

Administrative change.
 See: 34 N.J.R. 2804(a).
 Public Notice: Draft General Permits comment opportunity.
 See: 35 N.J.R. 3415(b).
 Public Notice: General Permit (GP-010) for Degreasing Operations Using Non-HAP Volatile Organic Compounds (VOCs).
 See: 35 N.J.R. 3966(b).
 Public Notice: Draft General Permits comment opportunity.
 See: 35 N.J.R. 5308(c).
 Administrative change.
 See: 36 N.J.R. 183(a), 184(a), 1790(d), 3076(a).
 Public Notice: Draft General Permits comment opportunity.
 See: 36 N.J.R. 3303(b), 3303(c), 3304(a).
 Administrative change.
 See: 36 N.J.R. 4511(a), 4512(a), 4513(a).
 Public Notice: Small Emitter General Air Permit (SEGAP)(GP-016).
 See: 36 N.J.R. 4544(a).
 Public Notice: Draft General Permit (GP-015) for Non-MACT Plating Operations.
 See: 37 N.J.R. 142(a).
 Administrative change.
 See: 37 N.J.R. 4436(a), 4911(a).
 Public Notice: Draft General Permit (GP-020) for Research and Development.
 See: 38 N.J.R. 343(a).
 Public Notice: Air Quality Permitting: Opportunity for Public Comment on Revised General Permit (GP-005) for Emergency Generators.
 See: 38 N.J.R. 1351(a).
 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).
 Inserted "of" after "instructions for the use" in (g).
 Administrative change.
 See: 38 N.J.R. 2798(b).
 Public Notice: Announcement of Revised General Permit GP-008.
 See: 38 N.J.R. 2799(a).
 Administrative change.
 See: 39 N.J.R. 383(a).
 Public Notice: Draft General Permits comment opportunity.
 See: 39 N.J.R. 4452(a), 4867(c).
 Administrative change.
 See: 40 N.J.R. 880(a), 1646(a).
 Public Notice: Draft General Permits comment opportunity.
 See: 40 N.J.R. 5073(a).
 Administrative change and Announcement of General Permits (GP-017 and GP-018).
 See: 41 N.J.R. 583(a).

7:27-8.9 Environmental improvement pilot tests

(a) A person may seek approval for a preconstruction permit and certificate for an environmental improvement pilot test, as defined at N.J.A.C. 7:27-8.1, of air pollution control equipment or other environmental clean-up equipment under this section.

(b) An applicant for an environmental improvement pilot test shall ensure that the equipment shall comply with all applicable requirements, and that the activities shall not cause impacts outside the property boundary.

(c) An applicant for an environmental improvement pilot test approval shall submit the application on a form obtained from the Department at the address in N.J.A.C. 7:27-8.4(b). The application shall meet the requirements of N.J.A.C. 7:27-8.4, and shall include information regarding the planned sampling, analysis, equipment or processes, potential environmental impacts, the length of time requested for the test, projected emission rates, and any other information necessary

for the Department to ensure that the proposed activities fit within the definition of an environmental improvement pilot test at N.J.A.C. 7:27-8.1.

(d) The Department shall take final action on the application within 30 days of its receipt of a complete application.

(e) The Department shall determine the term of a permit and certificate for an environmental improvement pilot test approval on a case-by-case basis, but in no case shall the approval last longer than 90 days from the start of the actions covered by the environmental improvement pilot test approval. If the permittee wishes to extend the pilot test for 90 or fewer days, the permittee shall submit a new application for a preconstruction permit and operating certificate for an environmental improvement pilot test to the Department. The Department shall approve this application only if the applicant demonstrates that continued testing of the equipment or process is needed, and that the proposed activities remain within the definition of an environmental improvement pilot test at N.J.A.C. 7:27-8.1.

(f) The fee for an environmental improvement pilot test is set forth at N.J.A.C. 7:27-8.6.

(g) The holder of an environmental improvement pilot test approval shall keep records of product run time, emission testing performed, and other data relevant to the emission of air contaminants. These records shall be kept for a minimum of five years, and any relevant data obtained must be submitted with any future application covering the source.

(h) Upon completion of the environmental improvement pilot test, the equipment involved shall cease operating, or shall return to operating under the conditions of the existing permit, if any. An environmental improvement pilot test approval does not constitute Departmental acceptance of equipment or a process for future production purposes.

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).

Former N.J.A.C. 7:27-8.9, Reporting requirements, recodified to N.J.A.C. 7:27-8.15.

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 (e), deleted "The approval may be renewed by application", added "If the permittee ... pilot test" and substituted "approve this application" for "renew the environmental improvement pilot test approval".

7:27-8.10 Public comment

(a) The Department shall seek comments from the general public prior to making any final decision on those applications for which such comment is required by State or Federal statutes. Such applications include, but are not limited to, those applications which:

1. Are subject to the PSD requirements published at 40 CFR 52;

2. Must be submitted to the EPA for approval as revisions to any state implementation plan; or

3. Are subject to emissions offset requirements under N.J.A.C. 7:27-18.

(b) The Commissioner of the Department may seek comments from the public whenever the Commissioner finds a significant degree of public interest in an application, or whenever the Commissioner determines such comments might clarify one or more issues involved in the decision on the application. In determining whether to seek or accept public comment, the Commissioner shall consider factors relevant to the subject application and the applicable requirements. These factors may include, but are not limited to, the following:

1. The extent of any emissions increase;
2. The impact of any emissions increase on ambient air quality, human health and welfare, and the environment;
3. The applicant's record of compliance with air pollution control requirements;
4. Any other air pollution control aspects of the application or facility which might make the application of particular interest to the public.

(c) The Department shall notify those who submitted a written request for public comment of the Commissioner's decision regarding their request. The Commissioner's notification shall be in writing, and if the decision is a denial, the notification shall include a discussion of the factors in (b) above, as well as a description of all other factors which formed the basis for the decision.

New Rule, R.1991 d.109, effective March 4, 1991 (operative March 31, 1991).

See: 22 N.J.R. 292(a), 23 N.J.R. 723(a).

Old section recodified to 8.6.

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).

Recodified from N.J.A.C. 7:27-8.5 and 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. Former N.J.A.C. 7:27-8.10, Revocation, recodified to N.J.A.C. 7:27-8.16.

7:27-8.11 Standards for issuing a permit

(a) To obtain approval of a permit and certificate, a permit revision, or a compliance plan change, an applicant shall document that:

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.

“Fiberglass” means material consisting of fine filaments of glass that are combined into yarn and woven or spun into fabrics, or that are used as reinforcement in other materials or in masses as thermal or as acoustical insulating products for the construction industry.

“Fixed capital cost” means the capital needed to provide all the depreciable components of a facility, item of equipment or source operation.

“Flat glass” means glass produced by the float, sheet, rolled or plate glass process and formed into windows, windshields, table tops or similar products.

“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.

“Glass removed” means the amount of glass coming out of a glass melting furnace, expressed in short tons per day.

“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.

“Heavier than No. 2 fuel oil” means any fuel oil with an SSU viscosity greater than 45 at 100 degrees Fahrenheit.

“High electric demand day” or “HEDD” means the day following a day in which the next day forecast load is estimated to have a peak value of 52,000 megawatts or higher as predicted by the PJM Interconnection 0815 update to its Mid Atlantic Region Hour Ending Integrated Forecast Load, available from PJM Interconnection at <http://oasis.pjm.com/doc/projload.txt>.

“High electric demand day unit” or “HEDD unit” means an electrical generating unit, capable of generating 15 megawatts or more, that commenced operation prior to May 1, 2005, and that operated less than or equal to an average of 50 percent of the time during the ozone seasons of 2005 through 2007.

“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.

“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.

“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.

“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 or 19.23 is to be completed, or the period

of time for phased compliance under N.J.A.C. 7:27-19.22 as indicated by 2 below, as applicable.

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 begins on May 19, 2009 and ends on the date when an owner or operator is to attain full compliance with this subchapter, but no later than 12 months after May 19, 2010.

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.

“MWh” means megawatt-hour.

“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

nology 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).

“Shed load” means the systematic reduction through prior arrangement of system demand by temporarily decreasing load in response to transmission system or area capacity shortages, system instability, or voltage control considerations.

“Shift load” means the systematic reduction of system demand by temporarily decreasing load in response to transmission system or area capacity shortages, system instability, or voltage control considerations, through prior arrangement programs designed to encourage consumers to move their use of electricity from on-peak time to off-peak times.

“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.

“SSU viscosity” means the number of seconds it takes 60 cubic centimeters of an oil to flow through the standard orifice of a Saybolt Universal viscometer at 100 degrees Fahrenheit.

“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.

“Used oil” means any oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of such use, is contaminated by physical or chemical impurities, or unused oil that is contaminated by physical or chemical impurities through storage or handling.

“Viscosity” means the measure of a fluid’s resistance to flow.

“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”.

Amended by R.2009 d.137, effective April 20, 2009 (operative May 19, 2009).

See: 40 N.J.R. 4390(a), 41 N.J.R. 1752(a).

Added definitions “Asphalt pavement production plant”, “Blown glass”, “Class I renewable energy”, “Class II renewable energy”, “Clean distributed generation”, “Demand response”, “Dual fuel”, “Energy efficiency measure”, “Fiberglass”, “Flat glass”, “Glass removed”, “Heavier than No. 2 fuel oil”, “High electric demand day”, “High electric demand day unit”, “MWh”, “Non-high electric demand day unit”, “No. 2 and lighter fuel oil”, “On-specification used oil”, “Petroleum refinery”, “Pounds/MWh”, “Pressed glass”, “Renewable energy”, “Shed load”, “Shift load”, “SSU viscosity”, “Used oil” and “Viscosity”; deleted definition “Former DER credit user”; rewrote definitions “Clean Air Act” and “Interim period”; and in definition “Electric generating unit”, inserted “or ‘EGU’”; and alphabetized definition “CFR”.

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 a 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 pavement production plant;