC collected on an hourly basis if a thermal oxidizer is used to control emissions, except as provided in (p) below; or

ii. At least 90 percent by volume of the VOC collected on an hourly basis if a carbon adsorption system or any other control device is used to control emissions;

3. Collects at least 70 percent by volume of the source gas emitted from a fabric printing operation, including associated dryers, and prevents from being discharged into the outdoor atmosphere:

i. At least 95 percent by volume of the VOC collected on an hourly basis if a thermal oxidizer is used to control emissions, except as provided in (r) below; or

ii. At least 90 percent by volume of the VOC collected on an hourly basis if a carbon adsorption system or any other control device is used to control emissions; or

4. Collects at least 70 percent by volume of the source gas emitted from a screen printing operation and prevents from being discharged into the outdoor atmosphere:

i. At least 95 percent by volume of the VOC collected on an hourly basis if a thermal oxidizer is used to control emissions; or

ii. At least 90 percent by volume of the VOC collected on an hourly basis if a carbon adsorption system or any other control device is used to control emissions.

(i) Notwithstanding the provisions of (c)2 and (c)4ii above, the owner or operator of any tablet coating operation that uses a surface coating formulation that does not comply with the maximum allowable VOC content limits per volume of coating (minus water) set forth in Table 7B, Group II, shall install and use control apparatus which prevents no less than 90 percent by weight of the VOC content in the surface coating formulation as applied each hour from being discharged directly or indirectly into the outdoor atmosphere.

(j) The owner or operator of any wood furniture surface coating operation shall comply with the following requirements:

1. At a facility emitting less than 50 tons (45.36 megagrams) of VOC per year, each surface coating formulation specified in Table 7B, Group II under "Wood Furniture" shall be applied using airless, air-assisted airless, or heated airless spray techniques, or another application method approved by the Department and the EPA as having a transfer efficiency of at least 40 percent; or

2. At a facility emitting 50 tons (45.36 megagrams) of VOC or greater per year, each surface coating formulation specified in Table 7B, Group II under "Wood Furniture" shall be applied using airless, air-assisted airless, heated airless, electrostatic spray techniques, or flat line processes, or another application method approved by the Department and the EPA as having a transfer efficiency of at least 65 percent.

(k) The owner or operator of any pipe coating operation, gravure printing operation (sheet-fed), or screen printing operation subject to (c) above shall comply with the following schedule:

1. By October 26, 1994, submit to the Chief, Bureau of New Source Review, Environmental Regulation Program, Department of Environmental Protection, CN 027, Trenton, New Jersey 08625–0027, a complete application for each permit required, pursuant to N.J.A.C. 7:27–8, to achieve compliance with (c) above; and

2. By May 31, 1995, achieve compliance with (c) above and maintain compliance with this section thereafter.

(*l*) The provisions of this section shall not apply to:

1. The surface coating of aircraft and marine vessel exteriors, exclusive of parts coated prior to installation or assembly;

2. The refinishing of automobiles, if coating use is less than 50 gallons (189 liters) per week;

3. The customized topcoating of automobiles and trucks, if coating use is less than 48 gallons (182 liters) per week; and

4. The on-site coating of stationary structures such as, but not limited to, equipment used for manufacturing processes, storage tanks, bridges, and swimming pools. The coatings used in such on-site coating operations are subject to the provisions at N.J.A.C. 7:27–23.

(m) The owner or operator of any surface coating operation subject to this section applying only surface coating formulations which are subject to and conform with the applicable VOC content limit set forth in Table 7A, 7B, 7C, or 7D shall maintain records of the VOC content of each surface coating formulation (minus water) as applied, in pounds of VOC per gallon of coating or kilograms of VOC per liter of coating; the percent by weight of any exempt organic substance; and the daily volume of each surface coating formulation applied.

(n) The owner or operator of any surface coating operation, or graphic arts operation, which is subject to this section and which uses one or more surface coating formulations which do not conform with the applicable VOC content limit set forth in Table 7A, 7B, 7C, or 7D, shall maintain the following records:

1. For each surface coating formulation including each change of diluent or concentration of diluent as applied, record the following:

i. The number of hours each surface coating formulation was applied and the date;

ii. The volume of each surface coating formulation applied;

iii. The density of each surface coating formulation;

iv. The density of the VOC in each surface coating formulation;

v. The percent by weight of VOC in each surface coating formulation;

vi. The percent by weight of any exempt organic substance in each surface coating formulation;

vii. The percent by weight of any water in each surface coating formulation;

2. For any surface coating operation that has a thermal oxidizer used to control the emission of VOC, record on a continuous basis or at a frequency approved in writing by the Department the operating temperature at the exit of the combustion chamber and the carbon monoxide concentration in the flue gas emitted to the outdoor atmosphere;

3. For any surface coating operation that has a control apparatus using carbon or other adsorptive material to control the emission of VOC:

i. Record on a continuous basis or at a frequency approved in writing by the Department the concentration of the total VOC in the flue gas emitted to the outdoor atmosphere; or

ii. Record the date and time the carbon or other adsorptive material used in the control apparatus is regenerated or replaced; and maintain any other information required to document whether the control apparatus is being used and maintained in accordance with the manufacturer's recommended procedures. The manufacturer's recommendations for use and maintenance are to be readily available on the operating premises, and the person responsible for the surface coating operation shall provide these to the Department upon request; and

4. Upon the request of the Department and at the frequency specified by the Department, record any other operation parameter relevant to the prevention or control of air contaminant emissions from the surface coating operation or control apparatus.

(o) The method(s) to be used to determine the composition of a surface coating formulation as required by (m) or (n) above may include utilization of standard formulation sheets, material safety data sheets, the results of analytical tests, or other methods approved in advance and provided that the required information can be readily extracted from the documents.

(p) Notwithstanding the provisions of (h)1, 2, or 3 above, the owner or operator of any rotogravure printing operation, gravure (sheet-fed) printing operation, flexographic printing operation, or fabric printing operation, subject to this section pursuant to (a)1 above, may continue to use a control apparatus which was installed and continues to be operated in compliance with a permit issued by the Department for the printing operation prior to July 26, 1994 so long as the control apparatus has not been altered or replaced since the date of approval of the current permit. If and when the control apparatus is altered or replaced, the new or altered control apparatus shall, at a minimum, meet the requirements set forth in (h)1, 2, or 3 above.

(q) After receipt of a written request from an owner or operator for an extension of the deadline set forth in (k)1 above, the Department may authorize a 60-day renewable extension upon showing of good cause. Such extension may be renewed by the Department upon the written request of the owner or operator. Approval of such an extension shall not constitute approval of extension of the May 31, 1995 deadline established in (k)2 above. Written requests for the extension of a deadline submitted pursuant to this subsection shall be addressed to:

Assistant Director, Air and Environmental Quality Enforcement
Division of Enforcement Field Operations
Department of Environmental Protection
PO Box 422
401 East State Street, 4th Floor
Trenton, New Jersey 08625-0422

Amended by R.1986 d.379, effective September 22, 1986 (operative October 18, 1986).
See: 17 N.J.R. 1969(a), 18 N.J.R. 1936(a).
Substantially amended.
Amended by R.1989 d.331, effective June 19, 1989 (operative July 24, 1989).
See: 20 N.J.R. 3052(a), 21 N.J.R. 1669(b).
At (c) established differing rates for prior to and after June 15, 1990 and at (i) established deadlines of July 1, 1989 and at (i)3. reduced period from 12 to 6 months.
Petition for rulemaking. See: 22 N.J.R. 862(a).
Amended by R.1992 d.102, effective March 2, 1992 (operative March 28, 1992); (l), (m)1. (operative October 1, 1992); (m)2.-4. (operative April 1, 1993).
See: 23 N.J.R. 1858(b), 23 N.J.R. 2119(a), 24 N.J.R. 792(a).
Addressed EPA-identified deficiencies; added recordkeeping requirements; specified method for averaging surface coating formulations; specify method to be used to determine the required efficiency control apparatus serving surface coating operations; require nationally consistent standards; specify methods for achieving acceptable verification of transfer efficiency.
Administrative correction to (a)2, 3ii, 4 and (k)2.
See: 24 N.J.R. 1889(a).

Recodified from 7:27-16.5 and amended by R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Prior text at section, "Cutback and emulsified asphalts", recodified as 7:27-16.19.
Administrative Correction.
See: 26 N.J.R. 4793(a).
Amended by R.2003 d.244, effective June 2, 2003 (operative June 29, 2003).
See: 34 N.J.R. 2489(a), 35 N.J.R. 2509(a).
Rewrote (a); in Table 7A, substituted "or" for "and" and inserted "at original equipment manufacturing facilities" following "operations" in the title; in Table 7B, inserted "Coating of" preceding "Miscellaneous Metal Parts and Products", "Flat Wood Paneling" and "Wood Furniture" and substituted "Pipe Coating" for "Coatings" preceding "for Metal and Concrete Pipe"; in (*l*)4, substituted "stationary" for "assembled" preceding "structures" and added the second sentence.

Case Notes

Evidence supported finding that refinishers could comply with regulations limiting Volatile Organic Substances (VOS). Matter of Adoption of Amendments to N.J.A.C. 7:27-16, 244 N.J.Super. 334, 582 A.2d 824 (A.D.1990).

Evidence supported regulation limiting Volatile Organic Substances (VOS) content. Matter of Adoption of Amendments to N.J.A.C. 7:27-16, 244 N.J.Super. 334, 582 A.2d 824 (A.D.1990).

Department of Environmental Protection was not required to promulgate spot repair regulations to permit higher Volatile Organic Substances (VOS). Matter of Adoption of Amendments to N.J.A.C. 7:27-16, 244 N.J.Super. 334, 582 A.2d 824 (A.D.1990).

Erroneous estimation of beneficial impact of regulations did not invalidate regulations. Matter of Adoption of Amendments to N.J.A.C. 7:27-16, 244 N.J.Super. 334, 582 A.2d 824 (A.D.1990).

Volatile Organic Substance (VOS) regulations were not unreasonable for not applying to smaller shops. Matter of Adoption of Amendments to N.J.A.C. 7:27-16, 244 N.J.Super. 334, 582 A.2d 824 (A.D.1990).

Record established that auto body painting business violated both permit and air pollution regulations when paint fumes escaped from certified spray paint booths; $17,500 penalty assessed. Division of Environmental Quality v. Prestige Auto Body, 92 N.J.A.R.2d (EPE) 178.

7:27-16.8 Boilers

(a) The provisions of this section apply to any boiler which is subject to the provisions of N.J.A.C. 7:27-19.

(b) The owner or operator of any boiler serving an electric generating unit, regardless of size, or any industrial/commercial/institutional boiler with a maximum gross heat input rate of at least 50 million BTU per hour or greater shall:

1. Cause it to emit VOC in concentrations that do not exceed 50 ppmvd at seven percent oxygen;

2. Cause it to emit CO in concentrations that do not exceed 100 ppmvd at seven percent oxygen; and

3. Adjust its combustion process in accordance with the procedure set forth at N.J.A.C. 7:27-19.16 and the following schedule:

i. For any boiler serving an electric generating unit, regardless of size, by May 1 of each calendar year, except the adjustment may occur within seven days of the first period of operation after May 1, if the boiler has not operated between January 1 and May 1 of that year; or

ii. For any industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least 50 million BTU per hour or greater:

(1) If not located at a major NO_x facility, in the same quarter of each calendar year beginning in 2007; or

(2) If located at a major NO_x facility, or required by this section prior to November 7, 2005 to adjust the combustion process, in the same quarter of each calendar year.

(c) The owner or operator of any industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate at least five million BTU per hour, but less than 50 million BTU per hour, shall adjust the combustion process annually in accordance with the procedure set forth at N.J.A.C. 7:27-19.16 and the following schedule:

1. For an industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least five million BTU per hour, but less than 10 million BTU per hour, whether or not located at a major NO_x facility, in the same quarter of each calendar year, beginning in 2010; and

2. For an industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least 10 million BTU per hour, but less than 20 million BTU per hour, whether or not located at a major NO_x facility, in the same quarter of each calendar year, beginning in 2008; or

3. For an industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least 20 million BTU per hour, but less than 50 million BTU per hour:

i. If not located at a major NO_x facility, in the same quarter of each calendar year beginning in 2007; or

ii. If located at a major NO_x facility, or required by this section prior to November 7, 2005 to adjust the combustion process, in the same quarter of each calendar year.

(d) Except as set forth in (b)3ii(1), (c)1 and 2, and (c)3i above, any owner or operator of a boiler subject to this section shall achieve compliance with (b) above by May 31, 1995, and maintain compliance with this subsection thereafter.

(e) The owner or operator of any boiler serving:

(g) Any source conducting emissions monitoring for CO to determine compliance with this section shall do so using the method set forth at 40 CFR 60, Appendix B, Performance Specification Test No. 2, and 40 CFR 60, Appendix F, Quality Assurance Requirements, including any amendments or supplements thereto, or any equivalent method approved in advance by the Department and acceptable to EPA.

(h) Any source conducting emissions tests for CO to determine compliance with this section shall do so using the method set forth at 40 CFR 60, Appendix A, Reference Method 10, including any amendments or supplements thereto, or any equivalent method approved in advance by the Department and acceptable to EPA.

New Rule, R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Prior text at section, "Variances", recodified as 7:27-16.26.
Amended by R.1995 d.255, effective May 15, 1995 (operative June 19, 1995).
See: 26 N.J.R. 4478(a), 27 N.J.R. 1979(b).
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
In rule heading, substituted "reciprocating" for "internal combustion"; substituted "reciprocating" for "internal combustion" throughout the section; rewrote (a) and (c) through (e).

7:27-16.11 Asphalt plants

(a) The provisions of this section shall apply to any batch mix asphalt plant which is located at a major VOC facility or any drum mix asphalt plant which is located at a major VOC facility. Any batch mix asphalt plant or any drum mix asphalt plant may opt to be subject to the provisions of N.J.A.C. 7:27-16.17.

(b) The owner or operator of a batch mix asphalt plant or a drum mix asphalt plant shall cause it to emit CO in concentrations that do not exceed 500 ppmvd at seven percent oxygen and VOC in concentrations that do not exceed 250 ppmvd at seven percent oxygen.

(c) Any owner or operator of an asphalt plant subject to this section shall achieve compliance with this section by May 31, 1995, and maintain compliance with this section thereafter.

(d) Any owner or operator of an asphalt plant subject to this section shall demonstrate compliance with this subchapter in accordance with the procedures at N.J.A.C. 7:27-16.23 before May 31, 1996.

(e) Any owner or operator of any asphalt plant subject to this section shall adjust the combustion process in accordance with the procedure set forth in its permit and certificate or at least once per year beginning in 1995, whichever is more stringent.

(f) Any source conducting emissions tests for VOC to determine compliance with this section shall do so using New Jersey Air Test Method 3 (N.J.A.C. 7:27B-3) or any equivalent method approved in advance by the Department and acceptable to EPA.

(g) Any source conducting emissions monitoring for CO to determine compliance with this section shall do so using the method set forth at 40 CFR 60, Appendix B, Performance Specification Test No. 2, and 40 CFR 60, Appendix F, Quality Assurance Requirements, including any amendments or supplements thereto, or any equivalent method approved in advance by the Department and acceptable to EPA.

(h) Any source conducting emissions tests for CO to determine compliance with this section shall do so using the method set forth at 40 CFR 60, Appendix A, Reference Method 10, including any amendments or supplements thereto, or any equivalent method approved in advance by the Department and acceptable to EPA.

Recodification: From 16.11.
See: 17 N.J.R. 1969(a), 18 N.J.R. 1936(a).
Repealed and recodified by R.1992 d.102, effective March 2, 1992 (operative March 28, 1992).
See: 23 N.J.R. 1858(b), 24 N.J.R. 792(a).
Recodified from 16.12 and amended by changing "VOS" to "VOC"; former section 16.11 entitled "Permit to construct and certificate to operate" was repealed by this rulemaking and was previously originally recodified from 16.10. See: 17 N.J.R. 1969(a), 18 N.J.R. 1936(a).
Repeal and New Rule, R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Section was "Applicability".

7:27-16.12 Surface coating operations at mobile equipment repair and refinishing facilities

(a) This section shall apply on or after June 29, 2004 to surface coating operations performed at mobile equipment repair and refinishing facilities, and to the owners and operators of such facilities.

(b) Notwithstanding the requirements of (a) above, this section shall not apply to the following refinishing or repair operations:

1. A refinishing or repair operation which is subject to the standards set forth at N.J.A.C. 7:27-16.7;

2. An original equipment surface coating operation at an automobile assembly plant; or

3. A refinishing or repair operation performed by a person who does not receive compensation for the application of the coating.

(c) No person shall apply any coating, including, but not limited to, an automotive pretreatment coating, automotive primer-surface coating, automotive primer-sealer, automotive topcoat, or any automotive specialty coating, that contains VOC in excess of the applicable limits specified in Table 12A below, to mobile equipment or mobile equipment components.

TABLE 12A

MAXIMUM ALLOWABLE VOC CONTENT OF COATINGS USED FOR MOBILE EQUIPMENT REPAIR OR REFINISHING

Coating Type	Limit	
	Pounds per gallon	Grams per liter
Automotive pretreatment	6.5	780
Automotive primer-surfacer	4.8	580
Automotive primer-sealer	4.6	550
Automotive topcoat		
Single stage-topcoat	5.0	600
2 stage basecoat/clearcoat	5.0	600
3 or 4-stage basecoat/		

2. The make, model and serial number of the flare;

3. A copy of the manufacturer's specification of the performance standards for the flare;

4. A statement that the flare was installed in accordance with the manufacturer's specifications;

5. A statement that the flare is being operated and maintained in accordance with the manufacturer's specifications; and

6. A statement that the flare will continue to be operated in accordance with the manufacturer's specifications.

(c) The owner or operator of a flare subject to this section shall inspect the flare before May 1 of each year beginning in 1995 to verify that the flare continues to be operated in accordance with the manufacturer's specifications for the operation of the flare. The owner or operator of the flare shall record the following in a permanently bound log book at the conclusion of each inspection:

1. The name of the person conducting the inspection;

2. The date on which the inspection was conducted;

3. An entry indicating which flare was inspected;

4. Any changes or adjustments made to the flare as a result of the inspection; and

5. A statement stating that the flare is currently being operated in compliance with the manufacturer's specifications.

New Rule, R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Administrative Correction.
See: 26 N.J.R. 4793(a).
Administrative Correction.
See: 27 N.J.R. 2740(a).

7:27-16.14 through 7:27-16.15 (Reserved)

7:27-16.16 Other source operations

(a) The provisions of this section apply to any source operation, except source operations in the following categories (Note: Source operations in those categories designated by an asterisk (*) which have the potential to emit three pounds per hour or more of VOC and which are located at a major VOC facility are regulated by N.J.A.C. 7:27-16.17.):

1. VOC storage operations;

2. Gasoline transfer operations;

3. VOC transfer operations, other than gasoline;

4. Marine transfer operations;

5. Open top tanks and surface cleaners;

6. Surface coating and graphic arts operations;

7. Boilers;

8. Stationary combustion turbines;

9. Stationary reciprocating engines;

10. Asphalt plants;

11. Natural gas pipeline blowdown events;

12. Flares;

13. Petroleum solvent dry cleaning operations;

14. Fiberglass manufacturing furnaces;

15. Glass manufacturing furnaces;

16. Fuel burning for steam generation for space heating;

17. Sulfuric acid plant burners;

18. Any source operation regulated pursuant to N.J.A.C. 7:27-16.17; and

19. Any source operation exempted from this subchapter pursuant to N.J.A.C. 7:27-16.27.

(b) Source operations to which this section apply are not limited to those involved in manufacturing and include, without limit, the following: agitators, autoclaves, bakery ovens, blenders, centrifuges, distillation processes, driers, extruders, fermentation processes, fiberglass boat or vessel manufacturing operations, fiberglass product manufacturing operations, foam blowing operations, fumigation chambers, mills, mixers, ovens, reactors, receivers, roasters, sterilization operations, and synthetic fiber manufacturing operations. The provisions of this section do not apply to any insignificant source operation as defined in N.J.A.C. 7:27-8.2 or 22.1.

(c) No person shall cause, suffer, allow, or permit any VOC to be emitted into the outdoor atmosphere from any source operation subject to the provisions of this section, in excess of the maximum allowable emission rate, as determined in accordance with the procedure in (d) below.

(d) For the purposes of (c) above, the maximum allowable emission rate for a source operation subject to this section shall be determined in accordance with the following procedure:

1. Determine the vapor pressure at standard conditions in pounds per square inch absolute of the VOC emitted from the source operation.

2. Determine the percent by volume of the VOC in the source gas emitted from the source operation. Whenever dilution gas is added to the source gas from a source operation, the source gas shall be considered to have the gas discharge rate and composition prior to such dilution, in accordance with the following:

i. If the source operation discharges under a ventilation hood, concentration of VOC and the flow rate of the source gas may be measured or otherwise determined in the duct connecting the hood to the inlet of the ventilation fan.

ii. If the emissions and ventilation air are conveyed through ducts from the source operation to the outdoor atmosphere with no interruption, the concentration of VOC and the rate of the source gas are to be determined inside the ducts.

iii. For all other source operations including, but not limited to, evaporation from steps in chemical manufacturing processes, the concentration of VOC and the rate of the source gas shall be measured at a point no farther than six inches (15 centimeters) downstream from the point at which the vapors leave the process equipment.

3. From Table 16B, find the source gas range classification by selecting the appropriate line for the vapor pressure as determined in Step 1 and the appropriate column for the percent VOC as determined in Step 2.

4. From Table 16A, Column 2, determine the maximum allowable percent of process emissions for the source gas range as determined in Step 3.

5. The maximum allowable emission rate shall be the pounds (kilograms) per hour (or per batch cycle hour) equivalent to the percent of the process emissions shown in Column 2 or the Exclusion Rate shown in Column 3, whichever is greater.

TABLE 16A
MAXIMUM ALLOWABLE HOURLY VOC EMISSIONS FROM SOURCE OPERATIONS

Column 1	Column 2	Column 3	
	Maximum	Exclusion Rates	
Range	Allowable emissions,	As of June 15, 1990	
Determined	Percent of Process	Continuous or	
From Table 16B	Emissions by Weight	Batch Cycle Emissions	
		Pounds Per Hour	Kilograms Per Hour
Range A	15	3.5	1.59
Range B	15	3	1.36
Range C	15	2.5	1.14
Range D	12	2	0.91
Range E	10	1.5	0.68
Range F	8	1	0.46
Range G	2	0.5	0.23
Range H	0.3	0	0
Range I	15	3.5	1.59

ii. Record the date and time the carbon or other adsorptive material used in the control apparatus is regenerated or replaced; also maintain production records sufficient to demonstrate whether the processes conducted generate VOC emissions within the design parameters of the control apparatus and any other information required to document whether the control apparatus is being used and maintained in accordance with the manufacturer's recommended procedures. The manufacturer's recommendations for use and maintenance are also to be readily available on the operating premises, and the person responsible for the source operation shall provide these to the Department upon request; and

4. Upon the request of the Department and at the frequency specified by the Department, record any other operating parameter relevant to the prevention or control of air contaminant emissions from the source operation or control apparatus.

Amended by R.1986 d.379, effective September 22, 1986 (operative October 18, 1986).
See: 17 N.J.R. 1969(a), 18 N.J.R. 1936(a).
Substantially amended.
Amended by R.1989 d.331, effective June 19, 1989 (operative July 24, 1989).
See: 20 N.J.R. 3052(a), 21 N.J.R. 1669(b).
Established separate provisions for prior to and as of June 15, 1990 and added Column 4 to table 4.
Amended by R.1992 d.102, effective March 2, 1992 (operative March 28, 1992); (m)1. (operative October 1, 1992); (m)2-4 (operative April 1, 1993).
See: 23 N.J.R. 1858(b), 24 N.J.R. 792(a).
Addressed EPA-identified deficiencies; eliminated "bubble" provisions.
Administrative correction to (a); (m)1, i and 3.
See: 24 N.J.R. 1889(a).
Recodified from 7:27-16.6 and amended by R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Amended by R.2003 d.224, effective June 2, 2003 (operative June 29, 2003).
See: 34 N.J.R. 2489(a), 35 N.J.R. 2509(a).
In (b), added the second sentence; in (g), rewrote 2.
Administrative correction.
See: 37 N.J.R. 590(a).
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
In (a)8, substituted "combustion" for "gas"; in (a)9, substituted "reciprocating" for "internal combustion".

7:27-16.17 Facility-specific VOC control requirements

(a) This section establishes procedures and standards for the establishment of VOC control requirements for any source operation that:

1. Is located at a major VOC facility and has the potential to emit at least three pounds per hour (potential batch cycle emission rate of three pounds per hour for batch processes), and:

i. Is not regulated elsewhere in this subchapter; and

ii. Is not specifically exempted elsewhere in this subchapter because the source operation is within a category that is exempted or because the source operation operates below exclusion rates or threshold levels for control; or

2. If the owner or operator of a source operation regulated under N.J.A.C. 7:27-16.2 through 16.16 or 16.18 through 16.21 seeks approval of an alternative VOC control plan, which would apply to the equipment or source operation notwithstanding any control requirement or emission limit which would otherwise apply under this subchapter.

(b) Except as provided at (t) below, the owner or operator of any facility that contains a source operation subject to (a)1 above shall:

1. By October 24, 1994, submit a demonstration for all source operations to the Department at the address listed in (s) below. This demonstration shall include one of the following for each source operation subject to (a)1 above:

i. Information, pursuant to (e) below, that demonstrates the source operation is currently served by a control apparatus that collects at least 90 percent by weight of the VOC emissions from the source operation and prevents from being discharged into the outdoor atmosphere at least 90 percent by weight of the VOC collected, that the owner or operator has implemented pollution prevention measures (or a combination of control apparatus and pollution prevention measures) that achieve at least the same level of VOC emission reductions;

ii. Information, pursuant to (e) below, that demonstrates by May 31, 1995 the source operation will be served by control apparatus that collects at least 90 percent by weight of the VOC emissions from the source operation and prevents from being discharged into the outdoor atmosphere at least 90 percent by weight of the VOC collected, that the owner or operator will implement pollution prevention measures (or a combination of control apparatus and pollution prevention measures) that achieve at least the same level of VOC emission reductions; or

iii. A proposed alternative VOC control plan prepared in accordance with (d) below.

2. Beginning on May 31, 1995, comply with either (b)2i or ii below:

i. Use control apparatus that the Department has determined (pursuant to (1) below) will collect at least 90 percent by weight of the VOC emissions from the source operation and prevent from being discharged into the outdoor atmosphere at least 90 percent by weight of the VOC collected; or

ii. Operate the facility in accordance with an alternative VOC control plan approved by the Department pursuant to (j) below.

(c) An owner or operator seeking approval of an alternative VOC control plan pursuant to (a)2 above shall submit to the Department at the address listed in (s) below a proposed alternative VOC control plan prepared in accordance with (d) below. Submission of a proposed alternative VOC control plan does not relieve an owner or operator of any facility, equipment or source operation facility from complying by May 31, 1995 for source operations first regulated under this subchapter as amended operative July 26, 1994 or compliance dates in other sections of this subchapter. If and when the Department approves the alternative VOC control plan, the owner or operator shall be subject to the conditions and requirements of the plan and of the Department's approval.

(d) An owner or operator submitting a proposed alternative VOC control plan pursuant to (b)1iii or (c) above shall include the following information in the plan:

1. A list of each source operation at the facility to be included in the plan:

i. For a submission pursuant to (b)1iii above, the list shall include each source operation that is not regulated under N.J.A.C. 7:27-16.2 through 16.16, 16.20 or 16.21, and has the potential to emit at least three pounds of VOC per hour; or

ii. For a submission pursuant to (c) above, the list shall include each source operation for which the owner or operator seeks an alternative to compliance under N.J.A.C. 7:27-16.2 through 16.16, 16.20 or 16.21;

2. The following information for each source operation listed pursuant to (d)1 above:

i. A brief description of the source operation, and its permit number and any other identifying numbers;

ii. The maximum rated capacity of the source operation;

iii. The source operation's potential to emit VOC;

iv. A list of all VOC control technologies available for use with the source operation;

v. A list of all alternative processes and pollution prevention measures that the owner or operator is considering using with or in place of the source operation to reduce VOC emissions;

vi. An analysis of the technological feasibility of installing and operating each control technology and process alternative identified in (d)2iv and v above;

vii. For each control technology and process alternative which is technologically feasible to install and operate, an estimate of the cost of installation and annual operation;

viii. An estimate of the remaining useful life of the existing source operation;

ix. An estimate of the reduction in VOC emissions attainable through the use of each control technology and process alternative identified in (d)2iv and v above;

x. The VOC control technology or technologies or process alternatives which the owner or operator proposes to employ;

xi. For any construction, alteration or installation of any equipment or control apparatus that the owner or operator proposes in the plan, a complete application for each permit required. The permit may be a preconstruction permit and certificate under N.J.A.C. 7:27-8, an operating permit under N.J.A.C. 7:27-22, or a facility-wide permit as defined at N.J.A.C. 7:1K-1.5;

xii. A proposed VOC emission limit for the source operation or for the proposed process alternative; and

xiii. Proposed recordkeeping requirements sufficient to document the owner or operator's continued compliance with the plan;

3. Any other information the Department requests that is reasonably necessary to enable it to determine whether the application satisfies the requirements of (j) below; and

4. A certification signed by the owner or operator, satisfying the requirements of N.J.A.C. 7:27-1.39.

(e) An owner or operator submitting a demonstration pursuant to (b)1i or ii above shall include the following information in the demonstration:

1. A list of each source operation at the facility within the scope of (a)1 above;

2. The following information for each source operation listed pursuant to (e)1 above:

i. A brief description of the source operation, and its permit number and any other identifying numbers;

ii. The maximum rated capacity of the source operation;

iii. The source operation's potential to emit VOC;

iv. A description of the control apparatus that serves the source operation (for demonstrations pursuant to (b)1i above) or that the owner or operator states will serve the source operation (for demonstrations pursuant to (b)1ii above);

v. An analysis of how the control apparatus will collect at least 90 percent by weight of the VOC emissions from the source operation and prevent from being discharged into the outdoor atmosphere at least 90 percent by weight of the VOC collected;

vi. A description of any pollution prevention measures that the owner or operator has implemented (for demonstrations pursuant to (b)1i above) or will implement (for demonstrations pursuant to (b)1ii above),

and analysis of how such measures will control VOC emissions to the extent required under (b)1i and ii above;

vii. A proposed VOC emission limit for the source operation or for the proposed process alternative; and

viii. Proposed recordkeeping requirements sufficient to document the owner or operator's continued compliance with the plan;

3. A complete application for each new permit required and for each change to an existing permit for any equipment or control apparatus to be constructed, altered or installed in connection with the demonstration;

4. Any other information which the Department may request which is reasonably necessary to enable it to determine whether the application satisfies the requirements of (1) below; and

5. A certification signed by the owner or operator, satisfying the requirements of N.J.A.C. 7:27-1.39.

(f) Notwithstanding the provisions of (b) above, the owner or operator of a facility that had actual annual emissions of VOC in 1990 and each year thereafter of less than 25 tons, may comply with the requirements of this section by obtaining the Department's approval of a compliance plan and implementing such a plan. To comply in this manner, the owner or operator shall submit a proposed compliance plan pursuant to (f)1 below, obtain the Department's approval of the plan pursuant to (k) below, and implement the plan pursuant to (f)2 below.

1. The owner or operator shall submit to the Department a proposed compliance plan that includes the following information, and is certified by the owner or operator pursuant to N.J.A.C. 7:27–1.39;

i. Documentation establishing that the actual annual emissions of VOC from the facility in 1990 and each year thereafter were less than 25 tons. If the facility did not commence operations until after 1990, the documentation shall address each year beginning with the year that operations commenced. The documentation shall include records maintained at the facility and any report of actual emissions, including any emission statement, submitted for the facility to the Department for the relevant years;

ii. A statement of the owner or operator's intent to reduce the facility's potential to emit VOC to less than 25 tons per year;

iii. A description of how the reduction of the facility's potential to emit is to be achieved;

iv. Complete applications for amendments to any existing permit or for any new permit required to achieve the reduction of the facility's potential to emit VOC to less than 25 tons per year; and

v. Proposed recordkeeping requirements sufficient to document the owner or operator's continued compliance with the plan.

2. By May 31, 1995, the owner or operator of the facility shall reduce the facility's potential to emit VOC to less than 25 tons per year and achieve compliance with all new or amended permits.

(g) Within 30 days after receiving a demonstration submitted pursuant to (b)1 above, a proposed alternative VOC control plan submitted pursuant to (b)2 above, or a proposed compliance plan submitted pursuant to (f) above, the Department shall notify the owner or operator in writing whether the submission includes sufficient information to commence review. If the submission does not contain sufficient information to complete the review, the Department shall include in the notice a list of the deficiencies, a statement of the additional information required to make the submission complete, and a time by which the owner or operator must make a complete submission. The Department may refrain from reviewing the substance of the submission until the additional information is provided to the Department.

(h) Failure by an owner or operator to submit the additional information requested by the Department pursuant to (g) above within the time stated in the Department's notification shall constitute a violation of this subchapter. In such case, the Department may deny the request for approval of the submission and pursue its other remedies.

(i) The Department shall seek comments from the general public before making any final decision to approve or disapprove a proposed alternative VOC control plan. The Department shall publish a Notice of Opportunity for Public Comment in a newspaper for general circulation in the area in which the major VOC facility is located. In addition, the Department shall submit any approved alternative VOC control plan to EPA for approval as a revision to New Jersey's State Implementation Plan.

(j) Within six months after receiving a complete proposed alternative VOC control plan, the Department shall approve, approve and modify, or disapprove the proposed plan and notify the owner or operator of the decision in writing. The Department shall approve the proposed plan or request only if it satisfies the following requirements:

1. The proposed plan or request contains all of the information required under (d) above;

2. The proposed plan considers all control technologies available for the control of VOC emissions from the type of equipment or source operation in question;

3. For any control technologies described in (j)2 above which the owner or operator does not propose to use on the equipment or source operation, the proposed plan demonstrates that the control technology:

i. Would be less effective in controlling VOC emissions from the equipment or source operation than the proposed measures;

ii. Is unsuitable for use with the source operation, or duplicative of control technology or pollution prevention measure which the plan proposes to use;

iii. Would carry costs disproportionate to the improvement in the reduction of the VOC emissions rate which the control technology is likely to achieve, or disproportionately large in comparison to the total reduction in VOC emissions which the control technology is likely to achieve over its useful life; or

iv. Would carry costs disproportionate to the costs incurred for the control of VOC emissions from the same type of source operations used by all other persons in the owner or operator's industry;

4. The emission limit proposed for each source operation is the lowest rate which can practicably be achieved at a cost within the limits described in (j)3iii and iv above;

5. The cost of achieving an additional emission reduction beyond each proposed limit would be disproportionate to the size and environmental impact of that additional emission reduction; and

6. For any pollution prevention or other emission reduction measures proposed by the owner or operator, the proposed plan demonstrates that the measures:

i. Result in actual reductions in VOC emissions;

ii. Result in VOC emission reductions which are quantifiable; and

iii. Result in VOC emission reductions which are Federally enforceable.

(k) Within six months after receiving a complete compliance plan submitted pursuant to (f) above, the Department shall approve, approve and modify, or disapprove the proposed compliance plan and notify the owner or operator of the decision in writing. The Department shall approve the proposed compliance plan only if it satisfies the following conditions:

1. The compliance plan contains all of the information required under (f) above;

2. The compliance plan demonstrates to the Department's satisfaction that actual emissions of VOC, including fugitive VOC emissions, in 1990 (or the first year of the facility's operations, if operations commenced after 1990) and each year thereafter are less than 25 tons;

3. The proposed recordkeeping requirements are sufficient to enable the Department to verify that the owner or operator is complying with the plan; and

4. The compliance plan demonstrates that the potential to emit VOC will be less than 25 tons if the plan is approved and implemented.

(*l*) Within six months after receiving a complete demonstration submitted pursuant to (b)1 above, the Department shall approve, approve and modify, or disapprove the demonstration and notify the owner or operator of the decision in writing. The Department shall approve the demonstration only if:

1. The demonstration includes all of the information required under (e) above;

2. To the extent that the demonstration depends upon any construction, alteration or installation and use of any equipment or control apparatus that is not in use as of the time the demonstration was submitted, the owner or operator has obtained any new preconstruction permit and certificate, operating permit, or facility-wide permit, or any change thereto required for the control apparatus, and has agreed to install and use all such control apparatus in accordance with the applicable permit and certificate;

3. To the extent that the demonstration depends upon the implementation of pollution prevention measures that have not been implemented before the time at which the demonstration was submitted, the owner or operator has agreed to implement such measures; and

4. The demonstration establishes to the satisfaction of the Department that the control apparatus will collect at least 90 percent by weight of the VOC emissions from the source operation and prevent from being discharged into the outdoor atmosphere at least 90 percent by weight of the VOC collected, or that the pollution prevention measures will achieve at least the same level of emission reductions.

(m) As a condition of an approval issued under this section, the Department may impose requirements upon the operation of the source operation(s) necessary to minimize any adverse impact upon human health, welfare and the environment.

(n) Before altering any source operation which is included in an approved alternative VOC control plan, approved compliance plan or demonstration (except as authorized or required in the approval), the owner or operator shall:

1. Pursuant to this section, apply for and obtain the Department's approval of an amendment to the approved compliance plan, VOC control plan, or demonstration, reflecting the proposed alteration. If the owner or operator does not obtain the Department's approval of the amendment before commencing operation of the altered equipment or source operation, the Department may (in addition to assessing penalties under N.J.A.C. 7:27A–3.10) modify the VOC control plan, compliance plan or demonstration to reflect the alteration, in a manner satisfying the criteria set forth in (j), (k) or (*l*) above, respectively; and

2. Apply for and obtain any preconstruction permit and certificate, operating permit, or facility-wide permit, or change thereto, required for the alteration. Each application must be submitted with the application to amend the VOC control plan.

(*o*) The Department will revoke an approval of an alternative VOC control plan by written notice to the holder of the approval if EPA denies approval of the proposed VOC plan as a revision to the State Implementation Plan. The Department may revoke an approval of an alternative VOC control plan, compliance plan or demonstration by written notice to the holder of the approval, if:

1. Any material condition of the approval is violated;

2. The Department determines that its decision to grant the approval was materially affected by a misstatement or omission of fact in the owner or operator's submission or any supporting documentation; or

3. The Department determines that continued use of the subject source operation pursuant to the approval poses a potential threat to the public health, welfare or the environment.

4. For an alternative VOC control plan, EPA denies approval of the plan as a revision to the State Implementation Plan.

(p) A person may request an adjudicatory hearing in accordance with the procedure at N.J.A.C. 7:27–1.32, if:

1. The Department has denied the person's application for approval under this section for any other reason than an EPA rejection of the SIP revision;

2. The person seeks to contest one or more conditions of the Department's approval imposed under (m) above; or

3. The Department has revoked the person's approval pursuant to (*o*)1 through 3 above.

(q) After receipt of a written request from an owner or operator, the Department may authorize a 60 day extension of the deadline set forth in (b)1 above, provided that such a request shall include a statement, certified in accordance with N.J.A.C. 7:27–1.39, that notwithstanding the request for extension, the facility will comply with all applicable emission limits set forth in this section by the May 31, 1995 deadline established in (b)2 above. Such extension may be renewed by the Department upon the written request of the owner or operator provided that the request for renewal shall also include a statement, certified in accordance with N.J.A.C. 7:27–1.39, that notwithstanding the request for an extension, that the facility will comply with all applicable emission limits set forth in this section by the May 31, 1995 deadline established in (b)2 above. Written requests for the extension of a deadline submitted shall be submitted to the address listed below:

Assistant Director, Air and Environmental
Quality Enforcement
Division of Enforcement Field Operations
Department of Environmental Protection
PO Box 422
401 East State Street, 4th floor
Trenton, New Jersey 08625–0422

(r) Notwithstanding the requirement at (b)2 above, demonstration that a source operation is currently served by control apparatus that meets the criteria set forth in (b)1i above does not relieve a facility from complying with all existing emission limits and conditions set forth in this chapter.

(s) The owner or operator submitting a proposed alternative VOC control plan, compliance plan or demonstration shall send it to the Department at the following address:

Chief, Bureau of New Source Review
Division of Environmental Regulation
Department of Environmental Protection
PO Box 027
Trenton, New Jersey 08625–0027

(t) If a source operation is covered by a preconstruction permit and operating certificate or an operating permit, either of which requires the source operation to utilize a control apparatus which attains at least 90 percent capture and 90 percent control, the owner or operator need only be in compliance with that permit or certificate to be deemed in compliance with this section; the owner or operator need not submit the demonstration required by (b) above.

New Rule, R.1993 d.666, effective December 20, 1993 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 25 N.J.R. 4551(a), 25 N.J.R. 6002(a).
Amended by R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Public Notice: Submittal date for categories exempted from compliance until November 15, 1994.
See: 26 N.J.R. 4217(a).
Administrative Correction.
See: 26 N.J.R. 4793(a).
Amended by R.1995 d.255, effective May 15, 1995 (operative June 19, 1995).
See: 26 N.J.R. 4478(a), 27 N.J.R. 1979(b).
Administrative Correction.
See: 27 N.J.R. 2740(a).
Amended by R.1996 d.303, effective July 1, 1996 (operative August 2, 1996).
See: 28 N.J.R. 1147(b), 28 N.J.R. 3414(a).
In (m) provided for approval of alternative VOC control plans.
Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
In (d)2, rewrote xi; in (e), substituted "new permit required and for each change to an existing permit" for "permit required under N.J.A.C. 7:27–8" in 3; in (*l*), rewrote 2; in (n), rewrote 2; and in (p), changed N.J.A.C. reference in the introductory paragraph.
Amended by R.2000 d.204, effective May 15, 2000 (operative June 6, 2000).
See: 31 N.J.R. 1671(a), 32 N.J.R. 1808(a).
In (m), substituted "application for an alternative VOC control plan submitted to the Department pursuant to" for "alternative VOC control plan issued, extended or renewed under" following "of any" in the second sentence.
Administrative change.
See: 32 N.J.R. 3117(a).
Amended by R.2004 d.129, effective April 5, 2004 (operative April 25, 2004).
See: 35 N.J.R. 3486(a), 36 N.J.R. 1791(a).
In (m), deleted the last sentence.

Law Review and Journal Commentaries

Business-Friendly Regulators Ease Air Pollution Rules. Neale R. Bedrock. 139 N.J.L.J. No.8, S10 (1995).

7:27–16.18 Leak detection and repair

(a) The provisions of this section shall apply to any owner or operator of the following:

1. Any petroleum refinery;

2. Any natural gas/gasoline processing plant;

3. Any synthetic organic chemical or polymer manufacturing facility; or

4. Any chemical plant, other than a synthetic organic chemical or polymer manufacturing facility, which is a major VOC facility.

(b) The provisions of this section shall apply only to equipment in contact with a substance that:

1. At any petroleum refinery, is 10 percent by weight or greater applicable VOC;

2. At any natural gas/gasoline processing plant, is one percent by weight or greater applicable VOC; or

3. At any synthetic organic chemical or polymer manufacturing facility, is ten percent by weight or greater gaseous applicable VOC or light liquid VOC and the equipment is used to produce greater than 1,100 tons per year (1,000 megagrams per year) of synthetic organic chemicals or polymers, or any combination thereof; or

4. At any chemical plant, other than a synthetic organic chemical or polymer manufacturing facility, is 10 percent by weight or greater applicable VOC, and the total quantity of applicable VOC processed in the equipment is greater than 550 tons per year. The total quantity processed shall include the total annual quantity of applicable VOC charged to all operations for which the equipment is used and does not include any in-process recycled and in-process refluxed applicable VOC and any applicable VOC which is generated during the process.

7:27-18.10 Exemptions

(a) If a person demonstrates that a proposed significant net emission increase of an air contaminant which results from the use of alternative fuels in existing fuel burning equipment will not cause an exceedance of the significance level for the respective criteria pollutant in a nonattainment area for that pollutant, and will not prevent reasonable further progress toward attaining any NAAQS, the Department may, in its discretion, exempt the person from compliance with the provisions of this subchapter. No exemption shall be granted unless the person demonstrates, at a minimum, that:

1. The equipment was capable of burning the alternative fuel before December 21, 1976; or

2. The equipment must use such fuel by reason of an order in effect under Section 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (15 U.S.C. 792 et seq.) or under any superseding legislation, or by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act of 1978 (16 U.S.C. 791a et seq.); or

3. The alternative fuel is derived from municipal solid waste; or

4. The alternative fuel is to be used by reason of an order or rule issued under Section 125 of the Clean Air Act.

(b) N.J.A.C. 7:27-18.3(c)1 does not apply to any person submitting an application for:

1. Portable facilities which will be relocated outside of a nonattainment area within six months of initiation of operation; or

2. Temporary source operations which produce an experimental product, and which cease operation within six months of initiation of operation.

(c) The exemption in (b) above may not be applied to the same portable facility or temporary source operation more than once within the lifetime of the portable facility or temporary source operation.

Recodified from 18.9 and amended by R.1993 d.129, effective March 15, 1993 (operative April 20, 1993).
See: 24 N.J.R. 3459(a), 25 N.J.R. 1231(b).
Changes made pursuant to 1990 Clean Air Act amendments.
Amended by R.1996 d.511, effective November 4, 1996 (operative November 23, 1996).
See: 28 N.J.R. 748(a), 28 N.J.R. 4784(b).

7:27-18.11 (Reserved)

New Rule, R.1993 d.129, effective March 15, 1993 (operative April 20, 1993).
See: 24 N.J.R. 3459(a), 25 N.J.R. 1231(b).
New Rule, R.2000 d.204, effective May 15, 2000 (operative June 6, 2000).
See: 31 N.J.R. 1671(a), 32 N.J.R. 1808(a).
Administrative change.
See: 32 N.J.R. 3117(a).
Repealed by R.2004 d.129, effective April 5, 2004 (operative April 25, 2004).
See: 35 N.J.R. 3486(a), 36 N.J.R. 1791(a).
Section was "Procedures for interstate and intrastate trading".

7:27-18.12 Civil or criminal penalties for failure to comply

The owner or operator of any facility subject to this subchapter shall be responsible for ensuring compliance with all requirements of this subchapter. Failure to comply with any provision of this subchapter may subject the owner or operator to civil penalties in accordance with N.J.A.C. 7:27A-3 and applicable criminal penalties, including, but not limited to, those set forth at N.J.S.A. 26:2C-19(f)1 and 2. If there is more than one owner or operator of a facility, all owners and operators are jointly and severally liable for such civil penalties.

New Rule, R.1993 d.129, effective March 15, 1993 (operative April 20, 1993).
See: 24 N.J.R. 3459(a), 25 N.J.R. 1231(b).

SUBCHAPTER 19. CONTROL AND PROHIBITION OF AIR POLLUTION FROM OXIDES OF NITROGEN

Authority

N.J.S.A. 13:1B-3, 13:1D-9, and 26:2C-1 et seq., in particular 26:2C-9(c) and 19.

Source and Effective Date

R.1993 d.682, effective December 20, 1993 (operative January 23, 1994).
See: 25 N.J.R. 631(a), 25 N.J.R. 5957(a).

Law Review and Journal Commentaries

Air Pollution Law Changes Target Nitrogen Oxides. Neale R. Bedrock, 136 N.J.L.J. No. 8, S17 (1994).

Explaining the Facts of BACT, RACT and GACT. Neale R. Bedrock, 138 N.J.L.J. No. 8, 54 (1994).

7:27-19.1 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

"Air contaminant" means any substance, other than water or distillates of air, present in the atmosphere as solid particles, liquid particles, vapors or gases.

"Alter" means to effect an alteration of equipment or control apparatus.

"Alteration" means one of the following changes to equipment or control apparatus, or to a source operation, for which a permit has been issued:

1. If the equipment, control apparatus, or source operation is subject to preconstruction permit requirements, a change which requires a permit revision under N.J.A.C. 7:27-8.18; or

2. If the equipment, control apparatus, or source operation is at a facility for which an operating permit has been issued, a change which requires a minor modification or a significant modification of the permit under N.J.A.C. 7:27-22.23 or 24.

"Alternative maximum allowable emission rate" means a maximum allowable emission rate, set by the Department on a site-specific basis pursuant to N.J.A.C. 7:27-19.13.

"Ambient air quality standard" means a limit on the concentration of an air contaminant in the general outdoor atmosphere as set forth in N.J.A.C. 7:27-13 or 40 CFR 50.

"Anthracite coal" means coal that is classified as anthracite according to the ASTM Standard Specification for Classification of Coals by Rank, ASTM D 388-77, incorporated herein by reference, as amended or supplemented. This specification can be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959.

"Asphalt" means a solid, semisolid, or liquid material, produced by mixing bituminous substances together with gravel, crushed rock or similar materials, and used commonly as a coating or paving.

"ASTM" means the American Society for Testing and Materials.

"Averaging" means complying with the requirements of this subchapter pursuant to N.J.A.C. 7:27-19.6, Emissions averaging.

"Averaging unit" means an individual source operation or item of equipment which is included in a designated set for the purpose of averaging pursuant to N.J.A.C. 7:27-19.6.

"Base year" means calendar year 1990 or other calendar year determined pursuant to N.J.A.C. 7:27-19.20(d)1, in connection with a plan for seasonal fuel switching.

"Batch type asphalt plant" means an asphalt plant where the aggregate and asphalt cement or other binder are mixed in equipment other than a rotary dryer.

"Bituminous coal" means coal that is classified as bituminous according to the ASTM Standard Specification for Classification of Coals by Rank, ASTM D 388-77, incorporated herein by reference, as amended or supplemented. This specification can be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959.

"Borosilicate recipe" means a formula for making glass using 60 to 80 percent silicon dioxide, five to 35 percent boric oxides, and four to 23 percent other oxides.

"Boiler serving an electric generating unit" means a steam generating unit used for generating electricity including a unit serving a cogeneration facility.

"Brake horsepower" or "bhp" means a measure of mechanical power generated by a reciprocating engine determined by a brake attached to the shaft coupling.

"Brake horsepower-hour" or "bhp-hr" means a unit of energy or work, equal to the work done by a mechanism with a power output of one brake horsepower over a period of one hour.

"British thermal unit" or "BTU" means the quantity of heat required to raise the temperature of one avoirdupois pound of water one degree Fahrenheit at 39.1 degrees Fahrenheit.

"Budget source" means those sources regulated in N.J.A.C. 7:27-31.

"Calendar day" means the 24 hour period from 12:00 o'clock midnight to 12:00 o'clock midnight the following day.

"Carbon monoxide (CO)" means a colorless, odorless, tasteless gas at standard conditions, having a molecular composition of one carbon atom and one oxygen atom.

"Certificate" means either an operating certificate or a temporary operating certificate.

"Cleaner fuel" means a fuel other than a combustion source's primary fuel, the combustion of which results in a rate of NO_x emissions that is less than the rate of NO_x emissions when the primary fuel is combusted, all other circumstances being equal.

"CFR" means the United States Code of Federal Regulations.

"Clean Air Act" or "CAA" means the Federal Clean Air Act, 42 U.S.C. §§ 7401 et seq., as amended and supplemented.

"Coal" means anthracite coal, bituminous coal, coke, lignite, nonbanded coal, and/or subbituminous coal.

"Coke" means a fused, cellular, porous substance that remains after free moisture and the major portion of the volatile materials have been distilled from bituminous coal and other carbonaceous material by heating it in the absence of air or with a limited supply of air.

"Combined cycle combustion turbine" means a combustion turbine that recovers heat from the turbine exhaust gases to heat water or generate steam.

(k) Components that are insulated, encased, or enclosed may be tested for leaks at a distance within 0.4 inches (one centimeter) of the surface of the insulation, encasement, or enclosure.

(*l*) Notwithstanding the provisions of (f), (g), (h), and (i) above, difficult to monitor components installed prior to May 31, 1995, are exempt from quarterly testing requirements, and instead such testing shall be conducted on an annual basis.

(m) The reduced testing provisions pursuant to (*l*) above shall not apply to components installed on or after May 31, 1995, at a facility subject to this section. Instead, all such components installed on or after May 31, 1995 shall be tested in accordance with the other provisions of this section.

(n) The provisions of (f), (g), (h), and (i) above shall not apply to a pressure relief device which is connected to an operating flare or to a vapor recovery device, a storage tank valve, a valve that is not externally regulated, or a valve or other component in vacuum service.

(*o*) No owner or operator of any facility listed in (*o*)1 through 4 below shall install or operate a valve, except for a safety pressure relief valve, at the end of a pipe or line containing applicable VOC unless the pipe or line is sealed with a second valve, a blind flange, a plug or a cap. The sealing device may be removed only when a sample is being taken, during actual use in the process, or during maintenance. A fill line that is used to regularly fill containers is considered to be in actual use in the process for the purpose of this provision. Owners and operators of the following types of facilities are subject to this prohibition, beginning on the dates set forth below:

1. Any petroleum refinery subject to (f) above, after July 1, 1982:

2. Any natural gas/gasoline processing plant subject to (g) above, after July 1, 1987;

3. Any synthetic organic chemical or polymer manufacturing facility subject to (h) above, after July 1, 1987; or

4. Any chemical plant subject to (i) above, beginning May 31, 1995.

(p) The provisions of (f), (g), (h), and (i) above shall not apply to the following components:

1. A component which is primarily used in a laboratory operation or research facility;

2. A component that cannot be tested without immediate danger to the personnel conducting the test, or a component that cannot be tested because it is not accessible, and cannot practicably be made accessible, for conducting the test. For such components, the owner or operator shall document in writing:

i. The reason that the the component cannot be safely tested, or cannot practicably be made accessible for testing with monitoring equipment; and

ii. Under which circumstances and by what method, if any, the component can be tested. Further, when those circumstances do arise, the owner or operator shall cause testing that complies with this section to be performed and shall respond to the results of that testing as this section otherwise requires;

3. A pump that is inherently sealless by design, for example, a magnetic drive, canned motor, or diaphragm pump;

4. A pump equipped with dual mechanical seals, provided that the barrier fluid is not an applicable VOC and that:

i. Each dual mechanical seal is operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure;

ii. Each dual mechanical seal is equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a VOC control apparatus;

iii. Each dual mechanical seal is equipped with a closed-loop system that purges the barrier fluid into a process stream; or

iv. Each barrier fluid system is equipped with a device that provides detection for the failure of the seal system, the barrier fluid system, or both;

5. A leakless design Bellows type valve; and

6. Process equipment enclosed in such a manner that all emissions from any component with a leak is vented through a system that routes those emissions to a controlled emission point, provided that:

i. The enclosure is maintained under negative pressure at all times while the process unit is in operation; or

ii. The potential points of leakage from the enclosure are subjected to the same leak detection and repair requirements as the components would be if they were not enclosed.

(q) Notwithstanding the other subsections of this section, the owner or operator of a facility subject to the provisions of this section may use pressure testing with gas or liquid as an alternative method to comply with leak detection requirements.

1. If the pressure testing alternative is used for continuous processing equipment, the frequency of pressure testing shall be no less than the frequency set forth in (f), (g), (h) and (i).

2. If the pressure testing alternative is used for batch product processes:

i. Each time batch processing equipment is reconfigured, the batch product-process equipment shall be pressure tested for leaks before applicable VOC is first fed into the equipment and the equipment is placed in applicable VOC service, provided, however, that when the seal is broken between two items of equipment or when equipment is changed in a section of the batch product-processing equipment train, pressure testing is required only for the new or disturbed equipment; and

ii. Notwithstanding (i) above, each batch product process that operates in applicable VOC service during a calendar year shall be pressure tested at least once during the calendar year.

3. When pressure testing with a gas, the following procedures shall be used:

i. The product-process equipment shall be pressurized with a gas to the operating pressure of the equipment, but the equipment shall not be tested at a pressure greater than the pressure setting of the lowest relief valve setting in the portion of the equipment being tested;

ii. Once the test pressure is obtained, the gas source shall be shut off;

iii. The test shall continue for not less than 15 minutes unless it can be determined in a shorter period of time that the allowable rate of pressure drop is exceeded; and

iv. The pressure shall be measured at the beginning and at the end of the test period using a pressure measurement device (gauge, manometer, or equivalent) which has a precision of plus or minus 2.5 mm Hg. If the rate of pressure change is greater than one pound per square inch per hour, or if there is visible, audible or olfactory evidence of fluid loss, a regulated leak is detected.

4. When pressure testing with a liquid, the following procedures shall be used:

i. The product-process equipment shall be filled with the test liquid. Once the equipment is filled, the liquid source shall be shut off;

ii. The test shall be conducted for a period of at least 60 minutes, unless it can be determined in a shorter period of time that there is a regulated leak; and

iii. Each seal in the equipment being tested shall be inspected for indications of fluid loss. If there are any indications of liquid dripping or of fluid loss a regulated leak is detected.

(r) The owner or operator of a facility subject to the provisions of this section is exempt from the requirement to repair any regulated leak within the applicable time limits set forth in this section, so long as no applicable VOC is fed to the source operation of which the component is a part until testing confirms that the leak has successfully been repaired.

(s) An affirmative defense to liability for a violation of this section's requirements regarding time limits for repairs shall be available to any person who can demonstrate that:

1. Failure to comply with those time limits was caused by an inability to obtain the necessary parts through the exercise of due diligence; and

2. Keeping the necessary part in stock or otherwise available would have been technically or economically unreasonable; and

3. The parts were obtained and the repairs were made as quickly as the exercise of due diligence permitted.

(t) A leak shall not constitute a violation of this section so long as the component from which it appears has been monitored or inspected in accordance with this section and so long as the leak has been repaired in accordance with this section.

Recodified from 7:27-16.6(d)-(m) and amended by R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Administrative Correction.
See: 26 N.J.R. 4793(a).
Amended by R.1995 d.255, effective May 15, 1995 (operative June 19, 1995).
See: 26 N.J.R.4478(a), 27 N.J.R.1979(b).
Administrative Correction.
See: 27 N.J.R. 2740(a).

7:27-16.19 Application of cutback and emulsified asphalts

(a) No person shall cause, suffer, allow, or permit the use of cutback asphalt or emulsified asphalt containing any VOC unless:

1. The material is applied during the periods January 1 through April 15 or October 15 through December 31;

2. The use is solely as a penetrating prime coat;

3. The emulsified asphalt contains no greater than eight percent VOC by volume and is used for mixed-in-place construction;

4. The material is a cold-mix, stockpile material used for pavement repair; or

5. The user can demonstrate that there are no emissions of VOC from the asphalt under conditions of normal use.

Amended by R.1992 d.102, effective March 2, 1992 (operative March 28, 1992).
See: 23 N.J.R. 1858(b), 24 N.J.R. 792(a).

Addressed EPA-identified deficiencies; "VOS" changed to "VOC" throughout.
Recodified from 7:27–16.7 and amended by R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).

7:27–16.20 Petroleum solvent dry cleaning operations

(a) No person shall cause, suffer, allow, or permit VOC emissions to the outdoor atmosphere from a petroleum solvent dry cleaning dryer unless such dryer is:

1. Equipped with a vapor control system which prevents VOC emissions from exceeding 7.7 pounds (3.5 kilograms) per 220 pounds (100 kilograms) dry weight of articles dry cleaned; or

2. A solvent recovery dryer operated in a manner such that the dryer remains closed and the recovery phase continues until a final recovered solvent flow rate of 0.013 gallons (50 milliliters) per minute is attained.

(b) No person shall cause, suffer, allow, or permit any VOC emissions to the outdoor atmosphere from a petroleum solvent filtration system unless:

1. The VOC content in all filtration wastes is reduced to no more than 2.2 pounds (1.0 kilograms) per 220 pounds (100 kilograms) dry weight of articles dry cleaned, before disposal, and exposure to the atmosphere; or

2. The system is a cartridge filtration system operated such that the filter cartridges are drained in their sealed housings for eight hours or longer before their removal.

(c) No owner or operator of a petroleum solvent dry cleaning facility shall cause, suffer, allow, or permit any VOC to be emitted into the outdoor atmosphere from:

1. Visibly leaking equipment including, but not limited to, washers, dryers, solvent filters, settling tanks, and vacuum stills; and

2. Containers of VOC or VOC-laden waste standing open to the outdoor atmosphere.

(d) The provisions of (a) above shall not apply to petroleum solvent dry cleaning facilities that consume less than 15,000 gallons (56,775 liters) of petroleum solvent annually.

(e) Any person subject to the provisions of (a) above shall comply with the following schedule:

1. By February 2, 1987, a plan shall be submitted to the Department for approval describing the measures which will be applied in order to achieve compliance. The plan submittal shall include completed applications for all preconstruction permits and operating certificates required by N.J.A.C. 7:27–8;

2. By May 1, 1987, construction or installation of equipment and control apparatus in accordance with the approved plan shall commence; and

3. By October 31, 1987, compliance with this section shall be achieved.

(f) The total amount of any VOC consumed by a petroleum solvent dry cleaning operation in each calendar year shall not exceed 9.9 pounds per 220 pounds of dry weight of articles cleaned.

(g) Any person responsible for the emission of any VOC from a petroleum solvent dry cleaning operation subject to this section shall maintain a monthly record setting forth the chemical name of the VOC used in the operation, the volume of VOC consumed in the operation, and the dry weight of articles cleaned.

New Rule, R.1986 d.379, effective September 22, 1986 (operative October 18, 1986).
See: 17 N.J.R. 1969(a), 18 N.J.R. 1936(a).
Amended by R.1992 d.102, effective March 2, 1992 (operative March 28, 1992); (g) (operative October 1, 1992).
See: 23 N.J.R. 1858(b), 24 N.J.R. 792(a).
New (f) and (g) addresses EPA-identified deficiencies.
Recodified from 7:27–16.8 by R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
In (e)1, rewrote the second sentence.

7:27–16.21 Natural gas pipelines

(a) The owner or operator of any natural gas pipeline shall by October 26, 1994 prepare a Control Measure Plan that shall:

1. Identify each control technology or procedure available to the owner or operator for achieving reductions in VOC emissions from a blowdown event. Such control technology or procedures may include, without limitation, pipeline pressure reductions, the use of mobile compressors for recompressing, and the use of control apparatus; and

2. Identify in detail the criteria that the owner or operator will use to select the control technology or procedure, or combination thereof, that will achieve the greatest reductions in VOC reasonably achievable for each blowdown event.

(b) The owner or operator of any natural gas pipeline shall by May 31, 1995 achieve some reduction in VOC emissions from each blowdown event and shall implement the control technologies or procedures that the Control Measure Plan indicates would be appropriate for each blowdown event.

(c) On or before March 1 of each year beginning in 1996, the owner or operator of each natural gas pipeline shall submit a report to the Chief, Bureau Field Operations setting forth the location, date and duration of each blowdown event, a description of the emissions reduction procedures and technology used, and a quantification of the

amount of VOC emission reductions achieved for each event.

(d) The owner or operator of any natural gas pipeline subject to (a) above shall retain the Control Measure Plan at the office having operating responsibility for the section of pipeline for which the blowdown event will occur and shall provide a copy of such plan to the Department within three days of receipt of a written request from the Department.

(e) If after reviewing a Control Measure Plan, the Department determines that it fails to satisfy the requirements set forth in (a) above, the Department shall notify the owner or operator that it has 30 days to submit to the Department appropriate amendments to its plan. Failure to do so shall constitute a violation of this section. However, an owner or operator may request an adjudicatory hearing regarding the Department's determination in accordance with the procedure at N.J.A.C. 7:27-1.32.

(f) The Department may require amendments to a Control Measure Plan if:

1. The Plan does not contain all of the information required under (a) above;

2. The Plan does not consider all control technology and procedures used or considered for use by other persons in the owner or operator's industry, taking into account the potential for the creation of a safety hazard or the potential for unreasonable interference with enjoyment of life and property;

3. The Plan would be ineffective in controlling VOC emissions during blowdown events;

4. The emission reductions being achieved are not the greatest reductions which can be practicably achieved at reasonable costs; or

5. Implementation of the plan results or would result in any violation of law or regulation; or

6. EPA denies approval of the proposed Control Measure Plan as a revision to the State Implementation Plan.

(g) After receipt of a written request from an owner or operator for an extension of the deadline set forth in (a) above, the Department may authorize a 60-day renewable extension upon showing of good cause. Such extension may be renewed by the Department upon the written request of the owner or operator. Approval of such an extension shall not constitute approval of extension of the May 31, 1995 deadline established in (b) above. Written requests for the extension of a deadline submitted pursuant to this subsection shall be addressed to:

Assistant Director, Air & Environmental Quality Enforcement
Division of Enforcement Field Operations
Department of Environmental Protection
PO Box 422
401 East State Street, 4th Floor
Trenton, New Jersey 08625-0422

New Rule, R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
In (e), changed N.J.A.C. reference.

7:27-16.22 Emission information, record keeping and testing

(a) Any person subject to any record keeping provision of this subchapter shall maintain the required records for a period of no less than five years and shall make those records available upon the request of the Department or the EPA, or any duly authorized representative of the Department or the EPA.

(b) Any person who owns or operates a source operation subject to any recordkeeping requirement set forth in this subchapter may submit a request in writing to the Department for approval to maintain records other than those specified at N.J.A.C. 7:27-16.2(k), 16.3(s), 16.4(*o*), 16.5(j), 16.6(*l*), 16.7(m) and (n), 16.13(c), 16.16(g), 16.18(j), 16.20(g) or 16.21(c). The Department and EPA may approve any such request if the person demonstrates to the satisfaction of the Department and EPA that the alternate records to be maintained are at least as effective in documenting that the source operation is operating in compliance with the applicable requirements.

(c) Any person responsible for the emission of VOC shall, upon request of the Department, the EPA, or any duly authorized representative of the Department or the EPA, provide information relating to the location, rate, duration, composition, and properties of the effluent and such other information as the Department may prescribe.

(d) Any person responsible for the emission of VOC shall, upon request of the Department, the EPA, or any duly authorized representative of the Department or the EPA, provide facilities and necessary equipment for determining the quantity and identity of any VOC emitted into the outdoor atmosphere and shall conduct such testing using N.J.A.C. 7:27B-3 or another method approved by the Department and the EPA. Test data shall be recorded in a permanent log at such time intervals as specified by the Department and shall be maintained for a period of not less than two years and shall be available for review by the Department, the EPA, or any duly authorized representative of the Department or the EPA.

(e) Any person responsible for the emission of VOC shall, upon request of the Department, provide sampling facilities and testing facilities exclusive of instrumentation and sensing devices as may be necessary for the Department to determine the nature and quantity of the VOC being emitted into the outdoor atmosphere. During such testing by the Department, the equipment and all components connected, or attached to, or serving the equipment shall be used and operated under normal routine operating conditions or under such other conditions as may be requested by the Department. The facilities may be either permanent or temporary, at the discretion of the person responsible for their provision, and shall conform to all applicable laws and regulations concerning safe construction and safe practice.

(f) All testing and monitoring pursuant to the provisions of this subchapter shall be conducted using N.J.A.C. 7:27B-3 or other method approved in advance by the Department and acceptable to EPA.

(g) Hourly emissions limits apply to any consecutive 60 minute period, and testing performed to verify compliance shall be based on a 60 minute period during which the equipment or control apparatus is used and operated under conditions acceptable to the Department and consistent with the operational parameters and limits set forth in any permit or certificate in effect. If circumstances require that test periods be less than, or more than 60 minutes (such as when an operational duration is less than 60 minutes or when detectability limits are approached for low concentration gas streams), the Department may require different test periods in its review and approval of test protocols.

(h) Any record keeping requirement set forth at N.J.A.C. 7:27-16.2(k), 16.3(s), 16.7(m), 16.7(n), 16.16(g), or 16.20(g), shall become effective on October 1, 1992, except for record keeping based on continuous emission monitoring. Any record keeping requirement based on continuous emission monitoring shall become effective on April 1, 1993.

(i) Any person who reports information to the Department pursuant to the requirements set forth at N.J.A.C. 7:27-16.2(k), 16.3(s), 16.7(m) and (n), 16.16(g), or 16.20(g) may assert a confidentiality claim for that information in accordance with the procedures set forth at N.J.A.C. 7:27-1.6 through 1.30.

Recodification: Recodified from 16.8.
See: 17 N.J.R. 1969(a), 18 N.J.R. 1936(a).
Amended by R.1992 d.102, effective March 2, 1992 (operative March 28, 1992).
See: 23 N.J.R. 1858(b), 24 N.J.R. 792(a).
Require EPA approval of variances and access to records.
Amended by R.1993 d.128, effective March 15, 1993 (operative April 20, 1993).
See: 24 N.J.R. 2979(a), 25 N.J.R. 1254(a).
Corrected internal cite.
Recodified from 7:27-16.9 and amended by R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Administrative Correction.
See: 27 N.J.R. 2740(a).

7:27-16.23 Procedures for demonstrating compliance

(a) The owner or operator of equipment or a source operation subject to N.J.A.C. 7:27-16.8, 16.9, 16.10, 16.11 or 16.13 that is subject to an emission limit under this subchapter shall demonstrate compliance with the emission limit pursuant to (a)1 below if a continuous emissions monitoring system has been installed on the equipment or source operation for the air contaminant in question, or pursuant to (a)2 below if no such system has been installed for the air contaminant.

1. With respect to an emission limit for any air contaminant monitored by a continuous emissions monitoring system installed on the equipment or source operation, compliance with the limit is based upon the average of emissions over one calendar day, not including periods of equipment downtime.

2. With respect to an emission limit for any air contaminant that is not monitored by a continuous emissions monitoring system installed on the equipment or source operation, compliance with the limit is based upon the average of three one-hour tests, each performed over a consecutive 60-minute period specified by the Department and performed in compliance with N.J.A.C. 7:27-16.22.

(b) For any equipment or source operation subject to (a) above which was in operation before January 1, 1995, the owner or operator shall demonstrate compliance with this subchapter in accordance with (a)1 or 2 above by May 31, 1996, and thereafter at the frequency set forth in the permit or certificate for such equipment or source operation.

(c) For any equipment or source operation subject to (a) above which commences operations or is altered after January 1, 1995, the owner or operator shall demonstrate compliance with this subchapter in accordance with (a) or (b) above within 180 days from the date on which the source operation commences operation, and thereafter at the frequency set forth in the permit or certificate for such equipment or source operation.

(d) An exceedance of any applicable VOC or CO emission limit set forth in this subchapter, determined through testing or monitoring performed pursuant to (a) or (b) above or otherwise, is a violation of this subchapter.

New Rule, R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).

7:27-16.24 (Reserved)

New Rule, R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Repealed by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
Section was "Adjusting combustion processes".

7:27-16.25 (Reserved)

7:27-16.26 Variances

(a) Whenever a person responsible for the emission of any VOC believes that advances in the art of control for the kind and amount of VOC emitted have not developed to a degree which would enable the requirements of this subchapter to be attained, such person may apply to the Department in writing for a variance, setting forth any reason and justification therefor.

(b) Any person submitting an application for a variance to the Department is subject to the certification requirements set forth at N.J.A.C. 7:27-1.39.

(c) The Department may issue a variance which shall be valid for a period not to exceed three consecutive years from the date of issuance and may be renewed upon application to the Department setting forth reasons and justifications for its continuation.

(d) Variances issued under the provisions of this section shall be conditional upon:

1. Compliance with any requirements which the Department sets forth as conditions of approval; and

2. Approval by the EPA as a revision to the State Implementation Plan.

(e) Variances may be revoked at any time at the discretion of the Department.

(f) Any applicant aggrieved by the denial or revocation by the Department of a variance allowed under the provisions of this section may request an adjudicatory hearing pursuant to N.J.A.C. 7:27-1.32.

Recodification: From 16.9.
See: 17 N.J.R. 1969(a), 18 N.J.R. 1936(a).
Amended by R.1992 d.102, effective March 2, 1992 (operative March 28, 1992).
See: 23 N.J.R. 1858(b), 24 N.J.R. 792(a).
Addressed EPA-identified deficiencies.
Recodified from 7:27-16.10 by R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).
Administrative Correction.
See: 27 N.J.R. 2740(a).
Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
In (f), changed N.J.A.C. reference.

7:27-16.27 Exceptions

(a) The provisions of this subchapter shall not apply to any stationary vessel or delivery vessel maintained under a pressure greater than one atmosphere provided that any vent serving such vessel has the sole function of relieving pressure under abnormal emergency conditions.

(b) The provisions of this subchapter shall not apply to the emissions of VOC from the following source operations:

1. Offset lithography printing operations until November 15, 1994;

2. Surface coating of plastic parts until November 15, 1994;

3. Natural gas pipelines that are not major VOC facilities, with the exception of blowdown events as set forth in N.J.A.C. 7:27-16.21;

4. Industrial wastewater treatment systems until November 15, 1994;

5. All other wastewater treatment facilities until November 15, 1994; and

6. Open burning.

Recodification: From 16.12.
See: 17 N.J.R. 1969(a), 18 N.J.R. 1936(a).
Recodified from 16.13 by R.1992 d.102, effective March 2, 1992 (operative March 28, 1992).
See: 23 N.J.R. 1858(b), 24 N.J.R. 792(a).
Recodified from 7:27-16.12 and amended by R.1994 d.313, effective June 20, 1994 (operative July 26, 1994).
See: 25 N.J.R. 3339(a), 26 N.J.R. 2600(a).

APPENDIX I

CHEMICALS DEFINING SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING

CAS #	Chemical
105-57-7	Acetal
75-07-0	Acetaldehyde
107-89-1	Acetaldol
60-35-5	Acetamide
103-84-4	Acetanilide
64-19-7	Acetic acid
108-24-7	Acetic anhydride
67-64-1	Acetone
75-86-5	Acetone cyanohydrin
75-05-8	Acetonitrile
96-86-2	Acetophenone
75-36-5	Acetyl chloride
74-86-2	Acetylene
107-02-8	Acrolein
79-06-1	Acrylamide
79-10-7	Acrylic acid
107-13-1	Acrylonitrile
124-04-9	Adipic acid
111-69-3	Adiponitrile
††	Alkyl naphthalenes
107-18-6	Allyl alcohol
107-05-1	Allyl chloride
1321-11-5	Aminobenzoic acid
111-41-1	Aminoethylethanolamine
123-30-8	p-Aminophenol
628-63-7, 123-92-2	Amyl acetates
71-41-0,†	Amyl alcohols
110-58-7	Amyl amine
543-59-9	Amyl chloride
110-66-7,†	Amyl mercaptans

CAS #	Chemical
100-01-6	p-nitroaniline
91-23-6	o-nitroanisole
100-17-4	p-nitroanisole
98-95-3	Nitrobenzene
†	Nitrobenzoic acid (o, m, & p)
79-24-3	Nitroethane
75-52-5	Nitromethane
88-75-5	2-Nitrophenol
25322-01-4	Nitropropane
1321-12-6	Nitrotoluene
27215-95-8	Nonene
25154-52-3	Nonylphenol
27913-28-8	Octylphenol
123-63-7	Paraldehyde
115-77-5	Pentaerythritol
109-66-0	n-pentane
109-67-1	l-pentene
127-18-4	Perchloroethylene
594-42-3	Perchloromethyl mercaptan
94-70-2	o-phenetidine
156-43-4	p-phenetidine
108-95-2	Phenol
†	Phenolsulfonic acids
91-40-7	Phenyl anthranilic acid
††	Phenylenediamine
75-44-5	Phosgene
85-44-9	Phthalic anhydride
85-41-6	Phthalimide
108-99-6	b-picoline
110-85-0	Piperazine
†	Polybutenes
25322-68-3	Polyethylene glycol
25322-69-4	Polypropylene glycol
123-38-6	Propionaldehyde
79-09-4	Propionic acid
71-23-8	n-propyl alcohol
107-10-8	Propylamine
540-54-5	Propyl chloride
115-07-1	Propylene
127-00-4	Propylene chlorohydrin
78-87-5	Propylene dichloride
57-55-6	Propylene glycol
75-56-9	Propylene oxide
110-86-1	Pyridine
106-51-4	Quinone
108-46-3	Resorcinol
27138-57-4	Resorcylic acid
69-72-7	Salicyclic acid
127-09-3	Sodium acetate
532-32-1	Sodium benzoate
9004-32-4	Sodium carboxymethyl cellulose
3926-62-3	Sodium chloracetate
141-53-7	Sodium formate
139-02-6	Sodium phenate
110-44-1	Sorbic acid
100-42-5	Styrene
110-15-6	Succinic acid
110-61-2	Succinonitrile
121-57-3	Sulfanilic acid
126-33-0	Sulfolane
1401-55-4	Tannic acid
100-21-0	Terephthalic acid
†	Tetrachloroethanes
117-08-8	Tetrachlorophthalic anhydride
78-00-2	Tetraethyl lead
119-64-2	Tetrahydronaphthalene
85-43-8	Tetrahydrophghalic anhydride
75-74-1	Tetramethyl lead
110-60-1	Tetramethylenediamine
110-18-9	Tetramethylethylenediamine
108-88-3	Toluene
95-80-7	2,4,-diaminotoluene
584-84-9	Toluene-2,4-diisocyanate
26471-62-5	Toluene diisocyanates (mixture)
1333-07-9	Toluenesulfonamide
†	Toluenesulfonic acids
98-59-9	Toluenesulfonyl chloride
26915-12-8†	Toluidines
†	Trichlorobenzenes
71-55-6	1,1,1-trichloroethane
79-00-5	1,1,2-trichloroethane
79-01-6	Trichloroethylene
75-69-4	Trichlorofluoromethane
96-18-4	1,2,3-trichloropropane
76-13-1	1,1,2-trichlorotrifluoroethane
121-44-8	Triethylamine
112-27-6	Triethylene glycol
112-49-2	Triethylene glycol dimethyl ether
7756-94-7	Triisobutylene
75-50-3	Trimethylamine
57-13-6	Urea
108-05-4	Vinyl acetate
75-01-4	Vinyl chloride
75-35-4	Vinylidene chloride
25013-15-4	Vinyl toluene
1330-20-7	Xylenes (mixed)
95-47-6	o-xylene
106-42-3	p-xylene
1300-71-6	Xylenol
1300-73-8	Xylidine
1634-04-4	Methyl tert-butyl ether
9002-88-4	Polyethylene
9003-07-0	Polypropylene
9003-53-6	Polystyrene

† CAS numbers for the various isomers and mixtures have not been listed here.
†† CAS numbers not available.

Administrative correction.
See: 39 N.J.R. 4928(a).

SUBCHAPTER 17. CONTROL AND PROHIBITION OF AIR POLLUTION BY TOXIC SUBSTANCES

Subchapter Historical Note

Unless otherwise expressly noted, all provisions of this subchapter were adopted pursuant to authority of N.J.S.A. 13:1D-1 et seq. and 26:2C-1 et seq. and were filed and became effective on June 14, 1977, as R.1977 d.207. See: 9 N.J.R. 69(a), 9 N.J.R. 321(b). Amendments were filed on October 17, 1979, as R.1979 d.414 to become effective on December 17, 1979. See: 10 N.J.R. 477(b), 11 N.J.R. 544(b).

7:27-17.1 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

"Aerodynamic downwash" means the rapid descent of a plume to ground level with little dilution and dispersion due to alteration of background air flow characteristics caused by the presence of buildings or other obstacles in the vicinity of the emission point.

"Air contaminant" means any substance, other than water or distillates of air, present in the atmosphere as solid particles, liquid particles, vapors or gases.

"Asbestos" means actinolite, amosite, anthophyllite, chrysotile, crocidolite, tremolite.

"CFR" means the Code of Federal Regulations.

"Control apparatus" means any device which prevents or controls the emission of any air contaminant directly or indirectly into the outdoor atmosphere.

"Combustion source" means a source operation or item of equipment which combusts fuel.

"Combustion turbine" means an internal combustion engine fueled by liquid or gaseous fuel, in which blades are driven by combustion gases to generate mechanical energy in the form of a rotating shaft that drives an electric generator or other industrial equipment.

"Construction engine" means a mobile engine used for construction at a site for a limited time period. Construction engine includes a mobile electric generator that is used until regular electric power lines are available to replace the function of the electric generator at the construction site. Construction engine does not include:

1. An engine attached to a foundation;

2. An engine (including any replacement engines) at the same location for more than 12 months;

3. An engine (including any replacement engines) at a seasonal source for at least 90 days per year for at least two years; or

4. An engine that is moved from one location to another in an attempt to circumvent the residence time criteria in 2 or 3 above.

"Commercial container glass" means clear or colored glass made of soda-lime recipe, which is formed into bottles, jars, ampoules or other containers, but does not include specialty container glass.

"Commercial fuel" means solid, liquid, or gaseous fuel which is ordinarily produced, manufactured, or sold for the purpose of creating heat.

"Comparable demand day" means, for any day in which an averaging unit is not operating, a day on which demand for electric power was within 10 percent of the demand on the day in question.

"Continuous emissions monitor" or "CEM" means a device that continuously measures the emissions from one or more source operations.

"Continuous monitoring system" or "CMS" means a system designed to continuously measure various parameters at a facility, which parameters may affect or relate to a facility's emissions. Components of a CMS include, but are not limited to, any continuous emissions monitor (CEM), continuous opacity monitor (COM), continuous process monitor (CPM), or any other constantly operating measuring device and recording device approved by the Department to perform one or more of the functions of a CMS. Ambient monitors, which measure the impact or concentration of air contaminants emitted by the source operation or facility in nearby areas, are not considered part of a facility's CMS.

"Control apparatus" means any device which prevents or controls the emission of any air contaminant directly or indirectly into the outdoor atmosphere.

"Criteria pollutant" means any air contaminant for which a NAAQS has been promulgated under 40 CFR 50 or for which a New Jersey Ambient Air Quality Standard has been promulgated in N.J.A.C. 7:27-13.

"Cyclone-fired boiler" means a boiler which combusts fuel in a horizontal water-cooled cylinder before releasing the combustion gases into the boiler.

"Delivery vessel" means any mobile storage tank including, but not limited to, tank trucks or railroad tank cars. This term does not include marine tank vessels.

"Department" means the New Jersey Department of Environmental Protection.

"Designated set" means the averaging units which an owner or operator is authorized by the Department to include in an averaging plan pursuant to N.J.A.C. 7:27-19.6.

"Distillates of air" means helium (He), nitrogen (N_2), oxygen (O_2), neon (Ne), argon (Ar), krypton (Kr), and xenon (Xe).

"Dry bottom boiler serving an electric generating unit" means a boiler serving an electric generating unit in which ash is removed from the boiler in a solid state.

"Drum mix asphalt plant" means an asphalt plant where the asphalt cement or other binder is added to the aggregate while the aggregate is still in the rotary dryer.

"Dual fuel engine" means compression ignited stationary internal combustion engine that is capable of burning liquid fuel and gaseous fuel.

"Duct burner" means an item of equipment used with a combustion turbine or a stationary reciprocating engine to increase the steam generating capacity of heat recovery steam generators. A duct burner consists of pipes and small burners that are placed in the exhaust duct upstream of the heat recovery steam generator; the duct burner allows firing of fuel to supplement or replace the exhaust heat energy of the turbine or engine. A duct burner is a type of indirect heat exchanger.

"Electric distribution company" means a public utility, as the term is defined in N.J.S.A. 48:2-13, that transmits or distributes electricity to end users within this State.

"Electric distribution system" means that portion of an electric system, which delivers electricity from transformation points on the transmission system to points of connection at a customer's premises. An electric distribution system generally carries less than 69 kilovolts of electricity.

"Electric generating unit" means a combustion or steam generating source used for generating electricity that delivers all or part of its power to the electric power distribution grid for commercial sale.

"Emergency" means any situation that arises from sudden and reasonably unforeseeable events beyond the control of an owner or operator of a facility, such as an unforeseen system capacity shortage caused by an act of God, that requires immediate corrective action to prevent system collapse or to restore normal operations at the facility.

"Emergency capacity" means the generation of electricity by an electric generating unit at a rate in excess of the unit's maximum normal power output rating. This maximum normal power output rating shall be that agreed upon by PJM and the owner or operator of the unit, and published by the owner or operator.

"Emergency generator" means a combustion source that:

1. Is located at a facility and produces mechanical or thermal energy, or electrical power exclusively for use at the facility;

2. Is the source of mechanical or thermal energy, or electrical power during an emergency when the primary source of energy is unavailable; and

3. Is operated only:

i. During the performance of normal testing and maintenance procedures, as recommended in writing by the manufacturer and/or as required in writing by a Federal or State law or regulation;

ii. When there is power outage or the primary source of mechanical or thermal energy fails because of an emergency; or

iii. When there is a voltage reduction issued by PJM and posted on the PJM internet website (www.pjm.com) under the "emergency procedures" menu.

"EPA" means the United States Environmental Protection Agency.

"Equipment" means any device capable of causing the emission of an air contaminant either directly or indirectly to the outdoor atmosphere, and any stack or chimney, conduit, flue, duct, vent or similar device connected or attached to, or serving the equipment. This term includes, but is not limited to, a device in which the preponderance of the air contaminants emitted is caused by a manufacturing process.

"Face-fired boiler" means a furnace firing design in which the burners are mounted on one or more walls of the furnace.

"Facility" means the combination of all structures, buildings, equipment, storage tanks, source operations, and other operations located on one or more contiguous or adjacent properties owned or operated by the same person. This term does not include delivery vessels.

"Facility-wide permit" means a single permit issued by the Department to the owner or operator of a priority industrial facility incorporating the permits, certificates, registrations, or any other relevant Department approvals previously issued to the owner or operator of the priority industrial facility pursuant to the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., the Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq., and the appropriate provisions of the Pollution Prevention Plan prepared by the owner or operator of the priority industrial facility pursuant to N.J.S.A. 13:1D-41 and 42. This term shall have the same meaning as defined for the term "facility-wide permit" at N.J.A.C. 7:1K-1.5; if there is any conflict between the definition at N.J.A.C. 7:1K-1.5 and this one, the definition at N.J.A.C. 7:1K-1.5 shall control.

"Federally enforceable" means all limitations and conditions on operation, production, or emissions which can be enforced by EPA pursuant to authorities which include, but are not limited to, those established in:

1. Any standards of performance for new stationary sources (NSPS) promulgated at 40 CFR 60;

2. Any national emission standard for hazardous air pollutants (NESHAP) promulgated at 40 CFR 61;

3. Any provision of an applicable SIP;

4. Any permit issued pursuant to requirements established at 40 CFR 51, Subpart I; 40 CFR 52.21; 40 CFR 70; or 40 CFR 71; or

5. Any permit issued pursuant to requirements established under the Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq., and this chapter.

"Fixed capital cost" means the capital needed to provide all the depreciable components of a facility, item of equipment or source operation.

"Former DER credit user" means one who used Discrete Emission Reduction (DER) credits in the three years immediately preceding August 4, 2003 in compliance with the Open Market Emissions Trading Program rules then promulgated at N.J.A.C. 7:27-30 to satisfy the requirements of N.J.A.C. 7:27-16 or 19.

"Fuel" means combustible material burned in boilers, furnaces or other machinery to generate heat or other forms of energy. This term includes commercial fuel and non-commercial fuel.

"Fuel-bound nitrogen" means the nitrogen content, in weight fraction, of a fuel.

"Fuel oil" means a liquid or liquefiable petroleum product burned for the generation of light, heat or power and derived directly or indirectly from crude oil.

"Gas" or "gaseous fuel" means any gaseous substance that can be used to create useful heat and/or mechanical energy.

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

"Glass manufacturing furnace" means equipment which uses heat for the production of glass.

"Heat input" means heat derived from the combustion of fuel put into any boiler, furnace or other piece of equipment. This term does not include the heat from preheated combustion air, recirculated flue gases or exhaust gases from other sources.

"Higher heating value" means the total heat obtained from the complete combustion of a fuel which is at 60 degrees Fahrenheit when combustion begins, and the combustion products of which are cooled to 60 degrees Fahrenheit before the quantity of heat released is measured.

"Incinerator" means any device, apparatus, equipment, or structure using combustion or pyrolysis for destroying, reducing or salvaging any material or substance, but does not include thermal or catalytic oxidizers used as control apparatus on manufacturing equipment. For the purposes of this subchapter, this term includes (without limitation) any thermal destruction facility which is a resource recovery facility, as such terms are defined in N.J.A.C. 7:26-1.4.

"Indirect heat exchanger" means equipment in which heat from the combustion of fuel is transferred by conduction through a heat-conducting material to a substance being heated, so that the latter is not contacted by, and adds nothing to, the products of combustion. Examples of indirect heat exchangers include boilers, duct burners and process heaters.

"Industrial/commercial/institutional boiler" or "ICI boiler" means an indirect heat exchanger that generates steam to supply heat to an industrial, commercial, or institutional operation. This term does not include boilers that serve electric generating units.

"Internal combustion engine" means either a reciprocating engine or a combustion turbine in which power, produced by heat and/or pressure from combustion is converted to mechanical work.

"Innovative control technology" means a NO_x control measure that has a substantial likelihood of achieving lower continuous levels of NO_x emissions than are required under this subchapter, but has not been adequately demonstrated and is not available to be implemented before May 31, 1995. An item of equipment or control apparatus, a change in a process, or a pollution prevention strategy may qualify as an innovative control technology.

"Interim period" means the period of time beginning on May 31, 1995, and ending when phased compliance under N.J.A.C. 7:27-19.21, 19.22 or 19.23 (as applicable) is to be completed.

1. For purposes of phased compliance for repowering pursuant to N.J.A.C. 7:27-19.21, the interim period ends on the date when repowering of a combustion source is to be completed.

2. For purposes of phased compliance for reasons of practicability pursuant to N.J.A.C. 7:27-19.22, the interim period ends on the date when a combustion source is to attain full compliance with this subchapter.

3. For purposes of phased compliance for innovative control technology pursuant to N.J.A.C. 7:27-19.23, the interim period ends on the date when the innovative control technology is to be fully implemented.

"KW" or "kW" means kilowatt.

"Lb/MMBTU" means pound per million British Thermal Units, which is based on higher heating value.

"Lean-burn engine" means a stationary reciprocating engine that operates at an air-to-fuel ratio that is fuel-lean of stoichiometric and that cannot operate with an exhaust oxygen concentration of less than one percent.

"Lignite" means coal that is classified as lignite A or B according to the ASTM Standard Specification for Classification of Coals by Rank, ASTM D 388-77, incorporated herein by reference, as amended or supplemented. This specification can be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959.

"Liquid particles" means particles which have volume but are not of rigid shape.

"Load dispatcher" means the employee or agent of the electric power distribution network, to which the electric generating unit is connected, who is responsible for determining that an MEG alert is the only feasible means of preventing or mitigating either a voltage reduction or an interruption in electric service or both.

"Major NO_x facility" means any facility which has the potential to emit 25 or more tons of NO_x per year.

"Manufacturing process" means any action, operation or treatment embracing chemical, industrial, manufacturing, or processing factors, methods or forms including, but not limited to, furnaces, kettles, ovens, converters, cupolas, kilns, crucibles, stills, dryers, roasters, crushers, grinders, mixers, reactors, regenerators, separators, filters, reboilers, columns,

classifiers, screens, quenchers, cookers, digesters, towers, washers, scrubbers, mills, condensers or absorbers.

"Maximum allowable emission rate" means the maximum amount of an air contaminant that may be emitted into the ambient air during one of the following:

1. A prescribed interval of time, such as one hour or one day;

2. Unit of activity, such as the burning of one gallon of fuel; or

3. Unit of output such as the generation of one megawatt hour of electricity.

"Maximum gross heat input rate" means the maximum amount of fuel a combustion source is able to combust in a given period as stated by the manufacturer of the combustion source. This term is expressed in BTUs per hour, based on the higher heating value of the fuel.

"MEG alert" means a period in which one or more electric generating units are operated at emergency capacity at the direction of the load dispatcher, in order to prevent or mitigate voltage reductions or interruptions in electric service, or both. A MEG alert begins and ends as follows:

1. An alert begins when one or more electric generating units are operated at emergency capacity after receiving notice from the load dispatcher, directing the electric generating unit to do so; and

2. An alert ends when the electric generating unit ceases operating its electric generating units at emergency capacity.

"MMBTU" means million British Thermal Units.

"Modify" or "modification" means any physical change, or change in the method of operation of existing equipment or control apparatus, that increases the amount of actual emission of any air contaminant emitted by that equipment or control apparatus or that results in the emission of any air contaminant not previously emitted. This term shall not include normal repair and maintenance.

"MW" means megawatt.

"National Ambient Air Quality Standard (NAAQS)" means an ambient air quality standard promulgated at 40 CFR 50.

"Natural gas" means:

1. A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

2. Liquid petroleum gas, as defined by the ASTM Standard Specification for Liquid Petroleum Gases, D1835-82, incorporated herein by reference, as amended and supplemented. This specification can be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, P O Box C 700, West Conshohocken, PA 19428-2959.

"Natural gas reburning" means a control technology where natural gas is injected into a boiler downstream of the main combustion zone in order to reduce the amount of NO_x in the exhaust gas.

"NESHAP" means a National Emission Standard for a Hazardous Air Pollutant as promulgated under 40 CFR Part 61 or 40 CFR Part 63.

"Net energy output" means the gross output minus any of the energy output consumed to generate the output.

"Nitrogen dioxide (NO_2)" means a gaseous compound at standard conditions, having a molecular composition of one nitrogen atom and two oxygen atoms.

"Nitrogen oxide (NO)" means a gaseous compound at standard conditions, having a molecular composition of one nitrogen atom and one oxygen atom.

"Nonbanded coal" means coal that is classified as nonbanded according to the ASTM Standard Definition of Terms Relating to Megascopic Description of Coal and Coal Beds and Microscopical Description and Analysis of Coals, ASTM D 2796-77, incorporated herein by reference, as amended or supplemented. This document may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959.

"Non-commercial fuel" means solid, liquid or gaseous fuel which is not ordinarily produced, manufactured, or sold for the purpose of creating heat.

"NSPS" means Standards of Performance for New Stationary Sources as promulgated under 40 CFR 60, commonly referred to as New Source Performance Standards.

"Operating certificate" or "certificate" means a "Certificate to Operate Control Apparatus or Equipment" issued by the Department pursuant to N.J.S.A. 26.2C-1 et seq., and in particular N.J.S.A. 26:2C-9.2, and implementing rules at N.J.A.C. 7:27-8.

"Operating permit" means the permit described in Title V of the Federal Clean Air Act, 42 U.S.C. §§ 7661 et seq., and in N.J.A.C. 7:27-22. This term shall include a general operating permit which is applicable facility wide, but does not include a general operating permit which applies only to a part of a facility. Where a general operating permit applies only to a part of a facility, the general operating permit shall be incorporated into the operating permit. This term also includes an operating permit issued for a temporary facility; for a facility subject to a MACT or GACT standard pursuant to N.J.A.C. 7:27-22.26; or for a component of a facility pursuant to N.J.A.C. 7:27-22.5(j).

"Output" means, with respect to an internal combustion engine, the shaft work output from the engine plus the energy reclaimed by any useful heat recovery system.

"Oxides of nitrogen (NO_x)" means all oxides of nitrogen, except nitrous oxide, as measured by test methods approved by the Department and EPA, such as the test methods set forth at 40 CFR 60 Appendix A Method 7E.

"Particles" means any material, except uncombined water, which exists as liquid particles or solid particles at standard conditions.

"Peak daily heat input rate," for a combustion source or for a designated set that has no operating history, means the maximum gross heat input rate of the source or of all the sources in the designated set. For a combustion source or for a designated set that has an operating history, "peak daily heat input rate" means the average of the daily heat inputs to a combustion source or to a designated set on the five days on which the heat input was highest, over the following period:

1. For a combustion source or for a designated set that has been operating for at least five years, the five years preceding the date on which the owner or operator applied to the Department for approval of an emissions averaging plan, pursuant to N.J.A.C. 7:27-19.6; and

2. For a combustion source that has been operating for less than five years, the entire period during which the combustion source has been operating.

"Permit" means preconstruction permit, operating permit, or facility-wide permit.

"Person" means any individual or entity and shall include, without limitation, corporations, companies, associations, societies, firms, partnerships and joint stock companies, and shall also include, without limitation, all political subdivisions of this State or any agencies or instrumentalities thereof.

"PJM" means PJM Interconnection, LLC, or any successor to PJM as the Regional Transmission Organization, approved by the Federal Energy Regulatory Commission (FERC), serving a region that includes New Jersey as well as all or parts of other states.

"Potential to emit" means the capability of a source operation or of a facility to emit an air contaminant at maximum design capacity, except as constrained by any Federally enforceable condition. Such Federally enforceable conditions may include, but are not limited to, the effect of installed control apparatus, restrictions on the hours of operation, and restrictions on the type or amount of material combusted, stored, or processed.

"Power outage" means an interruption in the provision of electricity to customers because normally available sources of electrical energy are unavailable, provided the unavailability is due to circumstances beyond the control of the customer.

"Ppmv" means a measurement of the concentration of a specified substance in air, expressed as the number of parts of the specified substance per million parts of air, by volume, including the number of parts contributed by water.

"Ppmvd" means a measurement of the concentration of a specified substance in air, expressed as the number of parts of the specified substance per million parts of air, by volume, not including the number of parts contributed by water.

"Preconstruction permit" or "permit" means a "Permit to Construct, Install, or Alter Control Apparatus or Equipment" issued by the Department pursuant to N.J.S.A. 26C-1 et seq., in particular N.J.S.A. 26:2C-9.2, and implementing rules at N.J.A.C. 7:27-8.

"Primary fuel" means the fuel that provided the greatest heat input (expressed in BTU) to a combustion source in the base year.

"Process heater" means an item of equipment in which heat from fuel combustion is transferred to fluids contained in tubes without coming into contact with the fluid. A process heater is a type of indirect heat exchanger.

"Rated power output" means the maximum electrical or equivalent mechanical power output stated on the nameplate affixed to an engine or the International Standard Organization (ISO) rated electrical or equivalent mechanical power stated on the nameplate affixed to a turbine by the manufacturer.

"Rebricking" means the replacement of damaged or worn bricks of a glass manufacturing furnace while the furnace does not contain molten glass.

"Reciprocating engine" means an internal combustion engine in which a rotating crankshaft is driven by reciprocating motion of piston(s).

"Reconstruction" means the replacement of components of an existing facility, item of equipment or source operation to such an extent that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct an entirely new facility, item of equipment or source operation.

"Refinery fuel gas" means gaseous fuel derived from the refining process and used as a fuel at the refinery where it was produced.

"Refining process" means the combination of physical and chemical operations including, but not limited to, distillation, cracking, and reformulation, performed on crude oil (or derivatives of crude oil) in order to produce petroleum products.

"Regenerative cycle combustion turbine" means a combustion turbine that recovers heat from its exhaust gases and uses that heat to preheat the inlet combustion air which is fed into the combustion turbine.

"Repowering" means the series of actions described in paragraphs 1 and 2 below by an owner or operator:

1. The permanent ceasing of the operations of the steam generator in a steam generating unit, the combustion turbine in a simple-cycle or combined-cycle combustion turbine, or any other combustion source; and

2. The installation in the State of a new combustion source or the purchase of heat or power from the owner of a new combustion source that is located in the State that:

i. Has a maximum gross heat output rate that is at least 50 percent of the maximum gross heat output rate of the combustion source that is shut down under 1 above, or has a power output rate that is at least 50 percent of the power output rate of the combustion source that is shut down; and

ii. Incorporates technology capable of controlling multiple combustion emissions simultaneously with improved fuel efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

"Rich-burn engine" means a stationary reciprocating engine that is not a lean-burn engine.

"Rotary dryer" means a cylindrical device, which rotates about an axis, through which hot gases are passed for the purpose of removing moisture from any solid.

"Sampling" means the selective collection of a quantity of raw materials, process intermediates, products, by-products or wastes.

"Selective noncatalytic reduction" or "SNCR" means a noncombustion technology that reduces NO_x emissions without a catalyst by injecting a reducing agent (such as ammonia, urea or cyanuric acid) into the flue gas, downstream of the combustion zone; the injection of the reducing agent converts NO_x to molecular nitrogen, water, and (if the reducing agent is urea or cyanuric acid) carbon dioxide (CO_2).

"Significant air quality impact level" means an increase, greater than or equal to that specified in Table 1 at N.J.A.C. 7:27-18.4, in the ambient air concentration of a criteria pollutant.

"Simple cycle combustion turbine" means a combustion turbine that does not recover heat from its exhaust gases.

"Soda lime recipe" means a formula for making glass using 60 to 75 percent silicon dioxide and 25 to 40 percent other oxides and no lead oxides.

"Solid particles" means particles of rigid shape and definite volume.

"Source emission testing" means the testing of a discharge of any air contaminant from equipment, control apparatus or source operation through any stack or chimney.

"Source operation" or "source" means any process or any identifiable part thereof, that emits or can reasonably be anticipated to emit any air contaminant either directly or indirectly into the outdoor atmosphere. A source operation may include one or more pieces of equipment or control apparatus.

"Specialty container glass" means clear or colored glass made of soda-lime recipe, which is produced to meet the specifications of any standard set forth by The United States Pharmacopeia or The National Formulary, incorporated herein by reference, and which is used for pharmaceutical, cosmetic or scientific purposes. The referenced specifications can be obtained from the United States Pharmacopeial Convention, Inc., 12601 Twinbrook Parkway, Rockville, MD 20852.

"Stack or chimney" means a flue, conduit or opening designed, constructed, or used for the purpose of emitting any air contaminant into the outdoor atmosphere.

"Standard conditions" means 70 degrees Fahrenheit (21.1 degrees Celsius) and one atmosphere pressure (14.7 pounds per square inch absolute or 760.0 millimeters of mercury).

"State implementation plan" or "SIP" means a plan or portion thereof, or any revision thereto, prepared by a state and approved by the EPA pursuant to 42 U.S.C. §7410, which includes enforceable emission limitations or other control measures, means or techniques, and provides for implementation, maintenance, and enforcement of one or more NAAQS.

"Stationary combustion turbine" means any simple cycle combustion turbine, regenerative cycle combustion turbine, or combustion turbine portion of a combined cycle steam/electric generating system that:

1. Is not self-propelled but may be mounted on a vehicle for portability; or

2. Is self-propelled on tracks at a facility, but does not in the course of its normal operation leave the facility.

"Stationary reciprocating engine" means an internal combustion engine that is a reciprocating engine that remains for more than 30 days at a single site (for example, any building, structure, facility, or installation), and:

1. Is not self-propelled, but may be mounted on a vehicle for portability; or

2. Is self-propelled on tracks at a facility, but does not in the course of its normal operation leave the facility. This term does not include mobile electric generators being used by the military, locomotive engines or construction engines.

"Steam generating unit" means any furnace, boiler, or other device which combusts commercial fuel for the purpose of producing steam.

"Subbituminous coal" means coal that is classified as subbituminous according to the ASTM Standard Specification for Classification of Coals by Rank, ASTM D 388-77, incorporated herein by reference, as amended or supplemented. This document may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959.

"Tangential-fired boiler" means a furnace firing design where the burners are mounted at the corners of the furnace chamber.

"Testing" means a procedure for determining the kind and amount of one or more air contaminants, potential air contaminants or air contaminant precursors present. This term includes, but is not limited to, sampling, sample custody, analysis, and reporting of findings.

"Use" means to engage in any form or manner of operation of equipment or control apparatus subsequent to the installation of such equipment or control apparatus. This term includes any trial operation.

"Volatile organic compound," or "VOC," means a volatile organic compound as that term is defined by the EPA at 40 CFR 51.100(s), as supplemented or amended, which is incorporated by reference herein.

"Voltage reduction" means a reduction in customer supply voltage of at least five percent by an electric distribution company in order to reduce load on an electric distribution system.

"Wet bottom boiler" means a boiler serving an electric generating unit in which the ash is removed from the boiler in a molten state.

Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
Inserted "Facility-wide permit", "Operating permit" and "Preconstruction permit"; and rewrote "Alteration" and "Permit".
Administrative change.
See: 31 N.J.R. 639(b).
Amended by R.2004 d.129, effective April 5, 2004 (operative April 25, 2004).
See: 35 N.J.R. 3486(a), 36 N.J.R. 1791(a).
Added "Former DER credit user".
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
Rewrote the section.
Amended by R.2005 d.392, effective November 21, 2005.
See: 36 N.J.R. 4607(a), 37 N.J.R. 16(b), 4415(a).
Deleted "carbon dioxide" from "Distillates of air" definition.
Administrative correction.
See: 38 N.J.R. 5155(b).
Amended by R.2008 d.366, effective December 1, 2008 (operative December 29, 2008).
See: 39 N.J.R. 4492(a), 40 N.J.R. 6769(a).
Rewrote definition "Volatile organic compound".

7:27-19.2 Purpose, scope and applicability

(a) This subchapter establishes requirements and procedures concerning the control and prohibition of air pollution by oxides of nitrogen. The general purpose of this subchapter is to require the owner or operator of certain stationary source operations to use reasonably available control technology (RACT) to prevent or control NO_x emissions. EPA defines RACT to mean the lowest emission limitation that a particular source is capable of meeting by the application of air pollution control technology which is reasonably available considering technological and economic feasibility.

(b) The following types of equipment and source operations are subject to the provisions of this subchapter:

1. Any boiler serving an electric generating unit, located at a major NO_x facility;

2. Until March 7, 2007, any industrial/commercial/institutional boiler or other indirect heat exchanger that has a maximum gross heat input rate of at least 20 million BTUs per hour, located at a major NO_x facility. On and after March 7, 2007, the applicability of this subchapter to an industrial/commercial/institutional boiler or other indirect heat exchanger shall be determined by (c)1 below;

3. Until March 7, 2007, any stationary combustion turbine that has a maximum gross heat input rate of at least 30 million BTUs per hour, located at a major NO_x facility. On and after March 7, 2007, the applicability of this subchapter to an stationary combustion turbine shall be determined by (c)2 below:

4. Any stationary reciprocating engine capable of producing an output of 500 brake horsepower or more and located at a major NO_x facility. In addition, on and after March 7, 2007, the applicability of this subchapter to a stationary reciprocating engine or group of stationary reciprocating engines, used for generating electricity, shall be determined by (c)3 and 4 below;

5. Any rotary dryer located at an asphalt plant;

6. Any glass manufacturing furnace producing commercial container glass, and having a maximum potential production rate of at least 14 tons of glass removed from the furnace per day and having the potential to emit more than 10 tons of NO_x per year;

7. Any glass manufacturing furnace producing specialty container glass, and having a maximum potential production rate of at least seven tons of glass removed from the furnace per day and having the potential to emit more than 10 tons of NO_x per year;

8. Any glass manufacturing furnace producing borosilicate recipe glass, and having a maximum potential production rate of at least five tons of glass removed from the furnace per day, and having the potential to emit more than 10 tons of NO_x per year; and

9. Any other equipment or source operation not specifically listed at (b)1 through 8 above or (c) below that has the potential to emit more than 10 tons of NO_x per year.

(c) On and after March 7, 2007, in addition to the types of equipment and source operations listed at (b) above, the following types of equipment or source operations shall be subject to the provisions of this subchapter:

1. Any industrial/commercial/institutional boiler or other indirect heat exchanger that has a maximum gross heat input rate of at least five million BTU per hour, whether or not it is located at a major NO_x facility;

2. Any stationary combustion turbine that has a maximum gross heat input rate of at least 25 million BTU per hour, located at a major NO_x facility;

3. Any stationary reciprocating engine used for generating electricity, whether or not it is located at a major NO_x facility, that has a maximum rated power output of:

i. One hundred forty-eight kilowatt or greater; or

ii. Thirty-seven kilowatt or greater, if the engine has either commenced operation at the facility or is modified on or after March 7, 2007; and

4. Any group of two or more stationary reciprocating engines used for generating electricity, each of which has a maximum rated power output of 37 kW or greater, but less than 148 kW, and whose total combined power output is 148 kW or greater, whether or not the group of engines is located at a major NO_x facility.

(d) Notwithstanding the provisions of (b) and (c) above, compliance with the recordkeeping requirements applicable to emergency generators set forth at N.J.A.C. 7:27-19.11 shall satisfy all record requirements in this subchapter for any equipment that is solely used as an emergency generator, as defined at N.J.A.C. 7:27-19.1. Emergency generators shall not be used:

1. In a circumstance other than an emergency, except as specified at paragraph 3 of the definition of emergency generator at N.J.A.C. 7:27-19.1;

2. For normal testing and maintenance on days when the Department forecasts air quality anywhere in New Jersey to be "unhealthy for sensitive groups," "unhealthy," or "very unhealthy" as defined in the EPA's Air Quality Index, at http://airnow.gov, incorporated herein by reference, as amended and supplemented, unless required in writing by a Federal or State law or regulation. Procedures for determining the air quality forecasts for New Jersey are available at the Department's air quality permitting web site at http://www.state.nj.us/dep/aqpp/aqforecast; and

3. As a source of energy or power after the primary energy or power source has become operable again. If the primary energy or power source is under the control of the owner or operator of the emergency generator, the owner or operator shall make a reasonable, timely effort to repair the primary energy or power source.

(e) Notwithstanding the provisions of (b) and (c) above, this subchapter does not apply to any equipment or source operation for which the EPA determines (when the EPA approves a plan or plan revision) that net air quality benefits are greater in the absence of reductions of oxides of nitrogen from such equipment or source operation.

(f) The owner or operator of a facility containing any equipment or source operation listed in (b)1 through 8 above may apply to the Department for an exemption from this subchapter. The following conditions apply to such exemptions:

1. An owner or operator shall apply for such an exemption in accordance with the procedures set forth in N.J.A.C. 7:27-19.14;

2. The Department shall approve an exemption only if the facility satisfies the following requirements:

i. The facility's potential to emit NO_x is less than 25 tons per year; and

ii. The facility's potential to emit NO_x on any calendar day from May 1 to September 30 is less than 137 pounds per day; and

3. If an exemption was approved for any equipment prior to June 6, 2000, but that equipment no longer qualifies for such an exemption due to amendments in this section operative on June 6, 2000, the owner or operator of such equipment shall comply with the requirements in this subchapter applicable to that equipment by October 6, 2001.

Administrative Correction.
See: 27 N.J.R. 1406(a).
Amended by R.1995 d.214, effective April 17, 1995 (operative May 23, 1995).
See: 26 N.J.R. 3298(a), 27 N.J.R. 1581(a).
Amended by R.2000 d.204, effective May 15, 2000 (operative June 6, 2000).
See: 31 N.J.R. 1671(a), 32 N.J.R. 1808(a).
Rewrote (f).
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
Rewrote the section.

7:27-19.3 General provisions

(a) Each owner and each operator of any equipment or source operation subject to this subchapter is responsible for ensuring compliance with all requirements of this subchapter. If there is more than one owner and operator of the equipment or source operation, each owner and each operator is jointly and severally liable for any penalties for violations of this subchapter.

(b) The emission limitations specified in this subchapter became operative on May 31, 1995, unless otherwise specified.

(c) For any alteration of equipment or source operations necessary to comply with the NO_x emission limits in this subchapter, which alteration does not involve a reconstruction of the equipment or source operation, the use of control measures which incorporate current advances in the art of air

pollution control for those types of control measures shall be deemed to satisfy the requirements of N.J.A.C. 7:27-8.12 or 22.35. For example, if a boiler serving an electric generating unit achieves compliance with an emission limit under this subchapter by installing a low-NO_x burner, the requirements of N.J.A.C. 7:27-8.12 or 22.35 are satisfied if the low-NO_x burner installed incorporates current advances in the art of air pollution control for low-NO_x burners.

(d) By February 7, 2006, the owner or operator of any facility, equipment or source operation that is subject to NO_x emissions limit at N.J.A.C. 7:27-19.5(d), 19.7(h), or 19.8(e) shall:

1. Apply for permits for all equipment and control apparatus necessary for compliance with this subchapter; and

2. If the owner or operator seeks to comply with this subchapter pursuant to the facility-specific NO_x emission limit provision of N.J.A.C. 7:27-19.13, submit to the Department a facility-specific NO_x control plan pursuant to N.J.A.C. 7:27-19.13.

(e) After receipt of a written request from an owner or operator for an extension of the deadline set forth in (d) above or the deadline set forth at N.J.A.C. 7:27-19.13(b), the Department may authorize a 60-day renewable extension, provided that the request includes a statement, certified in accordance with N.J.A.C. 7:27-1.39, that notwithstanding the request for an extension, the facility will comply with all applicable emission limits set forth in this subchapter by the May 31, 1995 deadline established in (b) above. Such extension may be renewed by the Department upon the written request of the owner or operator provided that the request of the renewal shall also include a statement, certified in accordance with N.J.A.C. 7:27-1.39, that notwithstanding the request for an extension, the facility will comply with all applicable emission limits set forth in this subchapter by the May 31, 1995 deadline established in (b) above. Written requests for the extension of a deadline submitted pursuant to this subsection shall be addressed to:

Assistant Director, Air and Environmental Quality Enforcement
Division Of Enforcement Field Operations
Department of Environmental Protection
PO Box 422
401 East State Street, 4th Floor
Trenton, New Jersey 08625-0422

(f) In lieu of complying with the applicable emission limits set forth at N.J.A.C. 7:27-19.4, 19.5, 19.7, 19.8, 19.9 or 19.10, the owner or operator of any equipment or source operation listed in N.J.A.C. 7:27-19.2(b) may comply with one of the following, or with a combination of (f)1 and 3 below. The owner or operator of any equipment or source operation listed in N.J.A.C. 7:27-19.2(c) may comply with (f)1, 2 or 4 below:

1. An emissions averaging plan approved by the Department pursuant to N.J.A.C. 7:27-19.6 and 19.14, which includes the combustion source in question as an averaging unit;

2. An alternative maximum allowable emission rate for the unit, approved by the Department pursuant to N.J.A.C. 7:27-19.13;

3. A seasonal fuel switching plan for the unit, approved by the Department pursuant to N.J.A.C. 7:27-19.14 and 19.20; or

4. A plan for phased compliance for the unit, approved by the Department pursuant to N.J.A.C. 7:27-19.14 and N.J.A.C. 7:27-19.21 or 19.23.

(g) On and after April 25, 2004, no owner or operator of a source operation subject to a NO_x emissions limit under this subchapter may comply with the limit through the use of discrete emission reduction (DER) credits. Any former DER credit user who used DER credits to comply with a NO_x emissions limit under this subchapter, and who would continue to require the use of DER credits to comply with that limit, shall achieve compliance with that limit by April 25, 2005 and maintain compliance with that limit thereafter. In the case of a former DER credit user, only, deadlines related to the NO_x emissions limit compliance deadline that are set forth elsewhere in this subchapter are modified as follows:

1. The emission limitations operative date established at (b) above is April 25, 2005;

2. The permit application submission deadline established at (d)1 above is July 25, 2004;

3. The proposed NO_x control plan submission deadline established at (d)2 above and N.J.A.C. 7:27-19.13(b) is July 25, 2004;

4. The NO_x control plan implementation deadline established at N.J.A.C. 7:27-19.13(n) is April 25, 2005;

5. The compliance demonstration deadline established at N.J.A.C. 7:27-19.15(b) is October 25, 2005;

6. The application for approval of a repowering plan deadline established at N.J.A.C. 7:27-19.21(b) is July 25, 2004;

7. The completion of repowering date referenced at N.J.A.C. 7:27-19.21(c) 2v and (d)4 is no later than April 25, 2008;

8. The May 31, 1995 deadlines established at N.J.A.C. 7:27-19.21(e)1, 4 and 6 are April 25, 2005;

9. The operation cessation deadline established at N.J.A.C. 7:27-19.21(e) 10 is April 25, 2008;

10. The innovative control technology application deadline established at N.J.A.C. 7:27-19.23(b) is July 25, 2004;

11. The implementation of the innovative control technology date referenced at N.J.A.C. 7:27-19.23(c)4, (d)2iii and 3 is no later than April 25, 2008;

12. The May 31, 1995 deadlines established at N.J.A.C. 7:27-19.23(d) 2iv, (e)1, 4 and 6 are April 25, 2005;

13. The May 1, 1999 operation cessation deadline established at N.J.A.C. 7:27-19.23(e)9 does not apply to a former DER credit user. Instead, by April 25, 2008, the former DER credit user shall either implement the innovative control technology for the combustion source included in its innovative control technology plan or that source must comply with the NO_x emissions limit under this subchapter.

(h) The extension of the NO_x RACT compliance deadline to April 25, 2005 at (g) above and the provisions of (g)1 through 13 above do not apply to a former DER credit user:

1. Whose only use of DER credits was in satisfaction of either the settlement of a penalty imposed pursuant to N.J.A.C. 7:27A-3.10 or an Administrative Consent Order entered into with the Department prior to January 1, 2003;

2. To extend a deadline contained in an Administrative Consent Order (ACO) entered into with the Department prior to January 1, 2003, unless compliance with the ACO requires the use of NO_x DER credits.

(i) The owner or operator of any facility, equipment or source operation which commences operation on or after January 23, 1994 shall ensure that such facility, equipment of source operation complies with the applicable requirement(s) of this subchapter from the date of commencement of operation or from the date the requirement is operative, whichever is later.

(j) A person required to provide a notice to the Department under this subchapter shall send the notice to the applicable address listed below:

1. If the notice concerns a combustion source located in Mercer County, Middlesex County, Monmouth County, Ocean County, or Union County, the person shall send the notice to:

Department of Environmental Protection
Central Regional Office
Air Compliance & Enforcement
Horizon Center
Rt. 130, Building 300
P.O. Box 407
Robbinsville, NJ 08625-0407

2. If the notice concerns a combustion source located in Bergen County, Essex County, Hudson County, Hunterdon County, Morris County, Passaic County, Somerset County, Sussex County or Warren County, the person shall send the notice to:

Department of Environmental Protection
Northern Regional Office
Air Compliance & Enforcement
7 Ridgedale Avenue
Cedar Knolls, NJ 07927

3. If notice concerns a combustion source located in Atlantic County, Burlington County, Camden County, Cape May County, Cumberland County, Gloucester County or Salem County, the person shall send the notice to:

Department of Environmental Protection
Southern Regional Office
Air Compliance & Enforcement
One Port Center
2 Riverside Drive, Suite 201
Camden, NJ 08103

4. If the notice concerns an averaging plan pursuant to N.J.A.C. 7:27-19.6, the person shall determine the county in which the averaging unit with the biggest potential to emit NO_x is located, and send the notice to the address applicable to that county under (j)1 through 3 above.

Amended by R.1995 d.214, effective April 17, 1995 (operative May 23, 1995).
See: 26 N.J.R. 3298(a), 27 N.J.R. 1581(a).
Amended by R.1996 d.303, effective July 1, 1996 (operative August 2, 1996).
See: 28 N.J.R. 1147(b), 28 N.J.R. 3414(a).
Added (g) and redesignated former (g) and (h) as (h) and (I).
Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
In (c) and (e), changed N.J.A.C. references.
Amended by R.2004 d.129, effective April 5, 2004 (operative April 25, 2004).
See: 35 N.J.R. 3486(a), 36 N.J.R. 1791(a).
Rewrote (g); added a new (h) and recodified former (h) and (i) as (i) and (j).
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
Rewrote (b), (c), (d), (f), (i), and (j).

7:27-19.4 Boilers serving electric generating units

(a) The owner or operator of any boiler serving an electric generating unit shall cause it to emit NO_x at a rate no greater than the applicable maximum allowable NO_x emission rate specified in Table 1 below, unless the owner or operator is complying with N.J.A.C. 7:27-19.3(f).

TABLE 1
Maximum Allowable NO_x Emission Rates for Boilers Serving Electric Generating Units
(pounds per million BTU)

	Firing Method		
Fuel/Boiler Type	**Tangential**	**Face**	**Cyclone**
Coal—Wet Bottom	1.0	1.0	0.60
Coal—Dry Bottom	0.38	0.45	0.55
Oil and/or Gas	0.20	0.28	0.43
Gas Only	0.20	0.20	0.43

(b) The owner or operator of any boiler serving an electric generating unit shall install on the boiler a continuous emissions monitoring system satisfying the requirements of N.J.A.C. 7:27-19.18.

(c) The owner or operator of any boiler serving an electric generating unit shall adjust the boiler's combustion process before May 1st of each calendar year in accordance with N.J.A.C. 7:27-19.16, except the adjustment may occur within seven days of the first period of operation after May 1, if the boiler has not operated between January 1 and May 1 of that year.

Amended by R.1995 d.214, effective April 17, 1995 (operative May 23, 1995).
See: 26 N.J.R. 3298(a), 27 N.J.R. 1581(a).
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
In rule heading substituted "Boilers serving electric generating units" for "Utility boilers"; rewrote (a) and (b); added (c).

7:27-19.5 Stationary combustion turbines

(a) Until March 7, 2007, the owner or operator of any stationary simple cycle combustion turbine that has a maximum gross heat input rate of at least 30 million BTUs per hour shall cause it to emit NO_x at a rate no greater than the applicable maximum allowable NO_x emission rate specified in Table 2 below, unless the owner or operator is complying with N.J.A.C. 7:27-19.3(f). On and after March 7, 2007, the rates in Table 2 shall apply only to a NO_x budget source.

TABLE 2
Maximum Allowable NO_X Emission Rate for Simple Cycle Combustion Turbines
(Pounds per million BTU)

Fuel Used	Emission Limit
Oil	0.4
Gas	0.2

(b) Until March 7, 2007, the owner or operator of any combined cycle combustion turbine or a regenerative cycle combustion turbine that has a maximum gross heat input rate of at least 30 million BTUs per hour shall cause it to emit NO_x at a rate no greater than the applicable maximum allowable NO_x emission rate specified in Table 3 below, unless the owner or operator is complying with N.J.A.C. 7:27-19.3(f). On and after March 7, 2007, the rates in Table 3 shall apply only to a NO_x budget source.

TABLE 3
Maximum Allowable NO_X Emission Rate for Combined Cycle or Regenerative Cycle Combustion Turbines
(Pounds per million BTU)

Fuel Used	Emission Limit
Oil	0..35
Gas	0.15

(c) In lieu of complying with the emission limits set forth in (a) and (b) above, the owner or operator of a stationary combustion turbine may comply with all of the following requirements:

1. The owner or operator of the stationary combustion turbine shall apply for and obtain the Department's written approval, in accordance with N.J.A.C. 7:27-19.14 and based on the standards in N.J.A.C. 7:27-19.14 and (c)2 and 3 below;

2. The owner or operator shall establish that there is an insufficient supply of water to the turbine suitable for NO_x emission control, due to either of the following circumstances beyond the control of the owner or operator:

i. A legally enforceable limit on the amount of water which the owner or operator's facility may use; or

ii. The need to provide for an alternate supply of water, because the existing supply is insufficiently filtered and de-ionized to be suitable for injection;

3. The owner or operator shall establish that there is no commercially available dry low-NO_x combustor suitable for use in the specific stationary combustion turbine;

4. The owner or operator shall maintain the Department's approval in effect;

5. The owner or operator shall comply with all conditions of the Department's approval; and

6. The owner or operator annually shall adjust the combustion process of the turbine in accordance with N.J.A.C. 7:27-19.16, before May 1 of each year.

(d) On and after March 7, 2007, the owner or operator of any stationary combustion turbine that has a maximum gross heat input rate of at least 25 million BTU per hour shall cause it to emit NO_x at a rate no greater than the applicable maximum allowable NO_x emission rate specified in Table 4 below, unless the owner or operator is complying with N.J.A.C. 7:27-19.3(f) or (c)1 through 5 below; except that a NO_x budget source shall be subject to the maximum allowable NO_x emission rates at Tables 2 and 3 above.

TABLE 4
Maximum Allowable NO_x Emission Rate for Stationary Combustion Turbines

Type of Turbine	Type of Fuel	Maximum Allowable NO_x Emission Rate
Combined cycle combustion turbine or a regenerative cycle combustion turbine	Gas	1.3 pounds of NO_x per MWh
	Oil	2.0 pounds of NO_x per MWh
Simple cycle combustion turbine	Gas	2.2 pounds of NO_x per MWh
	Oil	3.0 pounds of NO_x per MWh

(e) The owner or operator of any stationary combustion turbine that has a maximum gross heat input rate of at least 25 million BTU per hour shall adjust the turbine's combustion process in accordance with the procedure set forth at N.J.A.C. 7:27-19.16 and the following schedule:

1. For any stationary combustion turbine that has a maximum gross heat input rate of at least 25 million BTU but less than 30 million BTU per hour, according to manufacturer's recommended maintenance schedules beginning in 2007; or

2. For any stationary combustion turbine that has a maximum gross heat input rate of at least 30 million BTU per hour or greater, or required prior to November 7, 2005 to adjust the combustion process, according to manufacturer's recommended maintenance schedules.

(f) To calculate lb/MWh for units where energy is used for other than electric generation, for example useful heat from a combined heat and power unit, that useful energy should be converted to equivalent MWh and added to the electric output. The lb/MWh is based on net energy output, for both electric output and useful heat output.

Amended by R.1995 d.214, effective April 17, 1995 (operative May 23, 1995).
See: 26 N.J.R. 3298(a), 27 N.J.R. 1581(a).
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
In rule heading substituted "combustion" for "gas"; rewrote the section and added (d) and (e).

7:27-19.6 Emissions averaging

(a) The Department may authorize an owner or operator to comply with an averaging plan approved by the Department pursuant to this section and N.J.A.C. 7:27-19.14. An owner or operator in compliance with such an approved averaging plan is not required to have each averaging unit comply with any emission limit set forth in this subchapter which would be applicable in the absence of an approved averaging plan.

(b) An owner or operator of two or more source operations or items of equipment may request that the Department authorize an averaging plan for two or more averaging units designated by the owner or operator. The owner or operator seeking authorization for averaging shall submit a written application to the Department in accordance with N.J.A.C. 7:27-19.14(a), (b) and (c). The owner or operator shall include the following information in the application:

1. Information sufficient to identify each averaging unit, including its location, a brief description of the unit (for example, "dry-bottom coal-fired boiler serving an electric generating unit" or "oil-fired simple-cycle combustion turbine"), its permit number, any other identifying numbers, and any other information necessary to distinguish it from other equipment owned or operated by the applicant;

2. The maximum gross heat input rate of each averaging unit, expressed in BTUs per hour;

3. The type of fuel or fuels combusted in each averaging unit;

4. The maximum allowable NOx emission rate which the owner or operator proposes to impose upon each averaging unit, expressed in pounds per million BTU;

5. The peak daily heat input rate of each averaging unit or of the designated set, expressed in MMBTU;

6. A demonstration that in operating at the peak daily heat input rate of all the averaging units together or of the designated set would satisfy the following equation:

$$TPEE \leq TPAE$$

where:

i. TPEE means total peak estimated emissions and is equal to the sum of the peak estimated emissions for each averaging unit or the peak estimated emission of the designated set. The peak estimated emissions for each averaging unit equals the maximum emission rate listed in (b)4 above for that averaging unit, multiplied by the peak daily heat input rate listed in (b)5 above for that averaging unit. The peak estimated emissions of the designated set equals the sum of the maximum emission rates listed in (b)4 above for each averaging unit multiplied by the daily heat input rate to that averaging unit at the time of the peak daily heat input rate to the designated set as listed in (b)5 above; and

ii. TPAE means total peak allowable emissions, and is equal to the sum of the total peak allowable emissions for each averaging unit or the peak allowable emissions of the designated set. The peak allowable emissions for each averaging unit equals the applicable NO_x emission limit set forth in N.J.A.C. 7:27-19.4, 19.5, 19.7, 19.8, 19.9, 19.10 or 19.20 for that averaging unit, multiplied by the peak daily heat input rate listed in (b)5 above for that averaging unit. The TPAE of the designated set means the applicable NO_x emission limit for each averaging unit multiplied by the heat input rate to that averaging unit at the time of the peak daily heat input rate to the designated set. For an averaging unit that is included in a seasonal fuel switching plan under N.J.A.C. 7:27-19.20, the applicable NO_x emission limit from May 1 through September 30 is the limit established under N.J.A.C. 7:27-19.20(d) or 19.20(g)3 as applicable, and the applicable NO_x emission limit from October 1 through April 30 is the limit established under N.J.A.C. 7:27-19.20(g)4;

7. The method to be used to measure the actual NO_x emission rate of each averaging unit;

8. The name and phone number of the individual responsible for the recordkeeping required under (g) below; and

9. Any other information which the Department requests, which is reasonably necessary to enable it to determine whether the averaging units designated by the owner or operator will comply with the requirements of this section.

(c) The Department shall approve an averaging plan only if the following requirements are satisfied:

1. Each averaging unit can satisfy the maximum allowable NO_x emission rate which the owner or operator proposed under (b)4 above for that averaging unit;

2. The request for authorization satisfies all requirements of (b) above; and

3. The owner and operator of the averaging units to be included in the designated set enter into a Federally enforceable agreement with the Department (such as the inclusion of conditions in the applicable permits or operating certificates, or both), requiring any averaging unit for which the NO_x emission rate specified under (b)4 above is less than the applicable maximum allowable NO_x emission rate specified at N.J.A.C. 7:27-19.4, 19.5, 19.7, 19.8, 19.9, 19.10 or 19.20 to continue to emit NO_x at a rate no greater than that specified under (b)4 above.

(d) The owner or operator of the designated set shall operate each unit in the designated set in compliance with the following:

1. The actual NO_x emissions from each averaging unit in the designated set, averaged over the appropriate time period specified in (f) below, shall not exceed the maximum allowable NO_x emission rate specified in (b)4 above for that averaging unit; and

2. The sum of the actual NO_x emissions from all averaging units in the designated set, averaged over the appropriate time period specified in (f) below, shall not exceed the sum of the allowable NO_x emissions for all averaging units in the designated set. The allowable NO_x emissions for each averaging unit is calculated according to the following formula:

$$\text{Allowable } NO_x \text{ emissions} = H \times AL$$

where:

i. H means the actual heat input to the averaging unit during the appropriate time interval specified in (f) below. The heat input is expressed in millions of BTUs, based on the higher heating value of the fuel burned; and

ii. AL means the applicable NO_x emission limit set forth in N.J.A.C. 7:27-19.4, 19.5, 19.7, 19.8, 19.9, 19.10 or 19.20 for that averaging unit, expressed in pounds of NO_x per million BTUs. For an averaging unit that is included in a seasonal fuel switching plan under N.J.A.C. 7:27-19.20, the applicable NO_x emission limit from May 1 through September 30 is the limit established under N.J.A.C. 7:27-19.20(g) 3, and the applicable NO_x emission limit from October 1 through April 30 is the limit established under N.J.A.C. 7:27-19.20(g)4.

(e) The owner or operator of the designated set shall calculate the actual NO_x emissions of each averaging unit using emissions data from a continuous emissions monitoring system satisfying the requirements of N.J.A.C. 7:27-19.18. The owner or operator may comply with this requirement using emissions data derived in accordance with a monitoring plan for limited installation of continuous emissions monitoring systems approved by the Department under N.J.A.C. 7:27-19.18(e).

(f) The owner or operator shall demonstrate compliance with this section as follows:

1. The owner or operator shall determine whether the operations of the designated set and of each averaging unit comply with this section for each calendar day during the period beginning May 1 and ending September 30 of each year. The owner or operator shall base the calculations required under (d)1 and 2 above upon the heat input and NO_x emissions for each averaging unit over the entire calendar day. The owner or operator shall perform the calculations and make a record of them within three working days after the date which is the subject of the calculation; and

2. The owner or operator shall determine whether the operations of the designated set and of each averaging unit comply with this section for the 30-day period ending on October 1 of each year, and the 30-day period ending on each subsequent day through April 30 of the following year. The owner or operator shall base the calculations required under (d)1 and 2 above upon the heat input and NO_x emissions for each averaging unit over the entire 30-day period. The owner or operator shall perform the calculations and make a record of them by the 15th day of each month, for all 30-day periods ending in the preceding month.

(g) The owner or operator of a designated set shall maintain the records listed below for five years from the date on which each record was made. The owner or operator shall maintain such records in a permanently bound log book or an electronic method, in a format that enables the Department to readily determine whether the designated set and each averaging unit are in compliance. The owner or operator shall maintain the following records:

1. The unique identifier for each averaging unit included in the designated set as specified in (b)1 above;

2. The time period for which the data is being recorded;

3. The date upon which the data was recorded;

4. The amount, type and higher heating value of the fuel(s) consumed over the subject time period;

5. The amount of NO_x (expressed in pounds or tons) emitted by each averaging unit over the subject time period;

6. Whether the amount exceeds the allowable rate for the averaging unit specified under (b)4 above;

7. The sum of the amounts listed in (g)5 above for all averaging units;

8. The allowable NO_x emissions calculated pursuant to (d)2 above; and

9. Any other information required to be maintained as a condition of approval granted pursuant to (b) above.

(h) The owner or operator of a designated set shall submit quarterly reports to the Department on April 30, July 30, October 30 and January 30 of each year, for the immediately preceding calendar quarter ending March 31, June 30, September 30 and December 31, respectively. The owner or operator shall submit the report to the Department at the address set forth in (k) below. The owner or operator shall include the following information in the quarterly report:

1. The information listed in (g)2 and 3 above;

2. In the report for the quarter ending March 31, the compliance determination required under (f)2 above for each 30-day period ending on a calendar day within the quarter;

3. In the report for the quarter ending June 30:

i. The compliance determination required under (f)2 above for each 30-day period ending on a calendar day from April 1 through May 14, inclusive; and

ii. The compliance determination required under (f)1 above for each calendar day from May 15 through June 30, inclusive;

4. In the report for the quarter ending September 30, the compliance determination required under (f)1 above for each calendar day from July 1 through September 30; and

5. In the report for the quarter ending December 31, the compliance determination required under (f)2 above for each 30-day period ending on a calendar day within the quarter.

(i) If the emissions from the designated set or from any averaging unit do not comply with (d) above for any time period described in (f) above, the owner or operator of the designated set shall deliver (as opposed to send) written notice of the non-compliance to the Department within two working days after the date on which the owner or operator was required to calculate compliance under (f) above. The owner or operator shall provide the notice in writing to the Regional Enforcement Officer, at the address specified at N.J.A.C. 7:27-19.3(i) for the county in which the averaging unit with the highest NO_x emission rate is located. The owner or operator shall include the following information in the notification:

1. The name of the owner or operator;

2. The name and telephone number of the person specified in (b)7 above;

3. All information required to be recorded under (h) above;

4. A statement of the reason(s) for the non-compliance, if known; and

5. Certification of the notification, in accordance with N.J.A.C. 7:27-1.39.

(j) An owner or operator of an averaging unit which cannot be operated due to sudden and reasonably unforeseeable circumstances beyond the control of the owner or operator, and for which the NO_x emission rate specified under (b)4 above is less than the applicable maximum allowable NO_x emission rate under N.J.A.C. 7:27-19.4, 19.5, 19.7, 19.8, or 19.10 shall take the following actions:

1. Within two working days after the averaging unit ceased operating, deliver (as opposed to send) written preliminary notice to the Department. This preliminary notice shall be followed up within 30 calendar days of the occurrence of the incident certifying the information in accordance with N.J.A.C. 7:27-1.39. In the written notice, the owner or operator shall identify the unit which is or was not operating, and state why it is or was not operating;

2. If circumstances beyond the control of the owner or operator make it impracticable either to repair the averaging unit within 15 calendar days after it ceased operating, or to comply with the averaging plan without operating the unit (for example, through reducing the operations of another unit and purchasing electric power from another source), include in the notice described in (j)1 above an explanation of those circumstances and an estimate of the time required to repair the averaging unit; and

3. In determining whether the designated set is in compliance with (d)2 above, assume that the NO_x emissions and heat input for the non-operational averaging unit for each of the first 15 days of non-operation (or such longer period, not to exceed six months, as the Department determines is necessary to repair the averaging unit based on the information submitted under (j)2 above) are equal to the actual emissions and heat input for that unit on the most recent comparable demand day. For each day after the end of the period described above, assume that the NO_x emissions and heat input for the non-operational averaging unit are zero.

(k) A person required to submit a quarterly report to the Department under (h) above shall send the quarterly report to the applicable address listed below:

1. If the averaging unit with the highest NO_x emission limit is located in Mercer County, Middlesex County, Monmouth County, Ocean County, or Union County, the person shall send the quarterly report to:

Department of Environmental Protection
Central Regional Office
Air Compliance & Enforcement
Horizon Center
Rt. 130, Building 300
P.O. Box 407
Robbinsville, NJ 08625-0407

2. If the averaging unit with the highest NOx emission limit is located in Bergen County, Essex County, Hudson County, Hunterdon County, Morris County, Passaic County, Somerset County, Sussex County or Warren County, the person shall send the quarterly report to:

Department of Environmental Protection
Northern Regional Office
Air Compliance & Enforcement
7 Ridgedale Avenue
Cedar Knolls, NJ 07927

3. If the averaging unit with the highest NO_x emission limit is located in Atlantic County, Burlington County, Camden County, Cape May County, Cumberland County, Gloucester County or Salem County, the person shall send the quarterly report to:

Department of Environmental Protection
Southern Regional Office
Air Compliance & Enforcement
One Port Center
2 Riverside Drive, Suite 201
Camden, NJ 08103

Amended by R.1995 d.214, effective April 17, 1995 (operative May 23, 1995).
See: 26 N.J.R. 3298(a), 27 N.J.R. 1581(a).
Amended by R.1996 d.303, effective July 1, 1996 (operative August 2, 1996).
See: 28 N.J.R. 1147(b), 28 N.J.R. 3414(a).
Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
In (i)5 and (j)1, changed N.J.A.C. references.
Amended by R.2000 d.204, effective May 15, 2000 (operative June 6, 2000).
See: 31 N.J.R. 1671(a), 32 N.J.R. 1808(a).
In (b)6ii and (d)2ii, substituted references to September 30 for references to September 15 and substituted references to October 1 for references to September 16; in (f), substituted a reference to September 30 for a reference to September 15 in 1, and substituted a reference to October 1 for a reference to September 16 in 2; and rewrote (h)4.
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
In (b)1, deleted "utility", added "serving an electric generating unit" and substituted "combustion" for "gas"; in (h), substituted "(k)" for "(l)"; added (k).
Administrative correction.
See: 38 N.J.R. 5155(b).

7:27-19.7 Industrial/commercial/institutional boilers and other indirect heat exchangers

(a) Beginning in calendar year 1995, and until March 7, 2007, the owner or operator of an industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least 20 million but less than 50 million BTUs per hour shall:

1. Annually adjust the boiler's combustion process in accordance with N.J.A.C. 7:27-19.16, each calendar year; or

2. Cause the boiler or other indirect heat exchanger to emit NO_x at a rate no greater than the applicable maximum allowable NO_x emission rate specified in Table 5 below, and establish compliance with this requirement by continuous emissions monitoring pursuant to N.J.A.C. 7:27-19.15(a)1.

(b) Beginning on May 31, 1995, and until March 7, 2007, the owner or operator of an industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least 50 million but less than 100 million BTUs per hour shall cause the boiler or other indirect heat exchanger to emit NO_x at a rate no greater than the applicable maximum allowable NO_x emission rate specified in Table 5 below, and comply with the requirements of (e) below.

TABLE 5

Maximum Allowable NO_x Emission Rates for Industrial/Commercial/Institutional Boilers and other Indirect Heat Exchangers Subject to N.J.A.C. 7:27-19.7(b)
(pounds per million BTU)

	Firing Method		
Fuel/Boiler Type	Tangential	Face	Cyclone
Coal—Wet Bottom	1.0	1.0	0.55
Coal—Dry Bottom	0.38	0.43	0.55
# 2 Fuel Oil	0.12	0.12	0.12
Other Liquid Fuels	0.3	0.3	0.3
Refinery fuel gas	0.20	0.20	N/A
Natural Gas	0.1	0.1	0.1

(c) Beginning on May 31, 1995, and until March 7, 2007, the owner or operator of an industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least 100 million BTUs per hour shall cause the boiler or other indirect heat exchanger to emit NO_x at a rate no greater than the applicable maximum allowable NO_x emission rate specified in Table 6 below, and comply with the applicable requirements of (d) or (e) below.

TABLE 6

Maximum Allowable NO_x Emission Rates for Industrial/Commercial/Institutional Boilers and other Indirect Heat Exchangers Subject to N.J.A.C. 7:26-19.7(c) (pounds per million BTU)

	Firing Method		
Fuel/Boiler Type	Tangential	Face	Cyclone
Coal—Wet Bottom	1.0	1.0	0.60
Coal—Dry Bottom	0.38	0.45	0.55
Oil and/or Gas	0.20	0.28	0.43
Refinery fuel gas	0.20	0.20	N/A
Gas Only	0.20	0.20	0.43

(d) In addition to complying with (c) above, the owner or operator of any industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least 250 million BTU per hour shall install a continuous emissions monitoring system in accordance with N.J.A.C. 7:27-19.18.

(e) Until March 7, 2007, in addition to complying with (b) or (c) above, as applicable, the owner or operator of an industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least 50 million BTUs per hour but less than 250 million BTUs per hour shall either:

1. Annually adjust the boiler's combustion process in accordance with N.J.A.C. 7:27-19.16, each calendar year; or

2. Establish compliance with the applicable maximum allowable emission rate by continuous emissions monitoring pursuant to N.J.A.C. 7:27-19.15(a)1.

(f) Until March 7, 2007, in lieu of complying with a NO_x emission limit under (b) or (c) above, the owner or operator of an industrial/commercial/institutional boiler or other indirect heat exchanger may comply with N.J.A.C 7:27-19.3(f).

(g) On and after March 7, 2007, the owner or operator of an industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least five million BTU per hour, whether or not it is located at a major NO_x facility, shall adjust the combustion process annually in accordance with the procedure set forth at N.J.A.C. 7:27-19.16 and the following schedule:

1. For an industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least five million BTU per hour, but less than 10 million BTU per hour, in the same quarter of each calendar year, beginning in 2010;

2. For an industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least 10 million BTU per hour, but less than 20 million BTU per hour, in the same quarter of each calendar year beginning in 2008; or

3. For an industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least 20 million BTU per hour or greater, in the same quarter of each calendar year beginning in 2007.

(h) On and after March 7, 2007, an industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least 50 million BTU per hour, located at a major NO_x facility, shall cause the boiler or other indirect heat exchanger to emit NO_x at a rate no greater than the applicable maximum allowable NO_x emission rate specified in Table 7 below, unless the owner or operator is complying with N.J.A.C. 7:27-19.3(f).

TABLE 7

Maximum Allowable NOx Emission Rates for Industrial/Commercial/Institutional Boilers or other Indirect Heat Exchangers (pounds per million BTU)

Heat Input Rate (million BTU per hr)	Fuel/Boiler Type	Firing Method		
		Tangential	Face	Cyclone
at least 50 but < 100	Natural gas	0.10	0.10	0.10
	#2 Fuel oil	0.12	0.12	0.12
	Refinery fuel gas and other gaseous fuels	0.20	0.20	N/A
	Other liquid fuels	0.30	0.30	0.30
	Coal – Wet Bottom	1.0	1.0	0.55
	Coal – Dry Bottom	0.38	0.43	0.55
at least 100 or greater	Natural gas only	0.10	0.10	0.10
	Refinery fuel gas and other gaseous fuels	0.20	0.20	N/A
	Fuel oil and/or natural gas	0.20	0.28	0.43
	Coal – Wet Bottom	1.0	1.0	0.60
	Coal – Dry Bottom	0.38	0.45	0.55

Amended by R.1995 d.214, effective April 17, 1995 (operative May 23, 1995).
See: 26 N.J.R. 3298(a), 27 N.J.R. 1581(a).
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
In rule heading, substituted "Industrial/commercial/institutional boilers" for "Non-utility boilers"; rewrote (a) through (f); added (g) and (h).

7:27-19.8 Stationary reciprocating engines

(a) The owner or operator of a rich-burn stationary reciprocating engine capable of producing an output of 500 brake horsepower or more, fueled by gaseous fuel, shall cause it to emit no more than 1.5 grams of NO_x per bhp-hr. Beginning March 7, 2007, a rich-burn stationary reciprocating engine capable of producing an output of 370 kW or more, fueled by gaseous fuel, and used for generating electricity, shall be subject to (e) below, and not to this subsection.

(b) The owner or operator of a lean-burn stationary reciprocating engine capable of producing an output of 500 brake horsepower or more, fueled by gaseous fuel, shall cause it to emit no more than 2.5 grams of NO_x per bhp-hr. Beginning March 7, 2007, a lean-burn stationary reciprocating engine capable of producing an output of 370 kW or more, fueled by gaseous fuel, and used for generating electricity, shall be subject to (e) below, and not to this subsection.

(c) The owner or operator of a lean-burn stationary reciprocating engine capable of producing an output of 500 brake horsepower or more, fueled by liquid fuel, shall cause it to emit no more than 8.0 grams of NO_x per bhp-hr. Beginning March 7, 2007, a lean-burn stationary reciprocating engine capable of producing an output of 370 kW or more, fueled by liquid fuel, and used for generating electricity, shall be subject to (e) below, and not to this subsection.

(d) In lieu of complying with a NO_x emission limit under (a), (b) or (c) above, the owner or operator of a stationary reciprocating engine may comply with N.J.A.C. 7:27-19.3(f).

(e) On and after March 7, 2007, the owner or operator of a stationary reciprocating engine used for generating electricity whether or not it is located at a major NO_x facility, shall meet the following requirements, unless the owner or operator is complying with N.J.A.C, 7:27-19.3(f):

1. For an engine that has a maximum rated power output of 148 kW or greater, cause it to emit NO_x at a rate no greater than the applicable maximum allowable NO_x emission rate specified in Table 8 below;

TABLE 8
Maximum Allowable NO_x Emission Rates for Stationary Reciprocating Engines
Applicable to Paragraph (e)1 above and (e)4 below
Used for Generating Electricity

Engine/Fuel Type	Maximum Allowable NO_x Emission Rate (grams per Bhp-hr)
Rich - Burn fueled by Gaseous or Liquid Fuel	1.5
Lean - Burn fueled by Gaseous Fuel	1.5 or an emission rate which is equivalent to 80 percent NO_x reduction from the uncontrolled NO_x emission level
Lean-Burn fueled by Liquid Fuel	2.3
Lean-Burn fueled by Dual-Fuels (gas and liquid fuel)	2.3

2. For an engine that has a maximum rated power output of 37 kW or greater and that has commenced operation at the facility on or after March 7, 2007, cause it to emit NO_x at a rate no greater than 0.90 grams per bhp-hr;

3. For an engine that has a maximum rated power output of 37 kW or greater and that has been modified on or after March 7, 2007, cause it to emit NO_x at a rate no greater than 0.90 grams per bhp-hr or an emission rate which is equivalent to a 90 percent NO_x reduction from the uncontrolled NO_x emission level;

4. For a group of two or more stationary reciprocating engines, each of which has a rated power output of 37 kW or greater, but less than 148 kW, and whose total combined power output is 148 kW or greater, cause it to emit NO_x at a rate no greater than the applicable maximum allowable NO_x emission rate specified in Table 8 above.

5. For a modified engine to take advantage of a percent reduction standard specified in Table 8 at (e)1 above, or (e)3 above in lieu of the default emission standard, the equivalent grams per bhp-hr limit must be incorporated into a Preconstruction Permit or Operating Permit. To support the permit application, a stack test conducted in accordance with N.J.A.C. 7:27-19.15(a)2, utilizing a protocol developed using the protocol templates in Technical Manual 1004, available at the Department's website at www.state.nj.us/dep/bts.html, must be used to establish the baseline emission rate prior to modification. The engine must have had the combustion processes adjusted using the procedures at N.J.A.C. 7:27-19.16 prior to the stack test. The protocol and test results must be approved by the Bureau of Technical Services (BTS).

(f) The owner or operator of any stationary reciprocating engine that has a maximum rated power output of at least 37 kW or greater, used for generating electricity, and whether or not it is located at a major NO_x facility, shall adjust the engine's combustion process in accordance with the procedures set forth at N.J.A.C. 7:27-19.16 and the following schedule:

1. For stationary reciprocating engine that has a maximum rated power output of at least 37 kW but less than 370 kW used for generating electricity, according to manufacturer's recommended maintenance schedules beginning in 2007: or

2. For stationary reciprocating engine that has a maximum rated power output of at least 370 kW or greater, or required prior to November 7, 2005 to adjust the combustion process, according to manufacturer's recommended maintenance schedules.

Amended by R.1995 d.214, effective April 17, 1995 (operative May 23, 1995).
See: 26 N.J.R. 3298(a), 27 N.J.R. 1581(a).
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
In rule heading, substituted "reciprocating" for "internal combustion"; rewrote (a) through (d); added (e) and (f).

7:27-19.9 Asphalt plants

(a) The owner or operator of a batch type or drum mix asphalt plant shall cause it to emit NO_x at a rate no greater than 200 ppmvd at seven percent O_2.

(b) At least annually, the owner or operator of an asphalt plant subject to (a) above shall adjust the combustion process of the aggregate dryer in accordance with N.J.A.C. 7:27-19.16.

(c) In lieu of complying with a NO_x emission limit under (a) above, the owner or operator of an asphalt plant may comply with one of the following, or with a combination of (c)1 and 3 below:

1. An emissions averaging plan approved by the Department pursuant to N.J.A.C. 7:27-19.6 and 19.14, which includes the combustion source in question as an averaging unit;

2. An alternative maximum allowable emission rate for the unit, approved by the Department pursuant to N.J.A.C. 7:27-19.13;

3. A seasonal fuel switching plan for the unit, approved by the Department pursuant to N.J.A.C. 7:27-19.14 and 19.20; or

4. A plan for phased compliance for the unit, approved by the Department pursuant to N.J.A.C. 7:27-19.14 and N.J.A.C. 7:27-19.21, 19.22 or 19.23.

Amended by R.1995 d.214, effective April 17, 1995 (operative May 23, 1995).
See: 26 N.J.R. 3298(a), 27 N.J.R. 1581(a).
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
In (a), deleted "which has the potential to emit at least 25 tons per year of NO_x".

7:27-19.10 Glass manufacturing furnaces

(a) The owner or operator of any commercial container glass manufacturing furnace listed in N.J.A.C. 7:27-19.2(b)6 shall cause the furnace to emit no more than 5.5 pounds of NO_x per ton of glass removed from the furnace.

(b) The owner or operator of any specialty container glass manufacturing furnace listed in N.J.A.C. 7:27-19.2(b)7 shall cause the furnace to emit no more than 11 pounds of NO_x per ton of glass removed from the furnace.

(c) The owner or operator of a borosilicate recipe glass manufacturing furnace listed in N.J.A.C. 7:27-19.2(b)8 shall:

1. By January 1, 1994 determine the baseline NO_x emission rate from the furnace by either:

i. Conducting source emissions testing in accordance with N.J.A.C. 7:27-19.17; or

ii. Using the results of source emissions testing conducted at any time after November 15, 1990, provided that the procedures used for the source emission testing meet the requirements of N.J.A.C. 7:27-19.17;

2. By July 1, 1994, submit one of the following to the Department:

i. A written plan detailing how the NO_x emission rate from the furnace will be reduced by 30 percent from the baseline emission rate measured in (c)1 above; or

ii. A demonstration that the NO_x emissions from the furnace, as measured by the source emissions testing performed under (c)1 above, are at least 30 percent less than the uncontrolled NO_x emissions from the furnace as of a date no earlier than November 15, 1990;

3. Before the date specified in (d) below, implement the plan detailed in (c)2i above (unless the owner or operator has submitted the demonstration described in (c)2ii above); and

4. Beginning on the date specified in (d) below, cause the furnace to emit NO_x at a rate no greater than the reduced rate described in (c)2i above, or to continue to emit NO_x at a rate no greater than the rate demonstrated under (c)2ii above.

(d) A glass manufacturing furnace subject to this subchapter shall comply with the requirements of (a), (b), (c)3 and (c)4 above beginning on the earlier of the following:

1. The first date after January 23, 1994 on which rebricking of the furnace is completed; or

2. May 1, 1997.

(e) Beginning in calendar year 1994, the owner or operator of a glass manufacturing furnace subject to this subchapter shall adjust the combustion process of the furnace in accordance with N.J.A.C. 7:27-19.16 before May 1 of each calendar year.

(f) In lieu of complying with a NO_x emission limit under (a), (b) or (c) above, the owner or operator of a glass manufacturing furnace may comply with one of the following, or with a combination of (f)1 and 3 below:

1. An emissions averaging plan approved by the Department pursuant to N.J.A.C. 7:27-19.6 and 19.14, which includes the combustion source in question as an averaging unit;

2. An alternative maximum allowable emission rate for the furnace, approved by the Department pursuant to N.J.A.C. 7:27-19.13;

3. A seasonal fuel switching plan for the furnace, approved by the Department pursuant to N.J.A.C. 7:27-19.14 and 19.20; or

4. A plan for phased compliance for the furnace, approved by the Department pursuant to N.J.A.C. 7:27-19.14 and N.J.A.C. 7:27-19.21, 19.22 or 19.23.

Amended by R.1995 d.214, effective April 17, 1995 (operative May 23, 1995).
See: 26 N.J.R. 3298(a), 27 N.J.R. 1581(a).

7:27-19.11 Emergency generators - recordkeeping

(a) The owner or operator of an emergency generator with a maximum rated output of 37 kW, shall maintain on site and record in a logbook or computer data system, the following information:

1. Once per month, the total operating time from the generator's hour meter;

2. For each time the emergency generator is specifically operated for testing or maintenance:

i. The reason for its operation;

ii. The date(s) of operation and the start up and shut down time;

iii. The total operating time for testing or maintenance based on the generator's hour meter; and

iv. The name of the operator; and

3. If a voltage reduction is the reason for the use of the emergency generator, a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction.

(b) The owner or operator of an emergency generator shall maintain the records required under (a) above for a period of no less than five years after the record was made and shall make the records readily available to the Department or the EPA upon request.

New Rule by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).

7:27-19.12 (Reserved)

7:27-19.13 Facility-specific NO_x emissions limits

(a) This section establishes procedures and standards for the establishment of facility-specific NO_x emissions limits in the following circumstances:

1. If a major NO_x facility contains any source operation or item of equipment of a category not listed in N.J.A.C. 7:27-19.2(b) or (c) (that is, any source operation or item of equipment other than a boiler serving an electric generating unit, an industrial/commercial/institutional boiler, a stationary combustion turbine, a stationary reciprocating engine, a rotary dryer located at an asphalt plant, or a glass manufacturing furnace) that has the potential to emit more than 10 tons of NO_x per year, except as provided in (p) below; or

2. If the owner or operator of a source operation or item of equipment listed in N.J.A.C. 7:27-19.2(b) or (c) seeks approval of an alternative maximum allowable emission rate, which would apply to the equipment or source operation in lieu of the emission limit that would otherwise apply under this subchapter.

(b) The owner or operator of a major NO_x facility described in (a)1 above shall obtain the Department's written approval of a facility-specific NO_x control plan in accordance with this section. For any facility, equipment or source operation that is in operation prior to January 23, 1994, the owner or operator shall submit to the Department in writing a proposed NO_x control plan for the facility by April 23, 1994 or by a later date approved by the Department pursuant to N.J.A.C. 7:27-19.3(e). For any facility, equipment or source operation that is subject to a NO_x emissions limit under this subchapter as set forth at N.J.A.C. 7:27-1 9.5(d), 19.7(h), or 19.8(e), the owner or operator shall submit to the Department in writing a proposed NO_x control plan for the facility by February 7, 2006. In the proposed NO_x control plan, the owner or operator shall include:

1. A list of each source operation or item of equipment at the facility that has the potential to emit more than 10 tons of NO_x per year and is not listed in N.J.A.C. 7:27-19.2(b) or (c). In the list, the owner or operator shall briefly

describe the source operation or item of equipment, and list its permit number and any other identifying numbers; and

2. The information listed in (d) below.

(c) The owner or operator of a source operation or item of equipment listed in N.J.A.C. 7:27-19.2(b) may request approval of an alternative maximum allowable emission rate in accordance with this section. In the request, the owner or operator shall include:

1. A brief description of the equipment or source operation which is the subject of the request, and its permit number and any other identifying numbers;

2. A demonstration that the source operation or item of equipment is not reasonably able to comply with this subchapter through any alternative means of compliance established under this subchapter (for example, through seasonal combustion of natural gas pursuant to N.J.A.C. 7:27-19.4(b), or through compliance with an averaging plan under N.J.A.C. 7:27-19.6); and

3. The information listed in (d) below.

(d) In addition to the information required under (b) or (c) above, as applicable, the owner or operator shall include the following information in a proposed NO_x control plan or request for an alternative maximum allowable emission rate:

1. For each source operation or item of equipment listed in (b)1 above or (c)1 above, as applicable, a list of all NO_x control technologies available for use with the equipment or source operation;

2. An analysis of the technological feasibility of installing and operating each control technology identified in (d)1 above;

3. For each control technology which is technologically feasible to install and operate, an estimate of the cost of installation and operation;

4. An estimate of the remaining useful life of each source operation or item of equipment listed in (b)1 above or (c)1 above, as applicable;

5. An estimate of the reduction in NO_x emissions attainable through the use of each control technology which is technologically feasible to install and operate;

6. For each source operation or item of equipment listed in (b)1 above or (c)1 above, as applicable, the NO_x control technology or technologies which the owner or operator proposes to employ;

7. For each source operation or item of equipment listed in (b)1 above or (c)1 above, as applicable, a proposed NO_x emission limit;

8. Any other information which the Department requests which is reasonably necessary to enable it to determine whether the application satisfies the requirements of (g) below; and

9. A certification signed by the owner or operator, satisfying the requirements of N.J.A.C. 7:27-1.39.

(e) Within 30 days after receiving a proposed NO_x control plan or request for an alternative maximum allowable emission rate, the Department shall notify the owner or operator in writing whether the submission includes all of the information required under (d) above and under (b) or (c) above, as applicable. If the proposed NO_x control plan or request for an alternative maximum allowable emission rate is incomplete, the following shall apply:

1. The Department shall include in the notice a list of the deficiencies, a statement of the additional information required to make the proposed plan or request complete, and a time by which the owner or operator must submit a complete proposed plan or request;

2. The Department may refrain from reviewing the substance of the proposed plan or request (or any part thereof) until it is complete;

3. The owner or operator shall submit a complete proposed plan or request within the time stated in the Department's notification;

4. If the owner or operator fails to submit a complete proposed plan within the time stated in the Department's notification, the failure is a violation of this subchapter; and

5. If the owner or operator fails to submit a complete request for an alternative maximum allowable emission rate within the time stated in the Department's notification, the Department may deny the request.

(f) The Department shall seek comments from the general public before making any final decision to approve or disapprove a proposed NO_x control plan or request for an alternative maximum allowable emission rate. The Department shall publish notice of opportunity for public comment in a newspaper of general circulation in the area in which the major NO_x facility is located.

(g) Within six months after receiving a complete proposed NO_x control plan or request for an alternative maximum allowable emission rate, the Department shall approve, approve and modify, or disapprove the proposed plan or request and notify the owner or operator of the decision in writing. The Department shall approve the proposed plan or request only if it satisfies the following requirements:

1. The proposed plan or request contains all of the information required under (d) above and under (b) or (c) above, as applicable;

2. The proposed plan or request considers all control technologies available for the control of NO_x emissions from the type of equipment or source operation in question;

3. For any control technologies described in (g)2 above which the owner or operator does not propose to use on the equipment or source operation, the proposed plan or request demonstrates that the control technology:

i. Would be ineffective in controlling NO_x emissions from the equipment or source operation;

ii. Is unsuitable for use in the equipment or source operation, or duplicative of control technology which the plan proposes to use;

iii. Would carry costs disproportionate to the improvement in the reduction of the NO_x emissions rate which the control technology is likely to achieve, or disproportionately large in comparison to the total reduction in NO_x emissions which the control technology is likely to achieve over its useful life; or

iv. Would carry costs disproportionate to the costs incurred for the control of NO_x emissions from the same type of equipment or source operations used by other persons in the owner or operator's industry;

4. The emission limit proposed for each source operation and item of equipment is the lowest rate which can practicably be achieved at a cost within the limits described in (g)3iii and iv above;

5. The cost of achieving an additional emission reduction beyond each proposed limit would be disproportionate to the size and environmental impact of that additional emission reduction; and

6. Any significant net emission of any criteria pollutant (as determined pursuant to N.J.A.C. 7:27-19.17 or 19.18, as applicable) do not cause or significantly contribute to a violation of a National Ambient Air Quality Standard, an exceedance of a Federal Prevention of Significant Deterioration increment if applicable, or any violation of the Clean Air Act, 42 U.S.C. 7401 et seq. A significant net emission increase of any criteria pollutant, and the determination of when such an increase causes or significantly contributes to an exceedance of a National Ambient Air Quality Standard, shall be determined pursuant to N.J.A.C. 7:27-18.

(h) Any alternate emissions limit pursuant to N.J.A.C. 7:27-19.13(c) or NO_x Control Plan pursuant to 7:27-19.13(b) approved by the Department will be submitted to EPA for approval as a revision to the State Implementation Plan (SIP) for ozone.

(i) As a condition of an approval issued under this section, the Department may impose requirements upon the operation of any of the equipment or source operations at the subject facility listed pursuant to (b)1 or (c)1 above necessary to minimize any adverse impact upon human health, welfare and the environment.

(j) Before altering any equipment or source operation which is included in an approved facility-specific NO_x control plan, the owner or operator shall:

1. If the alteration would change any of the information required in (b) or (d) above, apply for and obtain pursuant to the procedures set forth at (b) and at (d) through (j) above the Department's approval of an amended facility-specific NO_x control plan, reflecting the proposed alteration. If the owner or operator does not obtain the Department's approval before commencing operation of the altered equipment or source operation, the Department may (in addition to assessing penalties under N.J.A.C. 7:27A-3.10) modify the facility-specific NO_x control plan to reflect the alteration, in a manner satisfying the criteria set forth in (g) above; and

2. Apply for and obtain such permits and certificates, or changes thereto, as are required under N.J.A.C. 7:27-8 or 22, N.J.A.C. 7:1K-1.5, and any other applicable law or regulation.

(k) An approval of an alternative maximum allowable emission rate is void upon the alteration of equipment or source operation which is subject to the rate unless:

1. The Department approves continued application of the existing alternative maximum allowable emission rate if the proposed alteration does not materially affect the basis of the Department's original approval; or

2. The owner or operator, before altering any equipment or source operation which is subject to an alternative maximum allowable emission rate, applies for and obtains the Department's approval of:

i. A revised alternative maximum allowable emission rate pursuant to this section, reflecting the proposed alteration; and

ii. Such permits and certificates as are required under N.J.A.C. 7:27-8 or 22, N.J.A.C. 7:1K-1.5, and any other applicable law or regulation.

(l) The Department will revoke an approval of a NO_x control plan by written notice to the holder of the approval if EPA denies approval of the proposed NO_x plan as a revision to the State Implementation Plan. The Department may revoke an approval of a NO_x control plan by written notice to the holder of the approval, if:

1. Any material condition of the approval is violated;

2. The Department determines that its decision to grant the approval was materially affected by a misstatement or omission of fact in the proposed plan or any supporting documentation;

3. The Department determines that continued use of the subject equipment or source operation pursuant to the approval poses a potential threat to the public health, welfare or the environment.

(m) A person may request an adjudicatory hearing in accordance with the procedure at N.J.A.C. 7:27-1.32, if:

1. The Department denied the person's application for approval of a plan or alternative rate under this section;

2. The person seeks to contest one or more conditions of the Department's approval imposed under (i) above; or

3. The Department has revoked the person's approval pursuant to *(l)*1, 2 or 4 above.

(n) The owner or operator of a facility described in (a)1 above shall implement the NO_x control plan (including, without limitation, complying with the emission limits set forth in the plan) approved by the Department by May 31, 1995, or by March 7, 2007 for any facility, equipment or source operation that is subject to a NO_x emissions limit under this subchapter as set forth at N.J.A.C. 7:27-19.5(d), 19.7(h), or 19.8(e), and maintain compliance with the plan and all conditions of the Department's approval thereafter. The owner or operator of a source operation or item of equipment for which the Department has approved an alternative maximum allowable emission rate shall cause it to emit NO_x at a rate no greater than the approved alternative rate.

(*o*) The owner or operator submitting a proposed NO_x control plan or request for an alternative maximum allowable emission rate shall send it to the Department at the following address:

Chief, Bureau of Preconstruction Permitting
Division of Air Quality
Department of Environmental Protection
401 East State Street
PO Box 027
Trenton, New Jersey 08625-0027

(p) A major NO_x facility satisfies the requirements of this section if its only equipment or source operations with the potential to emit 10 tons or more of NO_x per year are thermal oxidizers. The owner or operator of such a facility is not required to submit a facility-specific NO_x control plan for the facility.

Amended by R.1995 d.214, effective April 17, 1995 (operative May 23, 1995).
See: 26 N.J.R. 3298(a), 27 N.J.R. 1581(a).
Amended by R.1996 d.303, effective July 1, 1996 (operative August 2, 1996).
See: 28 N.J.R. 1147(b), 28 N.J.R. 3414(a).
In (i) provided for approval of alternative emission rates.
Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
In (d)9, changed N.J.A.C. reference; in (j)2 and (k)2ii, inserted "or 22, N.J.A.C. 7:1K-1.5"; and in (m), changed N.J.A.C. reference in the introductory paragraph.
Amended by R.2000 d.204, effective May 15, 2000 (operative June 6, 2000).
See: 31 N.J.R. 1671(a), 32 N.J.R. 1808(a).
In (i), inserted "application for an" following "of any", and substituted "submitted to the Department pursuant to" for "issued, extended or renewed under" following "rate" in the second sentence.
Amended by R.2004 d.129, effective April 5, 2004 (operative April 25, 2004).
See: 35 N.J.R. 3486(a), 36 N.J.R. 1791(a).
In (i), deleted the last sentence.
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
Rewrote (a)1; added "or (c)" and substituted "that" for "which" in (a)2; in (b), rewrote introductory paragraph; in (b)1, substituted "that" for "which" and added "or (c)"; rewrote (n); rewrote address in (*o*); deleted "non-utility boilers or" in (p).
Administrative correction.
See: 38 N.J.R. 5155(b).

7:27-19.14 Procedures for obtaining approvals under this subchapter

(a) This section establishes the procedure for obtaining any of the following from the Department:

1. An exemption from this subchapter, pursuant to N.J.A.C. 7:27-19.2(f);

2. Approval of a fuel switching plan under N.J.A.C. 7:27-19.20, and authorization to operate under the plan;

3. Approval of a plan for phased compliance under N.J.A.C. 7:27-19.21, 19.22 or 19.23, and authorization to operate under the plan;

4. Approval of compliance with the requirements of N.J.A.C. 7:27-19.5(c) for a stationary combustion turbine;

5. Approval of an emissions averaging plan under N.J.A.C. 7:27-19.6, and authorization to operate under the plan; or

6. Approval of an alternative monitoring plan pursuant to N.J.A.C. 7:27-19.18(b).

(b) The person seeking an approval listed in (a) above shall submit a written application to the Department at the following address:

Chief, Bureau of Preconstruction Permitting
Division of Air Quality
Department of Environmental Protection
401 East State Street
PO Box 027
Trenton, NJ 08625-0027

(c) The person seeking the approval under (a) above shall include the following information in the application submitted under (b) above:

1. Any information required under N.J.A.C. 7:27-19.2(f), 19.5(c), 19.6(b), 19.18(c), 19.20 or 19.21, as applicable;

2. The name, address and telephone number of the owner and the operator of the equipment or source operation which is the subject of the application;

3. The street address of the facility at which the subject equipment or source operation is located;

4. The type of equipment or source operation which is the subject of the application, and its make, model and serial number;

5. For requests submitted under N.J.A.C. 7:27-19.5(c), a proposed maximum allowable emission rate for the subject stationary combustion turbine;

6. A certification of the application, satisfying the requirements of N.J.A.C. 7:27-1.39; and

7. Any other information which the Department requests which is reasonably necessary to enable it to determine whether the application satisfies the requirements of (e) below.

(d) Within 30 days after receiving an application, the Department shall notify the applicant in writing whether the application includes all of the information required under (c) above. If the application is incomplete:

1. The Department shall include in the notice a list of the deficiencies, a statement of the additional information required to make the application complete, and the time by which the applicant must submit a complete application;

2. The Department may refrain from reviewing the substance of the application (or any part thereof) until it is complete;

3. The applicant shall submit a complete application within the time stated in the Department's notification; and

4. The Department may reject the application if the applicant fails to submit a complete application within the time stated in the Department's notification.

(e) Within six months after receiving a complete application, the Department shall grant its approval under this section only if:

1. The applicant satisfies all eligibility requirements set forth in N.J.A.C. 7:27-19.5(c), 19.6(c), 19.20, or 19.21 as applicable; and

2. Any significant net emission of any criteria pollutant (as determined pursuant to N.J.A.C. 7:27-19.17 or 19.18, as applicable) do not cause or significantly contribute to a violation of a National Ambient Air Quality Standard as determined pursuant to N.J.A.C. 7:27-18, an exceedance of a Federal Prevention of Significant Deterioration increment if applicable, or any violation of the Clean Air Act, 42 U.S.C. 7401 et seq. A significant net emission increase of any criteria pollutant, and the determination of when such an increase causes or significantly contributes to an exceedance of a National Ambient Air Quality Standard, shall be determined pursuant to N.J.A.C. 7:27-18.

(f) As a condition of an approval issued under this section (other than an approval of an exemption pursuant to N.J.A.C. 7:27-19.2(f)), the Department may impose requirements upon the operation of the subject equipment or source operation necessary to minimize any adverse impact upon human health, welfare and the environment.

(g) An approval issued under this section is void upon the alteration of equipment or source operation which is the subject of the approval unless:

1. The owner or operator applies for and obtains the Department's approval of a revised approval pursuant to this section, reflecting the proposed alteration; and

2. Before altering the equipment or source operation subject to the approval, the owner or operator applies for and obtains such permits and certificates as are required under N.J.A.C. 7:27-8 or 22, N.J.A.C. 7:1K-1.5, and any other applicable law or regulation.

(h) The Department may revoke an approval issued under this section, by written notice to the holder of the approval, if:

1. Any material condition of the approval is violated;

2. The Department determines that its decision to grant the approval was materially affected by a misstatement or omission of fact in the request for the approval or any supporting documentation;

3. The Department determines that as a result of a change in circumstances since the date of the approval, the subject equipment or source operations are able to comply with the applicable section of this subchapter. In revoking an approval pursuant to this paragraph, the Department shall specify an effective date for the revocation which provides the owner or operator with a reasonable amount of time to comply with the applicable section of this subchapter; or

4. The Department determines that continued use of the subject equipment or source operation pursuant to the approval poses a potential threat to public health, welfare or the environment.

(i) A person may request an adjudicatory hearing in accordance with the procedure at N.J.A.C. 7:27-1.32, if:

1. The Department has denied the person's application for an approval under this section;

2. The person seeks to contest conditions of the approval imposed under (f) above; or

3. The Department has revoked the person's approval pursuant to (h) above.

(j) If an item of equipment or a source operation has exceeded the maximum allowable emission rate applicable under this subchapter without an approval pursuant to this section, it shall not be a defense to an enforcement action that an application for an approval is pending.

Amended by R.1995 d.214, effective April 17, 1995 (operative May 23, 1995).
See: 26 N.J.R. 3298(a), 27 N.J.R. 1581(a).

Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
In (c)6, changed N.J.A.C. reference; in (g)2, inserted "or 22, N.J.A.C. 7:1K-1.5,"; and in (i), changed N.J.A.C. reference in the introductory paragraph.
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
Substituted "combustion" for "gas" in (a)4 and (c)5; rewrote address in (b).

7:27-19.15 Procedures and deadlines for demonstrating compliance

(a) The owner or operator of equipment or a source operation subject to an emission limit under this subchapter shall demonstrate compliance with the emission limit as follows:

1. If a continuous emissions monitoring system has been installed on the equipment or source operation, or if any other provision of this subchapter requires emissions from the equipment or source operation to be monitored by a continuous emissions monitoring system under N.J.A.C. 7:27-19.18, the owner or operator shall calculate the average NO_x emission rate using the data from such a system for the NO_x concentration in the flue gas and either the flue gas flow rate or the fuel flow rate. To calculate the emission rate using the NO_x concentration and fuel flow rate, the owner or operator shall use the conversion procedure set forth in the Acid Rain regulations at 40 CFR 75, Appendix F, or an alternative procedure that the Department determines will yield the same result. Compliance with the limit shall be based upon the average of emissions:

i. Between May 1 and September 30, over each calendar day; and

ii. From October 1 through April 30 of the following year, over the 30-day period ending on each such day; or

2. If no continuous emissions monitoring system has been or is required to be installed on the equipment or source operation, compliance with the limit shall be based upon the average of three one-hour tests, each performed over a consecutive 60-minute period specified by the Department, and performed in compliance with N.J.A.C. 7:27-19.17. Any NO_x testing conducted pursuant to this section shall be conducted concurrently with CO testing. The applicable NO_x emission limits in this subchapter will not be considered to have been met unless the concurrent CO testing demonstrates compliance with the CO limit in N.J.A.C. 7:27-16.8, 16.9, 16.10, 16.11, or the permit limit for CO, whichever is more stringent, is also met.

(b) For any equipment or source operation subject to this subchapter that was in operation before January 1, 1995, the owner or operator shall demonstrate compliance with this subchapter in accordance with (a)1 or 2 above by May 31, 1996, and thereafter at the frequency set forth in the permit for such equipment or source operation, except that the owner or operator of any facility, equipment or source operation that is subject to a NO_x emissions limit under this subchapter as set forth at N.J.A.C. 7:27-19.5(d), 19.7(h), or 19.8(e), and that is in operation before November 7, 2005 shall demonstrate compliance with this subchapter in accordance with (a)1 or 2 above by March 7, 2008. Test results that demonstrate compliance with a new requirement within the five years preceding November 7, 2005 shall be accepted by the Department as satisfying this test requirement, if the testing and test report were reviewed by the Department and found satisfactory.

(c) For any equipment or source operation subject to this subchapter which commences operations or is altered after January 1, 1995, the owner or operator shall demonstrate compliance with this subchapter in accordance with (a)1 or 2 above within 180 days from the date on which the source commences operation, and thereafter at the frequency set forth in the permit for such equipment or source operation.

(d) An exceedance of any applicable NO_x emission limit set forth in this subchapter, determined through testing or monitoring performed pursuant to (a), (b), or (c) above or otherwise, is a violation of this subchapter.

Amended by R.1995 d.214, effective April 17, 1995 (operative May 23, 1995).
See: 26 N.J.R. 3298(a), 27 N.J.R. 1581(a).
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
In (a)1, deleted "part" following "40 CFR"; revised the deadline dates in (a)1i and ii; in (a)2, added last two sentences; rewrote (b).

7:27-19.16 Adjusting combustion processes

(a) When any provision of this subchapter requires the adjustment of a combustion process for any equipment or source operation, other than stationary combustion turbines and reciprocating engines, the owner or operator of the equipment or source operation shall:

1. Inspect the burner, and clean or replace any components of the burner as necessary;

2. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern consistent with the manufacturer's specifications;

3. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly;

4. Minimize total emissions of NO_x and CO consistent with the manufacturer's specifications;

5. Measure the concentrations in the effluent stream of NO_x, CO and O_2 in ppmvd, before and after the adjustment is made; and

6. Convert the emission values of the NO_x, CO and O_2 concentrations measured pursuant to (a)5 above to pounds

per million BTU (lb/MM BTU) according to the following formula:

lb/MM BTU = ppmvd x MW x F dry factor x O_2 correction factor ÷ 387,000,000

Where:

ppmvd is the concentration in parts per million by volume, dry basis, of NO_x or CO

MW is the Molecular Weight for:

NO_x = 46 lb/lb-mole; CO = 28 lb/lb-mole

F dry factor for:

Natural gas = 8,710 dscf/MM BTU

Residual or fuel oil = 9,190 dscf/MM BTU

O_2 correction factor: (20.9%) ÷ (20.9% - O_2 measured)

O_2 measured is percent oxygen on a dry basis.

(b) The owner or operator of the equipment or source operation adjusted pursuant to (a) above shall ensure that each adjustment is recorded in a log book or computer data system and retained for a minimum of five years, to be made readily accessible to the Department upon request. Such record shall contain the following information for each adjustment:

1. The date of the adjustment and the times at which it began and ended;

2. The name, title and affiliation of the person who made the adjustment;

3. The NO_x and CO concentrations in the effluent stream, in ppmvd, before and after each actual adjustment was made;

4. The concentration of O_2 (in percent dry basis) at which the CO and NO_x concentrations were measured pursuant to (a)5 above;

5. A description of any corrective action taken;

6. Results from any subsequent tests performed after taking any corrective action, including concentrations and converted emission values in pounds per million BTU (lb/MM BTU);

7. The type and amount of fuel used over the 12 months prior to the annual adjustment; and

8. Any other information which the Department or the EPA has required as a condition of approval of any permit or certificate issued for the equipment or source operation.

(c) The owner or operator shall ensure that an annual adjustment combustion process report is submitted electronically to the Department according to the schedule listed in (d) below, and in the format the Department specifies at its website. The report shall contain the following information:

1. The concentrations of NO_x and CO in the effluent stream in ppmvd, and O_2 in percent dry basis, measured before and after the adjustment of the combustion process pursuant to (a)5 above;

2. The converted emission values in lb/MM BTU for the measurements taken before and after the adjustment of the combustion process;

3. A description of any corrective actions taken as a part of the combustion adjustment; and

4. The type and amount of fuel used over the 12 months prior to the annual adjustment.

(d) The owner or operator of an industrial/commercial/institutional boiler or other indirect heat exchanger shall ensure that the annual adjustment combustion process report required in (c) above is submitted to the Department within 45 days after the adjustment of the combustion process is completed, based on the gross heat input of the boiler or heat exchanger as follows:

1. For an industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least five million but less than 10 million BTU per hour, beginning in 2012;

2. For an industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input rate of at least 10 million but less than 20 million BTU per hour, beginning in 2010;

3. For an industrial/commercial/institutional boiler or other indirect heat exchanger with a maximum gross heat input of rate at least 20 million BTU per hour or greater, beginning in 2009;

(e) The owner or operator of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment.

(f) An exceedance of an emission limit that occurs during an adjustment of the combustion process under (a) above or (g) below is not a violation of this subchapter if it occurs as a result of the adjustment. After the combustion adjustment has been completed, the maximum emission rate of any contaminant shall not exceed the maximum allowable emission rate applicable under this subchapter or under an operating permit issued pursuant to N.J.A.C. 7:27-22 or an applicable certificate issued pursuant to N.J.A.C. 7:27-8.

(g) The owner or operator of a stationary combustion turbine or reciprocating engine shall ensure that the adjustment of the combustion process is carried out according to the

iv. Would carry costs disproportionate to the costs incurred for the control of NO_x emissions from the same type of combustion sources used by other persons in the owner or operator's industry who are also subject to the NO_x RACT requirements of P.L. 101-549, § 182(f).

6. For each combustion source included in the plan, the interim emission limit proposed under (c)10 above is the lowest rate that can practicably be achieved at a cost within the limits described in (d)5iii and iv above;

7. For each combustion source included in the plan, the cost of achieving an additional emission reduction beyond the interim emission limit proposed under (c)10 above would be disproportionate to the size and environmental impact of that additional emission reduction; and

8. The owner or operator has entered into an agreement with the Department in accordance with the requirements of (h) below.

(e) An owner or operator who has obtained the Department's approval of a repowering plan shall:

1. Beginning on May 31, 1995 (or on March 7, 2007 for any facility, equipment or source operation that is subject to a NO_x emissions limit under this subchapter as set forth at N.J.A.C. 7:27-19.5(d), 19.7(h), or 19.8(e)), operate all combustion sources included in the approved repowering plan in a manner that complies with the plan and with all conditions of the Department's approval;

2. Meet the compliance milestones in the approved plan;

3. Repower the combustion sources included in the plan by the date specified in the approved plan;

4. Beginning on May 31, 1995 (or on March 7, 2007 for any facility, equipment or source operation that is subject to a NO_x emissions limit under this subchapter as set forth at N.J.A.C. 7:27-19.5(d), 19.7(h), or 19.8(e)), determine the actual NO_x emissions from each combustion source included in the repowering plan in accordance with N.J.A.C. 7:27-19.15(a);

5. If the approved plan provides for the owner or operator to annually adjust the combustion process for a combustion source included in the plan, do so in accordance with the general procedures set forth at N.J.A.C. 7:27-19.16 before May 1 of each calendar year beginning with 1995, until repowering is completed;

6. Beginning on May 31, 1995 (or on March 7, 2007 for any facility, equipment or source operation that is subject to a NO_x emissions limit under this subchapter as set forth at N.J.A.C. 7:27-19.5(d), 19.7(h), or 19.8(e)). comply with the recordkeeping and reporting requirements of N.J.A.C. 7:27-19.19;

7. Within 15 days after the date specified in the approved repowering plan for completion of a milestone listed in (c)2 above, notify the Department in writing that the milestone has or has not been completed. If the milestone has not been completed, the owner or operator shall include in the notice the reason for the delay and the expected date on which the milestone will be completed;

8. Incorporate advances in the art of air pollution control into each repowered source, as required in the preconstruction permit for the replacement equipment;

9. If the plan includes a boiler serving an electric generating unit, cause the repowered boiler serving an electric generating unit to emit NO_x at a rate no higher than the applicable maximum allowable NO_x listed in Table 9 below (provided however, that the NO_x emission limits in Table 9 shall not be construed to limit the owner or operator's obligations under (e)8 above); and

10. If repowering of any combustion source included in the plan is not completed by May 1, 1999 (or by November 7, 2009 for any facility, equipment or source operation that is subject to a NO_x emissions limit under this subchapter as set forth at N.J.A.C. 7:27-19.5(d), 19.7(h), or 19.8(e)), cease operating the combustion source.

TABLE 9
Maximum Allowable NO_x Emission Rates for
Boilers Serving Electric Generating Units
Which Have Been Repowered
(pounds per million BTU)

	Firing Method		
Fuel/Boiler Type	Tangential	Face	Cyclone
Coal—Wet Bottom	0.2	0.2	0.2
Coal—Dry Bottom	0.2	0.2	N/A
Oil and/or Gas	0.1	0.1	0.1
Gas Only	0.1	0.1	0.1

(f) Except as provided in (g) below:

1. The Department shall seek comments from the general public before making any final decision to approve or disapprove a proposed repowering plan. The Department shall publish notice of opportunity for public comment in a newspaper of general circulation in the area in which each combustion source included in the plan is located;

2. The Department shall submit any repowering plan (and agreement to repower) approved under this section to EPA, as a proposed revision to New Jersey's State Implementation Plan; and

3. Upon EPA's approval of the revision to New Jersey's State Implementation Plan, it shall be Federally enforceable. Plans listed under (g) below shall be Federally enforceable upon the issuance of the Department's approval.

(g) A repowering plan (and agreement to repower) approved under this section is not required to be submitted to EPA as a proposed revision to New Jersey's State Implementation Plan, if the plan provides that NO_x emissions from each combustion source included in the plan will be

controlled during the interim period through one of the following methods:

1. Fuel switching under N.J.A.C. 7:27-19.20, using natural gas as the "cleaner fuel"; or

2. The use of selective non-catalytic reduction from May 1 through September 30 of each year.

(h) Before the Department approves a repowering plan, the owner or operator shall enter into a Federally enforceable agreement containing the following provisions:

1. Information sufficient to identify the owner or operator;

2. Information sufficient to identify the combustion source, including a brief description (for example, "dry-bottom coal-fired boiler serving an electric generating unit"), its location, its permit number, the company stack designation, and any other identifying numbers, and any other information necessary to distinguish it from other equipment owned or operated by the owner or operator;

3. The owner or operator's undertaking of the following duties:

i. Completing the milestones listed in (c)2 above by specified dates;

ii. Ceasing to operate a combustion source if repowering is not completed by a date specified for that source;

iii. Implementing interim measures to control NO_x emissions from each combustion source during the interim period;

iv. Causing each combustion source to emit NO_x at a rate no greater than a specified interim NO_x emission limit applicable during the interim period;

v. Using a specified method to measure the actual NO_x emission rate of the combustion source; and

vi. Maintaining the Department's approval in effect;

4. A provision for delay of compliance caused by a "force majeure" event beyond the control of and without the fault of the owner or operator;

5. A provision under which the Department can terminate the agreement and its approval of the repowering plan if the owner or operator materially fails to complete the repowering or any other milestone by the date specified in the approved plan. Termination of the agreement and the approval of the plan is in addition to any other remedies the Department has under this chapter and N.J.A.C. 7:27A; and

6. Other provisions necessary to make the agreement Federally enforceable, to accomplish the purposes of this subchapter, or to allow the agreement to be administered effectively.

New Rule, R.1995 d.214, effective April 17, 1995 (operative May 23, 1995).
See: 26 N.J.R. 3298(a), 27 N.J.R. 1581(a).
Administrative correction added (f)3.
See: 27 N.J.R. 3157(a).
Amended by R.2000 d.204, effective May 15, 2000 (operative June 6, 2000).
See: 31 N.J.R. 1671(a), 32 N.J.R. 1808(a).
In (g)2, substituted a reference to September 30 for a reference to September 15.
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
In (b), revised application deadline; in (c)1, (e)9 and (h)2, deleted "utility" and added "serving an electric generating unit"; rewrote (d)4 and (e).

7:27-19.22 Phased compliance—impracticability of full compliance by May 31, 1995

(a) The owner or operator of a combustion source included in a phased compliance plan is authorized to comply with the plan if the Department approves the plan pursuant to this section and N.J.A.C. 7:27-19.14. The owner or operator's compliance with the plan is in lieu of causing the combustion source to comply with the emission limit under N.J.A.C. 7:27-19.4, 19.5, 19.7, 19.8, 19.9 or 19.10 that would otherwise apply to the combustion source.

(b) By June 22, 1995, an owner or operator seeking approval of a phased compliance plan shall submit to the Department an application for approval of the phased compliance plan pursuant to N.J.A.C. 7:27-19.14. If an owner or operator fails to submit the application by June 22, 1995, the Department may reject the application. The Department may elect to process a late application, based on how late the application is, the nature and extent of the owner or operator's efforts to submit the application on time, and whether the owner or operator advised the Department before the application due date that a late application would be submitted. If the Department elects to process a late application, the pendency of the application shall not be a defense to a violation of a NO_x emission limit to which the source is subject in the absence of an approved plan. In the application, the owner or operator shall include the following information in addition to the information required under N.J.A.C. 7:27-19.14:

1. The phased compliance plan described in (c) below;

2. A description of the steps that the owner or operator has taken to cause each combustion source included in the plan to attain compliance with the applicable NO_x emission limit under this subchapter; and

3. For each combustion source included in the plan, a detailed explanation of the reasons why the owner or operator believes that compliance with the applicable NO_x emission limit by May 31, 1995 is impracticable.

(c) The owner or operator shall include the following information in the phased compliance plan with respect to each combustion source included in the plan:

1. Information sufficient to identify the combustion source, including a brief description (for example, "dry-bottom coal-fired boiler serving an electric generating unit"), its location, its permit number, the company stack designation, and any other identifying numbers, and any other information necessary to distinguish it from other equipment owned or operated by the owner or operator;

2. A proposed schedule setting dates by which the owner or operator will complete the following milestones for the combustion source:

i. Submit applications for all necessary permits and certificates;

ii. Obtain all necessary permits and certificates;

iii. Award contracts for the implementation of control measures or place orders for the purchase of component parts, equipment and/or control apparatus necessary to attain compliance with the applicable NO_x emission limit under this subchapter;

iv. Initiate construction and/or installation of the component parts, equipment and/or control apparatus necessary to attain compliance with the applicable NO_x emission limit under this subchapter; and

v. Attain full compliance with the applicable NO_x emission limit under this subchapter;

3. The NO_x control measures or technology that the owner or operator proposes to employ during the interim period; and

4. Any other information that the Department requests, which is reasonably necessary to enable it to determine whether the operation of combustion sources included in the phased compliance plan will comply with the requirements of this section.

(d) The Department shall approve a phased compliance plan only if the following requirements are satisfied with respect to each combustion source included in the plan:

1. The application satisfies all the requirements of N.J.A.C. 7:27-19.14 and (b) above;

2. The information submitted under (b)1ii above establishes that the owner or operator has made a good faith effort to cause the combustion source to attain compliance with the applicable NO_x emission limit under this subchapter;

3. The information submitted under (b)1iii above, evaluated in light of the criteria set forth in (e) below, establishes that it is impracticable for the combustion source to attain compliance with the applicable NO_x emission limit under this subchapter by May 31, 1995; and

4. The interim period is less than 12 months.

(e) In determining whether compliance with the applicable NO_x emission limit under this subchapter by May 31, 1995 is impracticable, the Department shall apply the following criteria:

1. The amount of time needed to obtain all permits and certificates necessary to attain compliance, following the submission of an administratively complete application;

2. The amount of time needed to obtain all component parts and/or equipment necessary to obtain compliance, following the placement of orders for such parts and/or equipment. The estimate of time may reflect shortages in the supply of such parts and/or equipment;

3. The amount of time needed to complete construction and/or installation of the component parts and/or equipment necessary to attain compliance, following the initiation of construction and/or installation; and

4. The nature, extent and probability of any harm to public safety or welfare that could result from accelerating construction and/or installation in order to attain compliance by May 31, 1995. For example, if it were probable that the owner or operator of the electric generating unit could not cause all of its electric generating units to attain compliance by that date without subjecting a substantial number of customers to voltage reductions and/or interruptions in electric service, that fact would be relevant in establishing impracticability.

(f) On the date that the approved compliance plan provides for a combustion source to attain full compliance with the applicable NO_x emission limit under this subchapter, the Department's approval of the plan shall expire. Upon expiration of the Department's approval, the combustion source shall be subject to all applicable requirements of this subchapter, including the NO_x emission limits that would have applied to the source in the absence of an approved plan.

(g) An owner or operator who has obtained the Department's approval of a phased compliance plan shall:

1. Operate all combustion sources included in the plan in a manner that complies with the plan and with all conditions of the Department's approval;

2. Meet all milestones in the approved phased compliance plan;

3. Within 15 days after the date of each milestone in the approved phased compliance plan, advise the Department in writing whether the owner or operator has met the milestone; and

4. During the interim period, control NO_x emissions from the combustion source as follows:

i. By adjusting the combustion process in accordance with N.J.A.C. 7:27-19.16, if the source's air-to-fuel ratio can be adjusted in a manner that reduces NO_x emissions; or

ii. By seasonally combusting natural gas in accordance with N.J.A.C. 7:27-19.20, implementing selective non-catalytic reduction, or implementing other measures that the Department determines are appropriate in light of the costs involved and the total quantity of NO_x reductions that will be achieved until the full compliance date listed in (c)2v above.

New Rule, R.1995 d.214, effective April 17, 1995 (operative May 23, 1995).
See: 26 N.J.R. 3298(a), 27 N.J.R. 1581(a).
Amended by R.2000 d.204, effective May 15, 2000 (operative June 6, 2000).
See: 31 N.J.R. 1671(a), 32 N.J.R. 1808(a).
In (e)4, substituted a reference to owners and operators of the electric generating units for a reference to electric generating utilities.
Amended by R.2005 d.343, effective October 17, 2005 (operative date of November 7, 2005).
See: 36 N.J.R. 4228(a), 37 N.J.R. 3976(a).
In (c)1, deleted "utility" and added "serving an electric generating unit".

7:27-19.23 Phased compliance—use of innovative control technology

(a) The owner or operator of a combustion source included in a phased compliance plan is authorized to comply with the plan if the Department approves the plan pursuant to this section and N.J.A.C. 7:27-19.14. The owner or operator's compliance with the plan is in lieu of causing the combustion source to comply with the emission limit under N.J.A.C. 7:27-19.4, 19.5, 19.7, 19.8, 19.9 or 19.10 that would otherwise apply to the combustion source.

(b) By June 22, 1995 (or by February 7, 2006 for any facility, equipment or source operation that is subject to a NO_x emissions limit under this subchapter as set forth at N.J.A.C. 7:27-19.5(d), 19.7(h), or 19.8(e)), an owner or operator seeking approval of an innovative control technology plan shall submit to the Department an application pursuant to N.J.A.C. 7:27-19.14 and the plan itself pursuant to (c) below. If an owner or operator fails to submit the application by the applicable date, the Department may reject the application. The Department may elect to process a late application, based on how late the application is, the nature and extent of the owner or operator's efforts to submit the application on time, whether the owner or operator advised the Department before the application due date that a late application would be submitted, and the extent of the emission reductions promised in the late application. If the Department elects to process a late application, the pendency of the application shall not be a defense to a violation of a NO_x emission limit to which the source would be subject in the absence of an approved plan.

(c) The owner or operator shall include the following information in the innovative control technology plan with respect to each combustion source included in the plan:

1. Information sufficient to identify the combustion source, including a brief description (for example, "dry-bottom coal-fired boiler serving an electric generating unit"), its location, its permit number, the company stack designation, and any other identifying numbers, and any other information necessary to distinguish it from other equipment owned or operated by the owner or operator;

2. A description of the NO_x control measures that the owner or operator proposes to employ as innovative control technology;

3. The rate of NO_x emissions that the owner or operator expects that the source will attain in employing the proposed innovative control technology, and the basis for that expectation;

4. Information establishing that the proposed innovative control technology is technically sound and sufficiently developed to be implemented by May 1, 1999 (or by November 7, 2009 for any facility, equipment or source operation that is subject to a NO_x emissions limit under this subchapter as set forth at N.J.A.C. 7:27-19.5(d), 19.7(h), or 19.8(e));

5. A proposed schedule setting dates by which the owner or operator will complete the following milestones for the combustion source:

i. Submitting applications for all necessary permits and certificates;

ii. Obtaining all necessary permits and certificates;

iii. Awarding contracts for the implementation of the innovative control technology, or placing orders for the purchase of any component parts, equipment and/or control apparatus associated with the innovative control technology;

iv. Awarding contracts and initiating implementation of the innovative control technology (including any construction and/or installation, if applicable); and

v. Completing the implementation of the innovative control technology.

6. Specific procedures and schedules for implementing interim measures for control of NO_x emissions for the combustion source during the interim period;

7. A list of all NO_x control technologies available for interim use with the combustion source during the interim period;

8. An analysis of the technological feasibility of installing and operating each NO_x emission control technology identified in (c)7 above for the interim period;

9. For each control technology that is technologically feasible to install and operate, an estimate of the cost of installation and operation;

10. An estimate of the reduction in NOx emissions attainable through the use of each control technology which is technologically feasible to install and operate. If a control technology installed before the innovative control

7:27-19.27 Use of NO_x budget allowances by a former DER credit user

(a) A former DER credit user who used DER credits to comply with a NO_x emissions limit under this subchapter, and who would continue to require the use of DER credits to comply with that limit, may use NO_x budget allowances, as defined by the provisions of N.J.A.C. 7:27-31, to achieve compliance with the applicable NO_x RACT emission limits of this subchapter.

(b) The number of NO_x budget allowances to be retired during any given calendar year pursuant to (a) above shall be determined as follows:

1. Determine the allowable NO_x emissions for the equipment or control apparatus for the calendar year in question by calculating the quantity of NO_x emissions in tons per year (tpy) which would be allowed for the equipment or control apparatus. The allowable NO_x emissions for a single fuel shall be the total BTU (higher heating value) burned in the calendar year times the maximum allowable NO_x emission rate, in pounds per million BTU, for the equipment or control apparatus in question, converted to tons per year (by dividing by 2,000). The allowable NO_x emissions for a stationary internal combustion engine shall be the total number of horsepower hours produced in the calendar year times the maximum allowable NO_x emission rate, in grams per horsepower hour, for the equipment or control apparatus in question, converted to tons per year (by dividing by 908,000). Maximum allowable NO_x emission rates are codified at N.J.A.C. 7:27-19.4(a), Table 1; 19.5(a), Table 2; 19.5(b), Table 3; 19.7(b), Table 4; 19.7(c), Table 5 and N.J.A.C. 7:27-19.8(a), (b) and (c). If more than one fuel is burned, determine the allowable emissions separately for each fuel and then sum these allowable emissions;

2. Determine the actual NO_x emissions, in tons, for the equipment or control apparatus for the calendar year in question as follows:

i. For a facility using a continuous emissions monitoring system to demonstrate compliance with the requirements of this subchapter pursuant to N.J.A.C. 7:27-19.15(a)1, integrate the measured concentration with a stack gas volumetric flow rate monitor, corrected for oxygen concentration and temperature, and convert it to cumulative tons. Use only instrumentation and methodology approved by the Chief of the Department's Bureau of Technical Services, whose address is set forth at N.J.A.C. 7:27-19.18(m);

ii. For a facility using the average of three one-hour tests to demonstrate compliance with the requirements of this subchapter pursuant to N.J.A.C. 7:27-19.15(a)2, multiply the measured average pounds per hour by the operating hours per calendar year, or multiply the measured average emission factor in pounds per million BTU (higher heating value) by the measured annual fuel use expressed in million BTU per calendar year, based on the higher heating value of the fuel; or

iii. For a stationary internal combustion engine, multiply the measured average emission rate in grams per horsepower hour by the measured annual horsepower hours generated by the engine, then convert into tons by dividing by 908,000;

3. Subtract the allowable NO_x emissions determined in (b)1 above from the actual emissions determined in (b)2 above to yield the quantity of excess NO_x emissions, in tons, from the equipment or control apparatus, that occurred during the calendar year in question; and

4. Take the quantity of excess NO_x emissions calculated under (b)3 above (expressed in tons) and round it up to the next whole number of tons to yield the number of NO_x allowances to be retired.

(c) By April 1 of the year following the calendar year when the NO_x budget allowances were used, the former DER credit user using NO_x budget allowances to comply with the applicable NO_x RACT emission limits set forth in this subchapter shall provide the Department with documentation demonstrating that the appropriate number of allowances has been retired, along with the supporting calculations described in (b) above, using the form set forth at the Appendix to this subchapter, promulgated and incorporated herein by reference.

New Rule, R.2004 d.129, effective April 5, 2004 (Operative April 25, 2004).
See: 35 N.J.R. 3486(a), 36 N.J.R. 1791(a).

APPENDIX

New Jersey Department of Environmental Protection

Notice of Use of NO_x Budget Allowances

A. General Information

Name of User: _____

User Address: _____

_____

_____

County: _____

User Type of Business: _____

Air Program Interest No. _____

Equipment Permit No. _____.

Location of the equipment at the facility: _____

_____

Name of Contact Person: _____

Telephone Number: _____

E-Mail Address: _____

B. Allowance Information

Calendar Year NO_x Budget Allowances Were Used: _____

Maximum Quantity of Excess Emissions: _____

Number of NO_x Budget Allowances Needed: _____

Specify the NO_x Budget Allowance Serial Number(s): _____ _____

C. Supporting Documentation: This submission is not complete without attached documentation of the calculation of the number of NO_x Budget Allowances Needed using the protocol set forth at N.J.A.C. 7:27-19.27(b).

Confirm attachment of supporting documentation and number of pages: _____

D. Certification by Source Owner or Operator

I certify under penalty of law that I believe the information provided in this Notice of Use, is true, accurate and complete. I am aware that there are significant civil and criminal penalties, including the possibility of fine or imprisonment or both for submitting false, inaccurate or incomplete information.

Signed: _____

Title: _____

This form (and all attachments) are to be submitted to the Department at the applicable address listed below:

If the source is located in Mercer, Middlesex, Monmouth, Ocean or Union County:	If the source is located in Bergen, Essex or Hudson County:
Department of Environmental Protection	Department of Environmental Protection
Air Compliance and Enforcement	Air Compliance and Enforcement
Central Regional Office	Metro Regional Office
Horizon Center, PO Box 407	2 Babcock Place
Trenton, New Jersey 08625-0407	West Orange, New Jersey 07052-5504
If the source is located in Hunterdon, Morris, Passaic, Somerset or Warren County:	If the facility is located in Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester or Salem County:
Department of Environmental Protection	Department of Environmental Protection
Air Compliance and Enforcement	Air Compliance and Enforcement
Northern Regional Office	Southern Regional Office
1259 Route 46 East, Building 2	2 Riverside Drive, Suite 201
Parsippany-Troy Hills, New Jersey07054-4191	Camden, New Jersey 08102

New Rule, R.2004 d.129, effective April 5, 2004 (Operative April 25, 2004).
See: 35 N.J.R. 3486(a), 36 N.J.R. 1791(a).

SUBCHAPTER 20. USED OIL COMBUSTION

Authority

N.J.S.A. 13:1B-3, 13:1D-9 and 26:2C-1 et seq.

Source and Effective Date

R.1999 d.428, effective December 6, 1999 (operative January 8, 2000).
See: 30 N.J.R. 4003(a), 31 N.J.R. 4016(a).

7:27-20.1 Definitions

(a) The following words and terms, when used in this subchapter, have the meanings given below unless the context clearly indicates otherwise.

"Air quality impact analysis" means a procedure, entailing the use of an air quality simulation model, for determining whether air contaminant emissions will result in ambient air concentrations that exceed standards established for the protection of human health and welfare and the environment.

"Air quality simulation model" means a mathematical procedure, taking into account the dispersive capacity of the atmosphere, meteorological data, topography, and other relevant factors, to predict the concentration of an air contaminant in the ambient air. Such procedure may entail use of a mathematical model or a physical model.

"Ash" means the residue remaining after the burning of a material as tested according to ASTM Standard Test Method for Ash from Petroleum Products by ASTM D482-91, incorporated herein by reference. This specification can be obtained from the ASTM, 1916 Race Street, Philadelphia, Pennsylvania 19103.

"Brake fluid" means oil drained from the braking system of a conveyance.

"Combustion unit" means a unit into which fuel is charged and heated to the point at which oxidation occurs and energy is generated.

"Commercial fuel" means solid, liquid, or gaseous fuel normally produced or manufactured, and sold for the purpose of creating useful heat.

"Crankcase oil" means oil drained from the crankcase of a conveyance.

"Do-it-yourselfer used oil collection center" means any site or facility that accepts and/or aggregates and stores used oil collected only from household do-it-yourselfer used oil generators.

"Energy recovery" means the use of heat from combustion for a useful purpose, such as the heating of air or water for space heating or wash water.

"Facility" means the combination of all structures, buildings, equipment, control apparatus, storage tanks, source operations, and other operations that are located on a single site or on contiguous or adjacent sites and that are under common control of the same person or persons. Research and development facilities that are located with other facilities shall be considered separate and independent entities for the purposes of complying with the operating permit requirements of P.L. 1954, c.212 (N.J.S.A. 26:2C-1 et seq.) or any codes, rules, or regulations adopted pursuant thereto.

"Capture efficiency" means the amount of an air contaminant collected by a control apparatus serving the source operation, expressed as a percentage of the total amount of the air contaminant emitted by the source operation.

"Carbon dioxide" or "CO_2" means a colorless, odorless, tasteless gas at standard conditions, having a molecular composition of one carbon atom and two oxygen atoms.

"Carbon monoxide" or "CO" means a colorless, odorless, tasteless gas at standard conditions, having a molecular composition of one carbon atom and one oxygen atom.

"Certificate" means either an operating certificate or a temporary operating certificate.

"CFR" means the United States Code of Federal Regulations. This document may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, (202) 783–3228.

"Control apparatus" means any device which prevents or controls the emission of any air contaminant directly or indirectly into the outdoor atmosphere.

"Control efficiency" means the amount of an air contaminant prevented from being discharged into the outdoor atmosphere by a control apparatus, expressed as a percentage of the total amount of the air contaminant collected by the control apparatus.

"Delivery vessel" means any vehicle designed and constructed or converted to be capable of transporting liquid VOC cargo such as gasoline or fuel oil. This term includes, but is not limited to, tank trucks, tank trailers, railroad tank cars, and marine tank vessels.

"Department" means the New Jersey Department of Environmental Protection.

"Distillates of air" means the following chemical species: helium (He), nitrogen (N_2), oxygen (O_2), neon (Ne), argon (Ar), krypton (Kr), and xenon (Xe).

"Emission Inventory Improvement Program" or "EIIP" is a program developed by local and State air pollution control officers and the EPA to improve the accuracy and quality of the emissions data reported by facilities to the states used for emission inventory development for submittal to the Federal government pursuant to 40 CFR Part 51. This plan includes a multi-volume reference of emission estimation methods that can be electronically accessed at the EPA Chief website at *http:www.epa.gov/ttn/chief* which provides the most current, accurate emission estimation calculation methods for determining actual emissions of all air contaminants from all types of source operations.

"Emission point" means a stack, chimney, door, window, vent, or any other opening where air contaminants are emitted to the atmosphere.

"Emission Statement Guidance Document" refers to the 1999 Emission Guidance Document and any addendum or subsequent revision, published at the Department's website at http://www.state.nj.us/dep/aqm/es/emission.html. This publication is updated annually to incorporate the Department's latest guidance regarding Emission Statement policies, reporting procedures and format. This information is provided in order to assist the owner or operator of a facility subject to this subchapter with the process of completing, certifying and submitting an Emission Statement.

"EPA" means the United States Environmental Protection Agency.

"Equipment" means any device capable of causing the emission of an air contaminant either directly or indirectly to the outdoor atmosphere, and any stack or chimney, conduit, flue, duct, vent, or similar device connected or attached to, or serving the equipment. This term includes, but is not limited to, a device in which the preponderance of the air contaminants emitted is caused by a manufacturing process.

"Facility" means the combination of all structures, buildings, equipment, control apparatus, storage tanks, source operations, and other operations located on a single site or on contiguous or adjacent sites and that are under common control of the same person or persons.

"Facility-wide permit" means a single permit issued by the Department to the owner or operator of a priority industrial facility incorporating the permits, certificates, registrations, or any other relevant Department approvals previously issued to the owner or operator of the priority industrial facility pursuant to the Solid Waste Management Act, N.J.S.A. 13:1E–1 et seq., the Water Pollution Control Act, N.J.S.A. 58:10A–1 et seq., the Air Pollution Control Act, N.J.S.A. 26:2C–1 et seq., and the appropriate provisions of the Pollution Prevention Plan prepared by the owner or operator of the priority industrial facility pursuant to N.J.S.A. 13:1D–41 and 42. This term shall have the same meaning as defined for the term "facility-wide permit" at N.J.A.C. 7:1K–1.5; if there is any conflict between the definition at N.J.A.C. 7:1K–1.5 and this one, the definition at N.J.A.C. 7:1K–1.5 shall control.

"Federally enforceable" means any limitation or condition on operation, production, or emissions that can be enforced by EPA. These limitations and conditions that can be enforced by EPA include, but are not limited to, those established pursuant to:

1. Any standard of performance for new stationary sources (NSPS) promulgated at 40 CFR Part 60, or promulgated under 42 U.S.C. § 7411;

2. Any national emission standard for hazardous air pollutants (NESHAP) promulgated at 40 CFR Part 61, 40 CFR Part 63, or promulgated under 42 U.S.C. § 7412;

3. Any standard or other requirement provided for in a SIP that has been approved by EPA, or promulgated through rulemaking by EPA; or

4. Any permit or order issued pursuant to requirements established at 40 CFR 51, Subpart I (including any preconstruction permit issued pursuant to N.J.A.C. 7:27-8 or any operating permit issued pursuant to N.J.A.C. 7:27-22); 40 CFR 52.21; 40 CFR Part 70; 40 CFR Part 71; or 40 CFR Part 72.

"Fugitive emissions" means any air contaminant emissions released directly or indirectly into the outdoor atmosphere which cannot reasonably pass through a stack or chimney.

"Gasoline" means any petroleum distillate or petroleum distillate/oxygenate blend having a Reid vapor pressure of four pounds per square inch (207 millimeters of mercury) absolute or greater, sold for use or used in a motor vehicle or motor vehicle engine, and commonly or commercially known or sold as gasoline.

"Gasoline dispensing facility" means a facility consisting of one or more stationary gasoline storage tanks together with dispensing devices used to fill vehicle fuel tanks.

"Insignificant source operation" means a source operation that is not a "significant source operation" as defined in this section.

"Lead" or "Pb" means elemental lead or any compound containing lead measured as elemental lead.

"Liquid particles" means particles which have volume but are not of rigid shape.

"Manufacturing process" means any action, operation or treatment embracing chemical, industrial, manufacturing or processing factors, methods or forms including, but not limited to, furnaces, kettles, ovens, converters, cupolas, kilns, crucibles, stills, dryers, roasters, crushers, grinders, mixers, reactors, regenerators, separators, filters, reboilers, columns, classifiers, screens, quenchers, cookers, digesters, towers, washers, scrubbers, mills, condensers or absorbers.

"Maximum design capacity" means, in reference to a source operation, its maximum capability, per period of time, to operate, to consume a process input or to generate a product. This term may be expressed in units such as the maximum number of kilowatt-hours of electricity that a combustion unit is capable of producing per hour or the maximum amount of a raw material that may be processed per day.

"Methane" or "CH_4" means a colorless, odorless, flammable gas at standard conditions, having a molecular composition of one carbon atom and four hydrogen atoms.

"NAICS code" means the North American Industrial Classification System code, assigned by the United States Office of Management and Budget, which classifies establishments according to the type of economic activity in which they are engaged. A NAICS manual is available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

"NESHAP" means a National Emission Standard for a Hazardous Air Pollutant as promulgated under 40 CFR 61.

"NSPS" means Standard of Performance for New Stationary Sources as promulgated under 40 CFR 60, commonly referred to as New Source Performance Standards.

"Operating certificate" or "certificate" means a "Certificate to Operate Control Apparatus or Equipment" issued by the Department pursuant to N.J.S.A. 26:2C-1 et seq., and in particular N.J.S.A. 26:2C-9.2, and the implementing rules at N.J.A.C. 7:27-8.

"Operating permit" means the permit described in Title V of the Federal Clean Air Act, 42 U.S.C. §§ 7661 et seq., and in N.J.A.C. 7:27-22. This term shall include a general operating permit which is applicable facility wide, but does not include a general operating permit which applies only to a part of a facility. Where a general operating permit applies only to a part of a facility, the general operating permit shall be incorporated into the operating permit. This term also includes an operating permit issued for a temporary facility; for a facility subject to a MACT or GACT standard pursuant to N.J.A.C. 7:27-22.26; or for a component of a facility pursuant to N.J.A.C. 7:27-22.5(j).

"Operating time" means, for a control apparatus that serves a source operation, the amount of time that the control apparatus is in use.

"Order" means any and all orders issued by the Department including, but not limited to, Administrative Orders and Administrative Consent Orders.

"Oxides of nitrogen" or "NO_x" means all oxides of nitrogen, except nitrous oxide, as measured by test methods approved by the Department and EPA, such as the test methods set forth at 40 CFR 60 Appendix A Methods 7 through 7E.

"Ozone season" means the portion of each year beginning May 1 and ending September 30.

"Pb" see "lead."

"Peak carbon monoxide season" means December 1 through the last day of February, inclusive.

"Peak ozone season" means June 1 through August 31, inclusive.

"Permit" means preconstruction permit, operating permit, or facility-wide permit.

"Person" means an individual, public or private corporation, company, partnership, firm, association, society, joint stock company, international entity, institution, county, municipality, state, interstate body, the United States of America, or any agency, board, commission, employee, agent, officer, or political subdivision of a state, an interstate body, or the United States of America.

"$PM_{2.5}$" means a class of air contaminants which includes all particulate matter having an aerodynamic diameter less than or equal to a nominal 2.5 microns.

"PM_{10}" means a class of air contaminants which includes all particulate matter having an aerodynamic diameter less than or equal to a nominal 10 microns.

"Potential to emit" means the maximum aggregate capacity of a source operation or of a facility to emit an air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of a source operation or a facility to emit an air contaminant, including control apparatus, and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is Federally enforceable. Fugitive emissions shall be included in the determination of potential to emit. However, the determination shall not include any banked emission reductions that are held by the owner or operator.

"Preconstruction permit" means a legally valid permit, authorizing construction, installation, reconstruction, or modification of a significant source, issued by the Department under N.J.A.C. 7:27-8 pursuant to the New Jersey Air Pollution Control Act and in particular N.J.S.A. 26:2C-9.2.

"Process intermediate" means any material used in a process which is neither a raw material nor a product.

"Product" means the output from a source operation, equipment, or control apparatus. Such outputs may include mixtures, composites, compounds and elemental substances.

"Raw material" means any input to equipment, control apparatus, or a source operation, including fuels, but excluding heat and other forms of energy. Such inputs may include mixtures, composites, compounds and elemental substances.

"Reasonably available" means, with respect to a method of quantification, utilizing data or information that is already in the possession of a person at the time of reporting or which can be obtained by such person through public sources. For example, a quantification method utilizing emission factors set forth in an AP-42 document is a reasonably available method.

"Reid vapor pressure" means the absolute vapor pressure of a petroleum product in pounds per square inch (kilopascals) at 100 degrees Fahrenheit (°F) (37.8 degrees Celsius (°C)) as measured by "Method 1—Dry RVP Measurement" or "Method 2—Herzog Semi-Automatic Method" promulgated at 40 CFR 80, Appendix E; or any other test method approved in advance in writing by the Department and the EPA.

"Reporting year" means the calendar year during which emissions reported in an Emission Statement were emitted, except that carbon monoxide emissions emitted in December of the preceding calendar year shall also be reported as part of the peak carbon monoxide season emissions in a given year.

"Responsible official" has the same meaning as defined for this term at N.J.A.C. 7:27-1.4.

"SCC code" means the eight digit Source Classification Code published by EPA that provides a detailed specification of a process. See EPA document "AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants" EPA 450/4-90-003, which may be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, 22161, (703) 487-4650 or the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402, (202) 783-3228.

"Seasonal throughput" means the activity rate/throughput for any specific season, such as the peak carbon monoxide season, the ozone season, or the peak ozone season.

"Significant source operation" has one of the following meanings:

1. In respect to a source operation at a facility which is subject to the operating permit requirements of N.J.A.C. 7:27-22, this term has the meaning defined for the same term at N.J.A.C. 7:27-22.1;

2. Otherwise, this term has the meaning defined for the same term at N.J.A.C. 7:27-8.1, except that, for the purposes of this subchapter, no source operation shall be excluded from being classified as a significant source operation solely because it is a grandfathered source. That is, even though for the purposes of N.J.A.C. 7:27-8, a source operation would be excluded from being classified as a significant source operation if it meets the following three criteria, it is not so excluded for the purposes of this subchapter:

i. The source operation was in operation prior to the date that source operations of its kind were subject to permit requirements under N.J.A.C. 7:27-8;

ii. The source operation has not been reconstructed or modified since that date referenced in 2i above; and

iii. The source operation is still operable.

"Solid particles" means particles of rigid shape and definite volume.

"Source emission testing" means the testing of a discharge of any air contaminant from a source operation through any stack or chimney.

"Source operation" means any process, or any identifiable part thereof, that emits or can reasonably be anticipated to emit any air contaminant either directly or indirectly into the outdoor atmosphere. A source operation may include one or more pieces of equipment or control apparatus.

"Stack equivalent" means an aggregation of more than one stack or chimney approved by the Department for use in calculating or measuring air contaminant emissions from a single source operation or a group of source operations with a common exhaust ventilation system.

"Stack or chimney" means a flue, conduit or opening designed, constructed or used for the purpose of emitting any air contaminant into the outdoor atmosphere.

"State Implementation Plan" (SIP) means a plan for the attainment of any NAAQS, prepared by a state and approved by the EPA pursuant to 42 U.S.C. § 7410.

"State Plane Coordinates" means a geographic reference system in the horizontal plane, which has been developed and is maintained by the Department, describing the position of points or features with respect to other points in New Jersey. Information about this system may be obtained from the Department's website at: http://www.state.nj.us/dep/GIS; from the Department's Bureau of Geographical Information and Analysis by e-mail at: gisnet@gis.dep.state.nj.us.

"Subject to operating permit requirements" means, with respect to a facility, that the owner or operator of the facility:

1. Is required to obtain an operating permit for the facility pursuant to N.J.A.C. 7:27-22; or

2. Has voluntarily applied for an operating permit for the facility and an operating permit has been issued by the Department for the facility.

"Submittal year" means the calendar year in which an Emission Statement is required to be submitted. This term may be contrasted with the term "reporting year," defined above, which is the temporal period during which the emissions that are reported in an Emission Statement are emitted.

"Sulfur dioxide" or "SO_2" means a colorless gas at standard conditions, having a molecular composition of one sulfur atom and two oxygen atoms.

"Ton" means a unit of weight equal to 2,000 pounds (0.907 metric tons or 907.20 kilograms).

"Total suspended particulate matter" or "TSP" means any air contaminant dispersed in the outdoor atmosphere which exists as solid particles or liquid particles at standard conditions and is measured in accordance with N.J.A.C. 7:27B-1; 40 CFR 60, Appendix A, Methods 5 through 5H; or another method approved by the Department and EPA.

"Toxic air pollutant" or "toxic" means any of the substances listed in N.J.A.C. 7:27-21, Appendix 1, Table 1, incorporated herein by reference.

"U.S.C." means the United States Code.

"UTM coordinates" means Universal Transverse Mercator geographic coordinates, specified by the UTM zone, horizontal coordinate and vertical coordinate.

"Volatile organic compound" or "VOC" means a volatile organic compound as that term is defined by the EPA at 40 CFR 51.100(s), as supplemented or amended, which is incorporated by reference herein.

Amended by R.1994 d.500, effective October 3, 1994 (operative October 31, 1994).
See: 25 N.J.R. 4033(a), 26 N.J.R. 4026(a).
Administrative Correction.
See: 27 N.J.R. 1406(a).
Amended by R.1998 d.231, effective May 4, 1998 (operative June 12, 1998).
See: 29 N.J.R. 3521(a), 30 N.J.R. 1563(b).
Rewrote "Federally enforceable", "Operating permit", "Permit" and "Preconstruction permit"; and inserted "Facility-wide permit".
Administrative change.
See: 31 N.J.R. 639(b).
Amended by R.2003 d.86, effective February 18, 2003 (operative March 24, 2003).
See: 34 N.J.R. 695(a), 35 N.J.R. 1059(a).
Rewrote the section.
Amended by R.2008 d.366, effective December 1, 2008 (operative December 29, 2008).
See: 39 N.J.R. 4492(a), 40 N.J.R. 6769(a).
Rewrote definition "Volatile organic compound".

7:27-21.2 Applicability

(a) This subchapter applies to a facility if the facility emits or has the potential to emit, directly or indirectly to the outdoor atmosphere, any air contaminant listed in Table 1 below at a rate greater than or equal to the applicable reporting threshold given in Table 1.

TABLE 1

AIR CONTAMINANT REPORTING THRESHOLDS

Air Contaminant	Reporting Threshold (Tons per Year)
VOC	10
NO_x	25
CO	100
SO_2	100
TSP	100
$PM_{2.5}$	100
PM_{10}	100
NH_3	100
Pb	5

Administrative correction.
See: 34 N.J.R. 770(a).
Amended by R.2003 d.86, effective February 18, 2003 (operative March 24, 2003).
See: 34 N.J.R. 695(a), 35 N.J.R. 1059(a).
Rewrote the section.
Administrative correction.
See: 35 N.J.R. 2529(a).

7:27–21.6 Methods to be used for quantifying actual emissions

(a) The method used for quantifying actual emissions for use in preparing emission information required at N.J.A.C. 7:27–21.5(e) shall be determined as follows:

1. If a permit or certificate issued by the Department pursuant to N.J.A.C. 7:27–8 or 22 specifies a method for quantifying actual emissions of a given air contaminant, then that method shall be used; and

2. For all other cases, the method that shall be used is the best available quantification method selected from Table 3 below. The best available quantification method is a method listed in Table 3 that is reasonably available, as defined at N.J.A.C. 7:27–21.1, and provides the most accurate estimation of the actual emissions from the source operation. An owner or operator submitting an Emission Statement shall presume that the highest-ranked method in Table 3, which is also reasonably available, is the best available quantification method and use that method, unless a different method is selected pursuant to (b) below.

TABLE 3

RANKING OF METHODS
FOR QUANTIFYING ACTUAL EMISSIONS

Rank	Method
1	Continuous Emissions Monitoring
2	Predictive Emissions Monitoring
3	Department Approved and Supervised Source Emission Testing Performed during the Reporting Year
4	Department Approved and Supervised Source Emission Testing Performed in a Prior Year
5	Mass/Material Balance
6	AP–42 Emission Factor or Other EPA–Approved Emission Estimation Methodology (for example, TANKS4 and WATER9) or Selection of a Source Emission Test for a Similar Size Unit from the AP–42 Basis and Background Documents
7	Manufacturer's Estimate
8	Others (including): Industry Council or Organization Emission Factor —Source Emission Testing Not Approved or Supervised by the Department —Good Engineering Judgement/Factor

(b) A method listed in Table 3, which is ranked lower than the highest-ranked reasonably available method, may be used to quantify actual emissions for an Emission Statement if any of the following conditions are met:

1. The owner or operator can demonstrate that use of the lower-ranked method results in more accurate quantification of emissions than what would have been achieved using any higher-ranked method that is reasonably available; or

2. Use of the lower-ranked method is consistent with EPA's guidance, including its hierarchy for emission calculation methods and/or its identification of preferred methods for specific types of source operations, as set forth in the most current version of EPA's Emissions Inventory Improvement Program Guidance Document.

(c) For each emissions calculation method used in an Emission Statement which is a lower-ranked method being used pursuant to (b) above, a written justification shall be prepared documenting the basis for the use of the lower-ranked method. This justification shall be maintained on-site and be provided upon request to the Department. It shall include:

1. Identification of the quantification method that was the highest-ranked reasonably available method pursuant to the rankings in Table 3;

2. Identification of the method selected by the owner or operator pursuant to (b) above; and

3. An explanation of how selection of this method conforms with the applicable condition(s) in (b) above.

New Rule by R.2003 d.86, effective February 18, 2003 (operative March 24, 2003).
See: 34 N.J.R. 695(a), 35 N.J.R. 1059(a).
Rewrote the section. Recodified from 7:27-21.6(*l*).

7:27–21.7 Recordkeeping requirements

(a) For each Emission Statement submitted to the Department, the owner or operator of the facility subject to this subchapter shall maintain the following records at the facility for a period of five years from the date each submittal is due:

1. A copy of the Emission Statement submitted to the Department;

2. Records indicating how the information submitted in the Emission Statement was determined, including any calculations, data, measurements, and estimates used; and

3. Each written justification required pursuant to N.J.A.C. 7:27–21.6(c) documenting the basis for the selection of a lower-ranked method for quantifying emissions.

(b) Upon the request of the Department, the owner or operator of the facility shall make these records available at the facility for inspection by any representative of the Department during normal business hours.

(c) Upon receipt of a written request from the Department, the owner or operator of the facility shall timely submit a copy of the records specified in (a) above to the Department by mail or by other means as agreed to by the Department.

Recodified from N.J.A.C. 7:27–21.6 and amended by R.2003 d.86, effective February 18, 2003 (operative March 24, 2003).
See: 34 N.J.R. 695(a), 35 N.J.R. 1059(a).
In (a), rewrote the introductory paragraph and added 3; added (c). Former N.J.A.C. 7:27–21.7, Certification of information, recodified to N.J.A.C. 7:27–21.8.

7:27–21.8 Certification of information

(a) Any owner or operator who submits an Emission Statement to the Department shall include, as an integral part of the Emission Statement, the following two-part certification:

1. A certification signed by the individual or individuals (including any consultants) with direct knowledge of and responsibility for the information contained in the Emission Statement. The certification shall state:

"I certify under penalty of law that I believe the information provided in this emission statement is true, accurate and complete. For those portions of the above information based on estimates, those estimates are the result of good faith application of sound professional judgment, using techniques, factors, or calculations approved by the Department or EPA, or generally accepted in the trade. I am aware that there are significant civil and criminal penalties, including fines or imprisonment or both, for submitting false, inaccurate or incomplete information."

2. A certification signed by a responsible official, as defined at N.J.A.C. 7:27–21.1, which states:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this emission statement and all attached documents and, based on my inquiry of those officials immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I certify that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe any estimates are the result of good faith application of sound professional judgment, using techniques, factors, or standards approved by the Department or EPA, or generally accepted in the trade. I am aware that there are significant civil and criminal penalties, including fines or imprisonment or both, for submitting false, inaccurate or incomplete information."

(b) Certification of an Emission Statement, pursuant to (a) above, shall be performed in accordance with the following:

1. If the Emission Statement is being submitted electronically, the responsible official shall certify the submittal either by signing the certification on a paper form obtained from the Department or by inserting his or her personal identification number (PIN), as assigned by the Department, into the applicable signature area following the text of the certification language given on the electronic Emission Statement form; and this signature or insertion of a PIN shall constitute certification of the Emission Statement in accordance with (a) above; or

2. If the Emission Statement is being submitted on a paper form obtained from the Department, the responsible official shall sign the certification on the paper form; and this signature shall constitute certification of the Emission Statement in accordance with the certification language at (a) above.

(c) If a claim of confidentiality is being asserted pursuant to N.J.A.C. 7:27–1.6 for any part of an Emission Statement, both of the submittals shall be certified. That is, the submittal which omits the confidential information, and which includes only the information for which no claim of confidentiality is being made, shall be certified; and also the submittal which includes all the required Emission Statement information, including the information for which a claim of confidentiality is being made, shall be certified.

Recodified from N.J.A.C. 7:27–21.7 and amended by R.2003 d.86, effective February 18, 2003 (operative March 24, 2003).
See: 34 N.J.R. 695(a), 35 N.J.R. 1059(a).
In (a), substituted "owner of operator" for "person" in the introductory paragraph; added (b) and (c). Former N.J.A.C. 7:27–21.8, Request for extension, recodified to N.J.A.C. 7:27–21.9.
Administrative correction.
See: 35 N.J.R. 3618(a).

7:27–21.9 Request for extension

(a) If meeting the due date set forth at N.J.A.C. 7:27–21.4 for submittal of an Emission Statement would cause extreme hardship, an owner or operator may request an extension.

(b) A request for an extension shall include the following information:

1. The name of the facility; the mailing address of the facility, including its zip code; and its facility ID number, as assigned by the Department;

2. The name of the Emission Statement contact for the facility and the contact person's telephone number;

3. The name of the responsible official and the responsible official's telephone number;

4. The reasons and justifications for the inability to submit the Emission Statement by the due date and the extreme hardship that would be prevented if the Department allows an extension of the due date;

5. The revised date by which the owner or operator commits to submitting the Emission Statement. This revised date can be no later than one month from the due date; and

6. A certification, signed by the responsible official, in accordance with N.J.A.C. 7:27–1.39.

(c) A request for an extension shall be submitted, in writing, to the following address:

Chief, Bureau of Air Quality Planning
Department of Environmental Protection
PO Box 418
Trenton, N.J. 08625–0418
ATTN: Emission Statements—Extension Request

(d) A request to extend the due date must be received by the Department by April 1 of the submittal year for a paper submittal and by May 1 of the submittal year for an electronic submittal. The Department will not consider a request for an extension it receives after these dates.

(e) Within 10 working days after receipt of a request for extension, the Department will respond with its determination as to whether the request for extension is denied or granted and, if granted, the revised date by which the Emission Statement is due. The Department will grant an extension if the extension is necessary to prevent extreme hardship.