NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION
NEW JERSEY ADMINISTRATIVE CODE
TITLE 7
CHAPTER 27
SUBCHAPTER 18

Control and Prohibition of Air Pollution from New or Altered Sources Affecting Ambient Air Quality (Emission Offset Rule)

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Please note: The Department has made every effort to ensure that this text is identical to the official, legally effective version of this rule, set forth in the New Jersey Register. However, should there be any discrepancies between this text and the official version of the rule, the official version will prevail.

REGULATORY HISTORY

Regulatory Action	**Proposal Date & NJR Citation**	**Date Adopted**	**Effective Date & NJR Citation**	**Operative Date**
Original Emergency Adoption and Concurrent Proposal		June 14, 1979	July 5, 1979 11 N.J.R. 327(a)	June 30, 1979
Amendment	July 5, 1979 11 N.J.R. 327(a)	July 3, 1980	August 2, 1980 12 N.J.R. 462(c)	September 8, 1980
Amendment	July 2, 1984 16 N.J.R. 1679(a)	January 10, 1985	March 11, 1985 17 N.J.R. 277(a)	
Amendment	October 5, 1992 24 N.J.R. 3459(a)	February 19, 1993	March 15, 1993 25 N.J.R. 1231(b)	April 20, 1993
Amendment	February 20, 1996 28 N.J.R. 1147(b)	June 3, 1996	July 1, 1996 28 N.J.R. 3414(a)	August 2, 1996
Amendment	February 5, 1996 28 N.J.R. 748(a)	September 24, 1996	November 4, 1996 28 N.J.R. 4784(a)	November 23, 1996
Amendment	August 18, 1997 29 N.J.R. 3521(a)	April 13, 1998	May 4, 1998 30 NJR 1563(b)	June 12, 1998
Amendment	July 6, 1999 31 N.J.R. 1671(a)	April 7, 2000	May 15, 2000 32 N.J.R. 1808(a)	June 6, 2000
Administrative Change			August 21, 2000 32 N.J.R. 3117(a)	
Amendment	August 4, 2003 35 N.J.R. 3486(a)	February 25, 2004	April 5, 2004 36 N.J.R. 1791(a)	April 25, 2004
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Amendment	November 5, 2007 39 N.J.R. 4492(a)	October 30, 2008	December 1, 2008 40 N.J.R. 6769(a)	December 29, 2008
Administrative Change			September 6, 2011 43 N.J.R. 2328(a)	

Amendment	March 20, 2017 49 N.J.R. 515(a)	October 10, 2017	November 6, 2017 (49 N.J.R. 3511(a))	December 9, 2017

7:27-18.1 Definitions

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

"Actual emissions" means the actual rate of emissions of an air contaminant from a source operation, equipment, or control apparatus. The actual rate of emissions, as of a particular date, shall equal the average rate at which the air contaminant was actually emitted during the two calendar years that are immediately preceding the particular date provided these are representative of normal source operation. The Department may allow the use of a time period different from this two year period only upon a determination that the different time period is more representative of normal operation. Actual emissions shall be calculated using the actual operating hours, production rates, and types of materials used, processed, stored, or combusted during the selected time period. Generally, the particular date is the permit application date, but may be another date specified by the Department. For any equipment, source operation, or control apparatus which has not begun normal operations as of the particular date, the Department shall assume that its actual emissions equal its allowable emissions. Actual emissions shall, for the purposes of this subchapter, be expressed in tons per year.

"Aerodynamic diameter" means the theoretical diameter of a nonspherical particle having the same terminal settling velocity as an equally dense, spherical particle of such diameter.

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

"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 an ambient air concentration that exceeds a standard established for the protection of human health and welfare and the environment.

"Air quality simulation model" means a 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.

"Allowable emission" means the rate at which an air contaminant may be emitted into the outdoor atmosphere. This rate shall be based on the maximum rated capacity of the equipment, unless the equipment is subject to Federally enforceable limits which restrict the operating rate, hours of operations, or both. In such cases this rate is based on the most stringent of the following:

1. Applicable standards of performance for new stationary sources (NSPS) as set forth in 40 CFR 60;

2. Applicable national emission standards for hazardous air pollutants (NESHAP) as set forth in 40 CFR 61;

3. Applicable emission, equipment, and operating standards as set forth in this chapter, including those with a future compliance date;

4. Applicable emission limitations specified in a Federally enforceable permit, including limitations with a future compliance date; and

5. Any emission limitation in an applicable State Implementation Plan (SIP).

"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 fuel" means, with respect to any source operation, any fuel whose use is not authorized by any permit or, for a source operation without a permit, this term means any fuel not used in the source operation since December 21, 1976.

"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 in 40 CFR 50.

"Attainment area" means any area of the State which is not a nonattainment area.

"Banking" means the reservation of creditable emission reductions, pursuant to N.J.A.C. 7:27-18.8, for future use as emission offsets.

"Carbon monoxide" or **"CO"** means a gas having a molecular composition of one carbon atom and one oxygen atom.

"CAA" means the Clean Air Act as amended November 1990 (42 USC 7401 et seq., as amended by Pub. L. 101-549).

"Commence construction" or **"commencement of construction"** means, with respect to construction, reconstruction, or modification of equipment or control apparatus at a facility, the beginning of initiation of physical on-site construction. For the purpose of this subchapter, this term shall include installation activities on any source operation, equipment, or control apparatus, which are of a permanent nature. Such activities shall include, but are not limited to,

establishment of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation at a facility, this term refers to the beginning of those on-site activities which mark the initiation of the change in method of operation.

"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.

"Construct" or **"construction"** means to fabricate or erect equipment or control apparatus at a facility where it is intended to be used, but shall not include the dismantling of existing equipment or control apparatus, site preparation, or the ordering, receiving, or temporary storage of equipment or control apparatus. Unless otherwise prohibited by Federal law, "construct" or "construction" shall also not include the pouring of footings or placement of a foundation where equipment or control apparatus is intended to be used. This term shall include installation of equipment or control apparatus.

"Consumer Price Index" or **"CPI"** means the annual Consumer Price Index for a calendar year as determined year to year using the decimal increase in the September through August, 12-month average for the previous year of the Consumer Price Index for All Urban Consumers (CPI-U), as published by the United States Department of Labor.

"Contemporaneous" means, in respect to newly constructed, reconstructed, or modified equipment, or a change in method of operation, occurring within a time period which includes:

1. The five years prior to the commencement of construction; and

2. The period between the commencement of the construction and the initiation of operation of the newly constructed, reconstructed, or modified equipment.

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

"Creditable emission reduction" means a decrease in actual emissions which meets the conditions listed in 1 through 5 below. A decrease is a creditable emission reduction only to the extent that the pre-decrease level of actual emissions or the pre-decrease level of allowable emissions, whichever is lower, exceeds the new level of allowable emissions. Decreases in allowable emissions attributable to equipment or control apparatus that was permitted, but never operated, shall not be considered a creditable emission reduction. In order to be a creditable emission reduction, the decrease must be:

1. Quantifiable;

2. Federally enforceable;

3. Not required pursuant to any Federal or State law, rule, permit, order, or other legal document;

4. Not relied on by the Department in the SIP or any revision thereto, adopted by the Department, to demonstrate attainment or maintenance of a NAAQS or to demonstrate reasonable further progress toward attainment of a NAAQS; and

5. Verifiable, to the satisfaction of the Department, to have in fact occurred.

"Criteria pollutant" means any air contaminant for which a NAAQS has been promulgated under 40 CFR 50 or for which a NJAAQS has been promulgated in N.J.A.C. 7:27-13.

"Emission offset" means a creditable emission reduction approved by the Department for use to offset an increase in allowable emissions of an air contaminant from a facility.

"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 into 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, equipment 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 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.

"Federally enforceable" means all limitations and conditions on operation, production, or emissions which can be enforced by the 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; or

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

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

"Initiation of operation" means, in respect to the operation of newly constructed, reconstructed, or modified equipment or a change in method of operation, the date on which any air contaminant is first emitted from the newly constructed, reconstructed, or modified equipment, or from the equipment affected by the change in method of operation.

"Install" or **"installation"** means to carry out final setup activities necessary to provide equipment or control apparatus with a capacity for use or service, and shall include, but need not be limited to, connection of equipment or control apparatus, associated utilities, piping, duct work, or conveyor systems, but shall not include construction or reconfiguration of equipment or control apparatus to an alternative configuration specified in a permit application and approved by the Department.

"Lead" or **"Pb"** means elemental lead or any compound containing lead.

"Lowest achievable emission rate" or **"LAER"** means a limitation on the rate of emission from any source operation, equipment, or control apparatus which is consistent with the most stringent of the following:

1. The most stringent emission limitation which is contained in the SIP of any state for such class or category of source operation, equipment, or control apparatus, unless the owner or operator of the proposed new or altered equipment or control apparatus demonstrates to the satisfaction of the Department that such a limitation is not achievable by that equipment or control apparatus;

2. The most stringent emission limitation which is achieved in practice by such class or category of source operation, equipment, or control apparatus; or

3. The most stringent emission limitation established in any NSPS or NESHAP applicable to such class or category of equipment or control apparatus.

"Minimum offset ratio" means the minimum acceptable ratio of emission offsets to increases in the allowable emissions for a facility.

"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 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.

"Motor vehicle" means a vehicle propelled otherwise than by muscular power, excepting motorized bicycles and such vehicles as run only upon rails or tracks.

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

"NESHAP" means National Emission Standards for Hazardous Air Pollutants as promulgated under 40 CFR 61.

"Net air quality benefit" means, in the area affected by a proposed emission increase of an air contaminant, a net decrease in the ambient concentration of the respective criteria pollutant for the air contaminant.

"Net emission increase" means, in respect to any air contaminant emitted at a facility, an increase calculated in accordance with the procedures set forth at N.J.A.C. 7:27-18.7(a).

"New Jersey ambient air quality standard" or **"NJAAQS"** means an ambient air quality standard promulgated at N.J.A.C. 7:27-13.

"Nitrogen dioxide" or **"NO_2"** means a gas that has a molecular composition of one nitrogen atom and two oxygen atoms.

"Nonattainment area" means any area of the State:

1. Identified by the Department as one in which the ambient air concentration of a criteria pollutant exceeds an ambient air quality standard; or

2. Designated by the EPA at 40 CFR 81.331 as an area in which the ambient air concentration of a criteria pollutant exceeds the applicable NAAQS.

"NO_x" or **"oxides of nitrogen"** means all the oxides of nitrogen including, but not limited to, nitric oxide and nitrogen dioxide, except nitrous oxide.

"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" means a "Certificate to Operate Control Apparatus or Equipment" issued by the Department pursuant to the Air Pollution Control Act of 1954, and in

particular 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).

"Ozone" or **"O_3"** means a gas having a molecular composition of three oxygen atoms.

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

"Person" means an individual, public or private corporation, 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.

"Plume rise" means the vertical distance from the point at which an effluent stream is discharged into the outdoor atmosphere to the highest point attained by the center line of the effluent stream.

"PM_{10}" means a class of air contaminants that includes all particulate matter having an aerodynamic diameter less than or equal to a nominal 10 microns.

"$PM_{2.5}$" means a class of air contaminants that includes all particulate matter having an aerodynamic diameter less than or equal to a nominal 2.5 microns.

"$PM_{2.5}$ inter-pollutant offset" means a creditable emission reduction of $PM_{2.5}$, or of a $PM_{2.5}$ precursor, used in a $PM_{2.5}$ nonattainment area to offset an emission increase of $PM_{2.5}$, or of a $PM_{2.5}$ precursor, to provide a net air quality benefit.

"Potential to emit" means the same as that term is defined by the EPA at 40 C.F.R. 70.2 or any subsequent amendments thereto. In general, the potential to emit is 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 any limitation on fugitive emissions as a result of any applicable requirement, 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. Unless otherwise indicated, 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 unit" means equipment assembled to produce intermediate or final products. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product. The storage and transfer of product or raw materials to and from the process unit shall be considered separate from the process unit for the purposes of making reconstruction determinations. Product recovery equipment shall be considered to be part of the process unit, not part of the control apparatus.

"Reasonable further progress" or **"RFP"** means such annual incremental reductions in emissions to the outdoor atmosphere of an air contaminant as are required by the CAA for the purpose of ensuring attainment of the NAAQS for the respective criteria pollutant by the applicable statutory deadline.

"Reconstruct" or **"reconstruction"** means the replacement of part(s) of equipment included in the process unit, or the replacement of part(s) of control apparatus, if the fixed capital cost of replacing the part(s) exceeds both of the following amounts:

1. Fifty percent of the fixed capital cost that would be required to construct a comparable new process unit; or, if it is part(s) of control apparatus that is being replaced, 50 percent of the fixed capital cost that would be required to construct comparable new control apparatus; and

2. $ 80,000, in 1995 dollars, adjusted by the Consumer Price Index (CPI).

"Resource recovery source" means any equipment used for processing solid waste (including refuse derived fuel and sewage sludge) for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse. For the purpose of this subchapter energy conversion equipment must use solid waste to provide more than 50 percent of the heat input to be considered a resource recovery source.

"Respective criteria pollutant" means the corresponding criteria pollutant for each air contaminant listed in Table 3 of N.J.A.C. 7:27-18.7. The following are the air contaminants listed in Table 3, and their respective criteria pollutants:

Category of Air Contaminants	**Respective Criteria Pollutant**
TSP	TSP
PM_{10}	PM_{10}
$PM_{2.5}$	$PM_{2.5}$
SO_2	SO_2 and $PM_{2.5}$
CO	CO
NO_x	NO_2, O_3, and $PM_{2.5}$
VOC	O_3
Pb	Pb

"Secondary emissions" means emissions to the outdoor atmosphere which occur as an indirect result of the construction or operation of new or altered source operations, equipment or control apparatus at a facility and which affect the air quality of the same general area as emissions occurring as a direct result of the new or altered source operation, equipment or control apparatus. This term includes, but is not limited to:

1. Emissions from marine vessels or from vehicles running upon rails or tracks where such vessels or vehicles are associated with the construction or operation of the new or altered source operation, equipment or control apparatus. The term does not, however, include emissions resulting from motor vehicle or aircraft traffic; and

2. Emissions from off-site support facilities which would be constructed or whose rate of emissions would otherwise increase as a result of the construction or operation of the new or altered source operation, equipment, or control apparatus.

"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.

"Significant net emission increase" means an emission increase of any air contaminant determined pursuant to the procedures set forth in N.J.A.C. 7:27-18.7 to be a significant net emission increase.

"SO_2" or **"Sulfur dioxide"** means a gas that has a molecular composition of one sulfur atom and two oxygen atoms.

"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.

"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" or **"SIP"** means a plan for the attainment of NAAQS, prepared by a state and approved by the EPA pursuant to Section 110 of the Clean Air Act (42 USC 1857 et seq.).

"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 a test method at N.J.A.C. 7:27B-1; 40 CFR 60, Appendix A, Methods 5 through 5H; or another test method approved by the Department and EPA.

"Transportation control measure" or **"TCM"** means a measure directed toward reducing air contaminant emissions from motor vehicles. Such measures include those identified in Section 108(f)(1)(A), including the removal from use and the marketplace of pre-1980 model year light duty vehicles and pre-1980 model year light duty trucks.

"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.

7:27-18.2 Facilities subject to this subchapter

(a) This subchapter applies to certain applications, submitted to the Department pursuant to N.J.A.C. 7:27-8 or 22 for authorization to construct, reconstruct, or modify control apparatus or equipment at a facility, if the requirements at (b) or (c) below apply and:

1. The facility has the potential to emit any of the air contaminants listed below in an amount that is equal to or exceeds the following threshold levels:

Air contaminant	**Threshold level**
CO	100 tons per year
PM_{10}	100 tons per year
$PM_{2.5}$	100 tons per year
TSP	100 tons per year
SO_2	100 tons per year
SO_2 (as a $PM_{2.5}$ precursor)	100 tons per year
NO_x	25 tons per year
NO_x (as a $PM_{2.5}$ precursor)	100 tons per year
VOC	25 tons per year
Lead	10 tons per year; or

2. The emission increase of an air contaminant, proposed in the application, by itself equals or exceeds the threshold level for that air contaminant set forth in (a)1 above.

(b) For a facility which meets the criteria at (a)1 or 2 above, an application is subject to this subchapter if any allowable emissions proposed in the application would result in a significant net emission increase of any air contaminant listed in Table 3 of N.J.A.C. 7:27-18.7, and if the facility for which the construction, reconstruction, or modification is proposed is located at an area which is any of the following:

1. Nonattainment for the respective criteria pollutant corresponding to that air contaminant. The respective criteria pollutant for each air contaminant is listed in the definition of the term "respective criteria pollutant" at N.J.A.C. 7:27-18.1;

2. Attainment for the respective criteria pollutant, and both (b)1i and ii below are true:

   i. The proposed significant net emission increase would result in an increase in the ambient concentration of the respective criteria pollutant in an area that is nonattainment for the respective criteria pollutant, as determined by an air quality impact analysis required under N.J.A.C. 7:27-8.5; and

   ii. The increase in the ambient concentration of the respective criteria pollutant equals or exceeds the significant air quality impact level specified in Table 1 in N.J.A.C. 7:27-18.4, in the nonattainment area for the respective criteria pollutant; or

3. Attainment for the respective criteria pollutant, and the proposed significant net emission increase would result in an increase in the ambient concentration of the respective criteria pollutant that would:

   i. Equal or exceed the significant air quality impact level; and

   ii. Result in a violation of an applicable NAAQS or NJAAQS, as determined by an air quality impact analysis required under N.J.A.C. 7:27-8.5.

(c) For a facility which meets the criteria at (a)1 above, an application is subject to N.J.A.C. 7:27-18.3(b)1 (LAER) and 2 (compliance certification), if:

1. Emission offsets for an air contaminant have been previously required at the facility for which the permit is sought;

2. The construction, reconstruction, or modification proposed in the application would, within the contemporaneous period, result in a net emission increase, which is not a significant net emission increase, of the same air contaminant for which offsets were required. A net emission increase shall be calculated pursuant to N.J.A.C. 7:27-18.7; and

3. The nonattainment area in which the facility is located (or, in the case of a facility located in an attainment area, the nonattainment area whose air quality would

have been impacted by emissions from the facility had emission offsets not been secured) has not been redesignated as being in attainment for the respective criteria pollutant as of the date the permit application is submitted to the Department.

(d) This subchapter shall not apply to any person applying for a permit, if the allowable emissions proposed in the application would result in no net emission increase, as calculated pursuant to N.J.A.C. 7:27-18.7(a).

7:27-18.2A (Reserved)

7:27-18.3 Standards for issuance of permits

(a) The Department shall not authorize the construction, reconstruction, or modification of any equipment or control apparatus which is subject to this subchapter unless the owner or operator of the facility has demonstrated that the facility will be in compliance with all of the applicable requirements of this subchapter at that time of initiation of operation of the newly constructed, reconstructed, or modified equipment.

(b) Any person subject to this subchapter pursuant to N.J.A.C. 7:27-18.2(a) and 18.2(b)1, (b)2, or (c), shall:

1. Demonstrate that air contaminant emissions from the equipment proposed to be constructed, reconstructed, or modified will be controlled to the degree which represents the lowest achievable emissions rate (LAER); and

2. Certify, in accordance with N.J.A.C. 7:27-1.39, that all existing facilities in New Jersey, which are owned or operated by the person applying for the permit, or by any entity controlling, controlled by, or under common control with such person, are operating:

   i. In compliance with the provisions of this chapter and with all applicable emission limitations and standards promulgated pursuant to the Federal Clean Air Act; or

   ii. In conformance with an enforceable compliance schedule approved by the Department.

(c) Any person subject to this subchapter pursuant to N.J.A.C. 7:27-18.2(a) and 18.2(b)1 or 2 shall:

1. Secure emission offsets, in accordance with N.J.A.C. 7:27-18.5, for each air contaminant having a significant net emission increase at the facility; and

2. Submit to the Department an analysis of alternative sites within New Jersey, and of alternative sizes, production processes, including pollution prevention

measures, and environmental control techniques, demonstrating that the benefits of the newly constructed, reconstructed, or modified equipment significantly outweigh the environmental and social costs imposed as a result of the location, construction, reconstruction or modification and operation of such equipment.

(d) Any person subject to this subchapter pursuant to N.J.A.C. 7:27-18.2(a) and 18.2(b)3 shall secure emission offsets, sufficient to eliminate the proposed significant net emission increase that has been predicted to result in a violation of the NAAQS or NJAAQS.

(e) Any applicant required to secure emission offsets pursuant to (c)1 or (d) above shall submit to the Department, as a part of the application, an emission offset demonstration that specifies:

1. The sources of the air contaminant emission reductions to be applied as emission offsets;

2. How the emission reductions shall be effected;

3. How the owner or operator of the facility generating the emissions offsets will make the permanent reduction of the emissions to be used as emission offsets Federally enforceable on or before the date that the Department will issue to the applicant the authorization required under N.J.A.C. 7:27-8 or 22;

4. How the applicant shall ensure that the permanent reduction of emissions shall be in effect on or before the initiation of operation of the newly constructed, reconstructed, or modified equipment or control apparatus; and

5. How the emission offsets to be secured will comply with N.J.A.C. 7:27-18.5.

(f) Emission offsets required pursuant to (c)1 or (d) above shall be secured and the permanent reduction of emissions represented by the emission offsets shall have occurred, prior to initiation of operation of any newly constructed, reconstructed, or modified equipment or control apparatus.

(g) A person who, prior to November 15, 1992, has submitted a complete application to the Department for a permit which is subject to this subchapter may elect, under the conditions given below, to have the provisions of this subchapter which were in effect prior to April 20, 1993, rather than the provisions of the subchapter which are in effect on or after April 20, 1993, apply to the application. The emission offset postponement provisions, set forth at N.J.A.C. 7:27-18.6, shall apply to all permits issued on or after November 15, 1992, regardless of the date on which the permit application was submitted. To elect to have the provisions which were in effect prior to April 20, 1993 apply, a person shall:

1. Have received from the Department in writing, prior to November 15, 1992, a determination that the application is complete;

2. Commence the new construction, reconstruction, or modification as proposed in the application no later than 18 months from the date the permit is issued by the Department;

3. Not discontinue the new construction, reconstruction, or modification for a period of 18 months or more; and

4. Pursue the new construction, reconstruction, or modification with due diligence and complete the new construction or alteration within a reasonable time.

(h) Notwithstanding the provisions of (c) or (d) above, no person is required to secure emission offsets for temporary emission increases that occur during and result directly from the construction, reconstruction, or modification of the newly constructed, reconstructed, or modified equipment or control apparatus.

7:27-18.4 Air quality impact analysis

(a) Any person, subject to this subchapter pursuant to N.J.A.C. 7:27-18.2(a) and (b), who proposes to cause a significant net emission increase of an air contaminant listed in Table 3 of N.J.A.C. 7:27-18.7, not including VOC, shall conduct an air quality impact analysis to determine whether the proposed net emission increase would result in an increase in the ambient concentration of the respective criteria pollutant, not including ozone, and shall determine whether the increase in ambient concentration would:

1. Equal or exceed the significant air quality impact level for the respective criteria pollutant as set forth in Table 1; or

2. Taken together with the existing concentration of the criteria pollutant in the ambient air, cause a violation of a NAAQS or a NJAAQS.

TABLE 1
SIGNIFICANT AIR QUALITY IMPACT LEVELS FOR INCREASES IN AMBIENT AIR CONCENTRATIONS IN NONATTAINMENT AREAS

	Averaging Time				
Pollutant	**Annual**	**24-Hour**	**8-Hour**	**3-Hour**	**1-Hour**
SO_2	1.0 μ/m^3*	5.0 μ/m^3		25 μ/m^3	
TSP	1.0 μ/m^3	5.0 μ/m^3			
NO_2	1.0 μ/m^3				
CO			500 μ/m^3		2000 μ/m^3
Pb		0.1 μ/m^3			
PM_{10}	1.0 μ/m^3	5 μ/m^3			
$PM_{2.5}$	0.3 μ/m^3	1.2 μ/m^3			

* μ/m^3 = micrograms per cubic meter

(b) Any person conducting an air quality impact analysis pursuant to (a) above is subject to the air quality impact analysis service fees set forth in the Supplementary Fee Schedule at N.J.A.C. 7:27-8.11 or 22.31, whichever is applicable.

(c) An air quality impact analysis shall be performed in accordance with a protocol approved by the Department. The protocol shall be prepared in accordance with the Department's technical manuals on Air Quality Modeling (Technical Manual 1002) and Risk Assessment (Technical Manual 1003). These manuals are available on the Department's website at http://www.nj.gov/dep/aqpp/techman.html, or by mail at the following address:

Department of Environmental Protection
Air Quality Permitting Program
Bureau of Technical Services
Air Quality Evaluation Section
401 East State Street, 2nd Floor
Mail Code 401-02
PO Box 420
Trenton, New Jersey 08625-0420
Telephone: (609) 633-1110

7:27-18.5 Standards for use of emission reductions as emission offsets

(a) Only a creditable emissions reduction, as defined at N.J.A.C. 7:27-18.1, may be used to offset an emission increase. Such emission reductions shall be:

i. Contemporaneous; or

ii. Banked in accordance with N.J.A.C. 7:27-18.8.

(b) Creditable emission reductions may result from:

1. Installing control apparatus to decrease the actual emissions from existing equipment or source operations;

2. Applying fugitive emissions control measures which reduce the rate of actual emissions to less than the allowable emissions;

3. Obtaining emission reductions banked pursuant to N.J.A.C. 7:27-18.8;

4. Permanently curtailing the actual production rate or operating hours of an existing source operation;

5. Implementing one or more transportation control measures (TCM);

6. Shutting down an existing source operation; or

7. Adopting any other measure approved by the Department, including, but not limited to, pollution prevention measures, that reduces the rate of actual emissions or allowable emissions, whichever is lesser.

(c) Any use of emission reductions to offset an emission increase shall result in a net air quality benefit. Except as provided in (e), (f), (g), or (*l*) below, such net air quality benefit shall be demonstrated by showing that the ratio of emission offsets to the proposed net increase in allowable emissions equals or exceeds the minimum offset ratio, specified in Table 2 below, that is applicable based on the distance between the facility and the location of the emission reductions being proposed as emission offsets.

TABLE 2
MINIMUM OFFSET RATIO

Air Contaminant	**Distance (miles)**	**Minimum Offset Ratio (Reductions: Increase)**
VOC	0-100 100-250 250-500	1.3:1.0 2.6:1.0 5.2:1.0
NO_x	0-100 100-250 250-500	1.3:1.0 2.6:1.0 5.2:1.0
NO_x (as a $PM_{2.5}$ precursor)	Any	1.0:1.0
SO_2	0-0.5 0.5-1.0 1.0-2.0	1.0:1.0 1.5:1.0 2.0:1.0
SO_2 (as a $PM_{2.5}$ precursor)	Any	1.0:1.0
TSP	0-0.5 0.5-1.0 1.0-2.0	1.0:1.0 1.5:1.0 2.0:1.0
PM_{10}	0-0.5 0.5-1.0 1.0-2.0	1.0:1.0 1.5:1.0 2.0:1.0
$PM_{2.5}$	Any	1.0:1.0
CO	0-0.5 0.5-1.0 1.0-2.0	1.0:1.0 1.5:1.0 2.0:1.0

(d) The minimum offset ratio for lead is 1.00:1.00.

(e) If an applicant proposes to use, as emission offsets, emission reductions that do not satisfy the distance and ratio requirements in Table 2 in (c) above, an air quality simulation model shall be used to demonstrate a net air quality benefit. Such emission reductions shall not be used as emission offsets unless the air quality simulation model shows that the combined effects of the proposed emission reductions, and of meeting the LAER requirements at N.J.A.C. 7:27-18.3(b), will result in a net air quality benefit. An air quality simulation model shall be performed in accordance with a protocol approved by the Department. The protocol shall be prepared in accordance with the Department's technical manual on Air Quality Modeling (Technical Manual 1002), available as stated in N.J.A.C. 7:27-18.4(c).

(f) Notwithstanding (e) above, in no case shall the minimum offset ratio be less than:

1. For CO, NO_x (as a $PM_{2.5}$ precursor), and SO_2 (as a $PM_{2.5}$ precursor), 1.00:1.00; and

2. For VOC and NO_x, 1.30:1.00.

(g) Creditable emission reductions may be used as emission offsets only:

1. If they are qualitatively equivalent in their effects on public health and welfare to the effects attributable to the proposed increase; and

2. If they are emission reductions of the same category of air contaminant, except as provided at (*l*) below.

(h) Reductions in emissions of VOC or NO_x between October 1 and April 30 inclusive, may not be used to offset increased emissions of VOC or NO_x emitted between May 1 and September 30 inclusive.

(*i*) Emission reductions used previously as emission offsets, or used in calculating the proposed net emission increase, in accordance with N.J.A.C. 7:27-18.7(a)1, may not be used again as emission offsets.

(j) Except as provided in (k) below, the emission reductions used to offset emission increases shall, unless the facility for which the emissions increase is proposed is located in an attainment area, be secured from the applicant's facility or from another facility located in the same nonattainment area as the applicant's facility. In a case where the facility at which the emissions increase is to occur is located in an attainment area, the emission reductions shall be secured from a facility in the nonattainment area whose air quality could be adversely affected by the proposed construction or alteration. In both cases, if the area has been designated a nonattainment area by EPA pursuant to 40 CFR 81.331, the emission reductions shall be secured from the same Federally-designated nonattainment area.

(k) Any emission offsets for lead shall be obtained from:

1. The facility to which the application for a permit pertains; or

2. Another facility which significantly contributes to the same violation of the NAAQS or NJAAQS for lead in the same nonattainment area as the facility for which an application for a permit has been made.

(*l*) An applicant that provides for the use of $PM_{2.5}$ inter-pollutant offsets shall demonstrate the net air quality benefit required at (c) above by showing that the ratio of emission offsets to the proposed net increase in allowable emissions equals or exceeds one of the following minimum offset ratios:

1. A $PM_{2.5}$ inter-pollutant offset ratio established by the Department, approved by EPA, and published by the Department in Technical Manual 1002, "Guidance on Preparing an Air Quality Modeling Protocol";

2. A $PM_{2.5}$ inter-pollutant offset ratio established by EPA and approved by the Department; or

3. A regional $PM_{2.5}$ inter-pollutant offset ratio developed by the applicant or by a regional air pollution control organization that includes a technical demonstration showing a net air quality benefit, and is approved by the Department and EPA.

(m) When a NO_x offset is required pursuant to N.J.A.C. 7:27-18.3(c) or (d), the NO_x offset shall be secured based on the more stringent of the two applicable NO_x offset ratios.

(n) $PM_{2.5}$ inter-pollutant offsets cannot be used to determine significant net emission increase levels pursuant to N.J.A.C. 7:27-18.7.

7:27-18.6 Emission offset postponement

(a) If the Department has authorized a postponement before April 20, 1993 of these amendments, for complying with N.J.A.C. 7:27-18.3(c)1 or (d), to any person, the postponement will continue in effect until one year after the emission offsets become available, provided that the person complies with (b) below.

(b) Until emission offsets become available, any person who has received a postponement described in (a) above shall demonstrate to the Department annually that emission offsets are unavailable and shall certify that demonstration in accordance with N.J.A.C. 7:27-1.39.

(c) Any person who has received a postponement described in (a) above shall obtain emission offsets within one year after they become available.

(d) A postponement shall terminate if a person fails to comply with (b) or (c) above.

7:27-18.7 Determination of a net emission increase or a significant net emission increase

(a) Any calculation to determine whether the maximum allowable emissions proposed in an application for a permit would result in a net emission increase or significant net emission increase at the facility of any air contaminant listed in Table 3 below shall be conducted in accordance with the following:

1. Determine the net emission increase of each air contaminant listed in Table 3 using the following formula:

$$NI = IP + INP + IF + IA - DO – DC$$

Where:

NI = The net emission increase at a facility

IP = Any increase(s) in the allowable emissions of the air contaminant which occurred during the contemporaneous period and which were authorized by permits issued by the Department;

INP = Any increase(s) in the allowable emissions of the air contaminant which occurred during the contemporaneous period and which came from any equipment or control apparatus for which no permit was in effect at the time of the increase;

IF = Any increase in fugitive emissions of the air contaminant from the facility during the contemporaneous period;

IA = Any proposed increase in allowable emissions of the air contaminant from the newly constructed, reconstructed, or modified equipment or control apparatus which is the subject of the permit application;

DO = Any increase(s) in the allowable emissions of the air contaminant which occurred during the contemporaneous period, if emission offsets were secured for these increases from the facility or from another facility; and

DC = The sum of all creditable emissions reductions at the facility during the contemporaneous period, not including any creditable emissions reductions previously used as emission offsets at the facility or any other facility.

2. Compare the net emission increase of each air contaminant, derived pursuant to (a)1 above, to the significant net emission increase level for that air contaminant set forth in Table 3 below. If the net emission increase is equal to or greater than the applicable significant net emission increase level, it is a significant net emission increase.

TABLE 3
SIGNIFICANT NET EMISSION INCREASES

Air Contaminant	**Significant Net Emission Increase Levels (tons per year)**
SO_2	40
SO_2 (as a $PM_{2.5}$ precursor)	40
TSP	25
PM_{10}	15
$PM_{2.5}$	10
NO_x	25
NO_x (as a $PM_{2.5}$ precursor)	40
CO	100
Pb	0.6
VOC	25

7:27-18.8 Banking of emission reductions

(a) Any person may apply to the Department for the banking of emission reductions to be applied in the future as emission offsets. The applicant shall make the application in writing, submitted on a form obtained from the Department, containing the following information: name and address of person making the application; chemical name of air contaminant; quality of emission reductions with supporting calculations and documentation; reason for the emission reduction; specification of the equipment or source operations related to the emission reductions; and any additional information reasonably necessary to enable the Department to determine that a creditable emission reduction has been achieved. Such a form may be requested from:

Department of Environmental Protection
Division of Air Quality
Air Quality Permitting Program
Bureau of Air Permits
Mail Code 401-02
PO Box 420
Trenton, New Jersey 08625-0420

(b) Any application for the banking of emission reductions shall be certified in accordance with N.J.A.C. 7:27-1.39.

(c) An application to bank emission reductions shall be made no later than 12 months after the emission reduction occurs. No emission reductions due to the shutdown of any equipment or source operation shall be eligible for banking, unless the applicant notifies the Department at least 60 days prior to removal of the equipment and provides the

Department with the opportunity to inspect the equipment or source operation at least 30 days before it is dismantled.

(d) Any emission reductions submitted to the Department for banking shall, upon their approval by the Department for banking, be an enforceable operating restriction for the facility.

(e) If a State or Federal statute, rule, or regulation decreases an allowable emission limit for an air contaminant, the value of any banked emission reductions of that air contaminant shall be reduced, before discounting pursuant to (f) or (g) below, to equal the allowable emission limits in effect at the time the banked emission reductions are used to offset emission increases. The following example illustrates this reduction:

1. Assume that a CO reduction of 10 tons per year is approved for banking, and that seven years after that approval, the CO limit applicable to the equipment is reduced to four tons per year;

2. If the banked emission reduction is used five years after it was approved for banking, under (f) below its value is discounted by 50 percent, to five tons per year; and

3. If the banked emission reduction is used eight years after it was approved for banking (which is after the date of the change in the applicable CO limit), its value is reduced to two tons per year, as follows: first, from 10 tons per year to four tons per year, to reflect the reduction in the applicable CO limit; and second, from four tons per year to two tons per year, to reflect the 50 percent discount under (f) below.

(f) The value of banked emission reductions obtained from the shutdown or curtailment of operation of any equipment or source operation which remain unused as emission offsets for more than five years after the date the emission reduction is submitted for banking shall be discounted by 50 percent. As of the date five years after the date of submittal for banking, the discounted portion of the banked emission reductions may no longer be used as an emission offset by the applicant or by any person to whom the banked emission reductions may have transferred by the applicant, but shall revert to the State.

(g) Any banked emission reductions obtained from the shutdown or curtailment of operation of any equipment or source operation which remain unused as emission offsets for 10 years after the date they have been submitted for banking, shall revert to the State. As of the date 10 years after the date of submittal for banking, these emission reductions may no longer be used as emission offsets by the applicant or by any person to whom the banked emission reductions may have transferred by the applicant.

(h) Any discount of or reduction in the value of banked emission reductions pursuant to (e), (f) or (g) above shall take effect without further action by the Department.

(*i*) For the purposes of the discounting provisions set forth in (f) and (g) above, the Department shall treat any emission reductions which have been submitted for banking prior to April 20, 1993, as if they were submitted for banking on April 20, 1993.

(j) Any person applying for banking of emission reductions pursuant to this section is subject to the following service fees for banking:

Banking fees			
	Activity	Basis	Amount
a.	Base Application Review	Per Source Operation	$ 200.00
b.	Verification	Per Source Operation	$ 200.00
c.	Transfer of Facility Ownership	Per Source Operation	$ 50.00
d.	Withdrawal of Credits	Per Source Operation	$ 200.00
e.	Donation of Credits to the State of New Jersey	Per Source Operation	00.00

7:27-18.9 Secondary emissions

(a) Any person subject to this subchapter pursuant to N.J.A.C. 7:27-18.2(a) and 18.2(b)1, (b)2, or (c) shall certify that any increases in secondary emissions under the person's control will meet all requirements of N.J.A.C. 7:27-18.3.

(b) Any person subject to this subchapter pursuant to N.J.A.C. 7:27-18.2(a) and 18.2(b)1, (b)2, or (c) shall certify that any increases in secondary emissions not under the person's control will meet the requirements of only N.J.A.C. 7:27-18.3(c)1.

(c) The certifications required under (a) and (b) above shall be submitted with the application and shall be made in accordance with N.J.A.C. 7:27-1.39.

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.

7:27-18.11 (Reserved)

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.