ENVIRONMENTAL PROTECTION

AIR QUALITY, ENERGY, AND SUSTAINABILITY

DIVISION OF AIR QUALITY

Air Pollution Control: Air Emission Control and Permitting Exemptions, Hazardous Air Pollutant Reporting Thresholds, and CAIR NO_x Trading Program and NO_x Budget Trading Program

Proposed Amendments: N.J.A.C. 7:27-8.1, 8.2, 8.4, 8.12, 8.18, 8.20, 8.21, 7:27-8 Appendix 1, Table A, 16.1, 16.4, 16.6, 16.10, 16.16, 16.17, 17.1, 17.4, 17.9, 19.1, 19.2, 19.7, 19.8, 19.11, 19.16, 19.25, 21.3, 22.1, 22.3, 22.6, 22.9, 22.22, 22.27, 22.30, 22.35; and 7:27A-3.10

Proposed Repeals: N.J.A.C. 7:27-8 Appendix Table B, 16.26, 7:27-22 Appendix Table B, 17.7, 19.24, 30, and 31

Proposed New Rule: N.J.A.C. 7:27-17.9

Authorized By: Bob Martin, Commissioner, Department of Environmental Protection.

Authority: N.J.S.A. 13:1B-3.e, 13:1D-9, 26:2C-8 et seq., specifically 26:2C-8 through 8.5, and 8.11, and 39:8-41 et seq., specifically, 39:8-41 through 58.

Calendar Reference: See Summary below for explanation of exception to calendar requirement.

DEP Docket Number: 12-17-06.

Proposal Number: PRN 2017-139.

A **public hearing** concerning this notice of proposal and the proposed State Implementation Plan (SIP) revision that this proposed rulemaking represents will be held on Wednesday, September 6, 2017, at 10:00 A.M. at:

New Jersey Department of Environmental Protection

Hearing Room, 1st Floor

401 East State Street

Trenton, New Jersey 08625

Directions to the hearing room may be found at the Department's website address at www.nj.gov/dep/where.htm.

Submit comments by close of business on October 6, 2017, electronically at www.nj.gov/dep/rules/comments. Each comment should be identified by the applicable N.J.A.C. citation, with the commenter's name and affiliation following the comment.

The Department encourages electronic submittal of comments. In the alternative, comments may be submitted on paper to:

Alice A. Previte, Esq.

Attention: DEP Docket No. 12-17-06

Office of Legal Affairs

New Jersey Department of Environmental Protection

401 East State Street, 7th Floor

Mail Code 401-04L

PO Box 402

Trenton, NJ 08625-0402

Written comments may also be submitted at the public hearing. It is requested (but not required) that anyone providing oral testimony at the public hearing provide a copy of any prepared text to the stenographer at the hearing.

The Department will provide a copy of the proposed SIP revision to the United States Environmental Protection Agency.

The proposed new rule, repeals, amendments, and recodifications will become operative 60 days after their adoption (see N.J.S.A. 26:2C-8). The rule proposal may be viewed or downloaded from the Department's website at www.nj.gov/dep/rules.

The agency proposal follows:

Summary

As the Department of Environmental Protection (Department) has provided a 60-day comment period on this notice of proposal, this notice is excepted from the rulemaking calendar requirement pursuant to N.J.A.C. 1:30-3.3(a)5.

The Department is proposing new rules, repeals, and amendments to implement changes based on the experience it has gained in responding to disruptions caused by natural disasters such as Superstorm Sandy, availability of current data and new methodologies for determining hazardous air pollutant (HAP) thresholds, changes in Federal requirements regarding state programs to address emissions of oxides of nitrogen (NO_x), and discussions that the Department has held with representatives of the regulated community and environmental groups. The rulemaking consists of three major categories: 1) exemptions from air emission control and permitting requirements to improve resiliency in emergency and similar situations, and provide

flexibility for facilities to use low-emitting temporary and portable equipment; 2) updates to HAP reporting thresholds using the most recent science-based methodologies; and 3) repeal of N.J.A.C. 7:27-30, CAIR NO_x Trading Program, and 31, NO_x Budget Program, which have been Federally preempted. Additional proposed amendments conform the administrative penalties at N.J.A.C. 7:27A-3.10 to the proposed rules, and correct errors and inconsistencies throughout N.J.A.C. 7:27.

In 2014, the Department initiated discussions with stakeholders to consider rulemaking with the goal of promoting the most effective and efficient use of the Department's air program resources without compromising environmental protection. As part of the initiative, the Department sought the assistance of the Industrial Stakeholders Group, or ISG, which focuses on air quality permitting in the State of New Jersey. The ISG is composed primarily of Department air quality permitting staff, Department air quality enforcement staff, and representatives of regulated industries. The ISG meets quarterly to discuss ways of promoting effective and consistent permits that are protective of the environment and consider the concerns of the regulated community (www.nj.gov/dep/aqpp/isg.html).

For the rulemaking initiative, the ISG formed a subgroup, made up of two workgroups: one consisted of representatives of facilities operating in New Jersey that are subject to the Air Pollution Control rules (N.J.A.C. 7:27), and the other of representatives of the environmental community. The subgroup was charged with developing a list of proposed regulatory amendments in furtherance of the initiative. After many separate workgroup meetings, in December 2015, the subgroup met to conceptually agree on and finalize a list of recommendations for rulemaking. The Department then carefully considered the list and selected those options that best aligned with the Department's stated goal. Except for the

proposed repeal of the CAIR NO_x Trading Program and NO_x Budget Program rules, this rulemaking is a direct result of this focused stakeholder process.

The Department held meetings with stakeholders outside of the ISG on December 19, 2016, and February 23, 2017, to discuss all the components of the proposed rulemaking. Stakeholder meeting materials are available on the Department's website at www.nj.gov/dep/workgroups/.

Air Emission Control and Permitting Exemptions

In recent years, New Jersey has experienced weather events, such as Superstorm Sandy, that have caused widespread destruction and power outages. Existing rules would have required some facilities to obtain an air permit before they could operate emergency equipment during the storm, or during the post-storm recovery; regulatory limits on the use of equipment without an air permit would have prohibited some critical time-sensitive operations. In order that government and business entities could respond quickly and recover from these events – be more resilient - the Department suspended, on an emergency basis, its permitting requirements for certain necessary portable and temporary equipment. For example, in the aftermath of Superstorm Sandy, the Department issued Compliance Advisory 2012-19 to allow industrial/commercial facilities throughout the State to use rental emergency generators and packaged boilers without going through the otherwise-required permitting process. (See http://www.nj.gov/dep/enforcement/advisories/2012-19.pdf.) The compliance advisory did not apply to residential operations, which are not subject to the Air Pollution Control rules at N.J.A.C. 7:27.

The Department's goal is to fulfill its mandate to protect the environment, but at the same time enable affected businesses to be more resilient and to respond quickly to disruptions with as little interruption to business operations as possible. Based on its experience, the Department has developed consistent interpretations of the rules as they apply to emergency equipment. Because many of the same issues are raised by the use of temporary and portable equipment under non-emergency conditions, as discussed further below, the Department has also developed consistent interpretations of the rules as they apply to temporary and portable equipment.

The Department is proposing to amend its permitting rules at N.J.A.C. 7:27-8, Permits and Certificates for Minor Facilities (and Major Facilities without an Operating Permit), and 22, Operating Permits, its rules governing emissions of volatile organic compounds (VOCs) at N.J.A.C. 7:27-16, Control and Prohibition of Air Pollution by Volatile Organic Compounds, and emissions of oxides of nitrogen (NO_x) at N.J.A.C. 7:27-19, Control and Prohibition of Air Pollution from Oxides of Nitrogen, to provide exemptions from the permitting, VOC, and NO_x RACT rules for equipment that is used during and after natural and human-caused disasters.

The proposed rules also exempt from permitting requirements (but not other applicable rules) certain equipment that has a negligible environmental impact, either because the Department has limited the number of hours the equipment may be used without a permit, or for some other reason, as described below.

Exemptions for equipment used in emergencies and emergency aftermath

Portable equipment used for emergency management activities

A major weather event, such as Superstorm Sandy, often results in the need for the rapid deployment of portable equipment. Often the existing rules require a permit before this

equipment can be used. An example is debris removal equipment, which is considered a "significant source operation" because the combined weight of the raw materials that the equipment processes exceeds 50 pounds in any one hour. See the preconstruction permit and operating certificate requirements at existing N.J.A.C. 7:27-8.2(c)19, and the operating permit requirements at paragraph 6 of the definition of "significant source operation" at existing N.J.A.C. 7:27-22.1 and 22.6(d). Applying for and obtaining a permit delays the availability of the equipment for use in anticipation of or response to major events.

The Department, therefore, proposes new N.J.A.C. 7:27-8.2(d)17 to exempt from the preconstruction and operating certificate requirements portable equipment that is being used for emergency management activities. The proposed amended definition of "exempt activity" at N.J.A.C. 7:27-22.1 provides a corresponding exemption from the operating permit requirements. An "emergency management activity" is defined at proposed amended N.J.A.C. 7:27-8.1 and 22.1 as an activity to mitigate against, prepare for, respond to, and recover from threatened or actual natural disasters, acts of terrorism, or other man-made disasters. This definition is derived from the Federal Emergency Management Agency's use of the term. Because it may be necessary to use the equipment in advance of, for example, an anticipated weather event in order to reduce the impact of that event, the proposed definition includes activities in advance, if the activities are to mitigate against or prepare for the event.

The proposed new definition of "portable" at N.J.A.C. 7:27-8.1, 19.1, and 22.1 is consistent with the Department's definition of that term by footnote to the August 4, 2011 Memorandum "Permit Applicability for Equipment and Source Operations Operated During Construction, Repair and Maintenance Events" that clarified the Department's practices and is

the basis for the proposed new provisions at N.J.A.C. 7:27-8.2(d)15 through 19 and 22.1, the new paragraphs 15 through 19 of the definition of "exempt activity."

In order to be exempt from the permit requirements, the equipment must be in use for an emergency management activity; equipment that could be put into use in an emergency, but is being used for another purpose, is not exempt from permitting requirements to the extent that it is being used for that other purpose. Equipment that is used for incineration or open burning is not exempt. The proposed amendments require the equipment to be moved from the site no later than 90 days after it is first used there. Unlike other provisions of the rules that limit the use of portable equipment to a 90-day period in a single calendar year (for example, N.J.A.C. 7:27-8.8(c)19), the proposed rules do not limit the number of consecutive 90-day periods that the equipment may be used on a site; if more than one event requiring emergency management activities takes place in a year, the equipment may be needed again. However, if the equipment is needed for more than 90 days at a time, there is sufficient time for the owner or operator to obtain a permit for its use; during the first 90 days, the equipment can be operated without a permit.

Exemptions for equipment used in situations similar to emergencies

Emergency generators used during non-emergency power disruptions

Emergency generators are designed to supply power for a limited time in response to an emergency, as defined in the rules and discussed below. These generators are subject to permit requirements at N.J.A.C. 7:27-8.2(c)1 and paragraph 11 of the definition of "significant source operation" at N.J.A.C. 7:27-22.1. However, their limited use is the basis for the conditional exemption of qualifying generators from the existing VOC Reasonably Available Control

Technology (RACT) rules (N.J.A.C. 7:27-16) and NO_x RACT rules (N.J.A.C. 7:27-19). The VOC and NO_x RACT rules apply to stationary reciprocating engines, which these emergency generators technically are, but emergency generators are expressly excluded from the VOC RACT provisions governing stationary reciprocating engines at N.J.A.C. 7:27-16.10(a). Until 2005, emergency generators were also expressly excluded from NO_x RACT requirements. In a proposal to expand the scope of N.J.A.C. 7:27-19, the Department stated its intention to add recordkeeping requirements for emergency generators, but to continue to otherwise exclude them from the NO_x RACT requirements. See 36 N.J.R. 4228 at 4232, where the Department explicitly stated, "The proposed rule and amendments would continue to exempt emergency generators from the substantive requirements of the proposed new rule and amendments, and would require only recordkeeping to ensure that the engines meet the definition of 'emergency generator.' N.J.A.C. 7:27-19.11." See also the proposed rule text at 36 N.J.R. 4228 at 4245. However, a modification to the rule on adoption inadvertently removed the language intended to exclude emergency generators from all but the recordkeeping requirements. See 37 N.J.R. 3976(a) at 3999. The proposed amendment to N.J.A.C. 7:27-19.2(d) corrects this mistake.

For purposes of N.J.A.C. 7:27-16 and 19, and, therefore, for purposes of the conditional exemption, an "emergency generator" is narrowly defined as being operated only during power outages (black outs), voltage reductions (brown outs) issued by PJM (the regional electricity transmission organization), or during testing and maintenance of the emergency generator (N.J.A.C. 7:27-19.1 and 19.1). If an emergency generator is in use for an extended period of time, it is because there is a prolonged power outage, such as from a major storm. The Department proposes to define PJM at N.J.A.C. 7:27-16.1 and 19.1, as that term is used but not defined in these rules.

In recent years, the Department has seen a significant increase in applications for the installation of non-residential emergency generators (the Department issued 461 air permits for natural gas-fired emergency generators in 2013 through 2016). The Department attributes the increase to the applicants' desire to avoid extended power outages, such as many in the State experienced in the wake of Superstorm Sandy. These newly installed emergency generators, which are primarily natural gas-fired, are typically cleaner than those available for rent, which are almost always diesel fuel-fired.

Both the existing definition of "emergency generator" at N.J.A.C. 7:27-19.1 and the applicability provisions at N.J.A.C. 7:27-19.2(d)1 exempt the use of an emergency generator from NO_x RACT requirements only during an "emergency," as defined at N.J.A.C. 7:27-19.1. An "emergency" is a situation that arises from a sudden and reasonably unforeseeable event beyond the control of an owner or operator of a facility that requires immediate corrective action to prevent a system collapse or to restore normal operations at the facility. The Department proposes to amend the definition of "emergency" at N.J.A.C. 7:27-8.1 and 22.1 to be identical to the definitions of that term at N.J.A.C. 7:27-16.1 and 19.1. This amended definition coordinates with the proposed amended definition of "emergency generator" at N.J.A.C. 7:27-16.1 and 19.1. A generator that is used during a temporary power disruption that results from construction or infrastructure repair or maintenance activities at the facility is not exempt from the NO_x RACT provisions of the existing rules. Similarly, the existing rules do not exempt from the NO_x RACT rules, a generator used to power equipment for construction, repair, or maintenance at the facility. Neither use is an "emergency" under the existing rules. Thus, in order to power construction or repair equipment or to provide short-term non-emergency power to the facility, under the existing rules the facility must have some other power source that meets the RACT

requirements. In many cases, the facility would rent a diesel-fired generator, which may be more polluting than the emergency generator (which is usually powered by natural gas), and represents an additional cost to the facility. Under the circumstances, the limited use of an emergency generator would be preferable, both environmentally and economically.

The Department is proposing to expand the allowable use of emergency generators, without being subject to VOC or NO_x RACT requirements, by amending the definition of "emergency generator" at N.J.A.C. 7:27-16.1 and 19.1, and the applicability provisions of N.J.A.C. 7:27-19.2(d). The proposed amended rules allow a facility to use an emergency generator during a non-emergency electrical power disruption that results from construction, repair, or maintenance activity at the facility, or to power equipment used for non-emergency construction, repair, or maintenance of infrastructure and/or equipment of the facility. Operation of the emergency generator for a non-emergency use under this subparagraph is limited to 30 days in any calendar year. There is no similar time limit for the use of an emergency generator during an emergency. As a result of the proposed amendments, facilities that have emergency generators will not incur the cost of renting or otherwise obtaining a generator during non-emergency power outages, or to operate construction equipment. To the extent that the emergency generators are cleaner-burning than the temporary generator that a facility would otherwise use, there is an environmental benefit from the proposed amendments.

The proposed amended definition of "emergency generator" identifies the allowable uses of the generator. Use of the generator for repair and maintenance, subparagraph 3i of the existing definition, is relocated to proposed amended N.J.A.C. 7:27-19.2(d)1. The Department does not propose to amend the permitting provisions at N.J.A.C. 7:27-8 and 22 regarding emergency generators. In addition, the Department has recognized the need for public water systems,

wastewater and stormwater systems, and sludge management facilities to perform normal testing and maintenance on their emergency generators, regardless of air quality, during the 48 hours prior to a National Weather Service-designated named storm impacting the facility's area of the State. The Department provided for such testing in its October 28, 2015 Memorandum "Approval for Testing and Maintenance of Emergency Generator within 48 hours of a National Weather Service designated named storm" signed by Richelle Wormley, Director, Division of Air Enforcement. The proposed amended N.J.A.C. 7:27-19.2(d)2 reflects the requirements in that memorandum including notification of the Department when air quality is forecast to be unhealthy or worse during that time of testing.

Combustion sources burning fuel oil during curtailment of natural gas supply

A "combustion source," as defined at N.J.A.C. 7:27-19.1 is a source operation or item of equipment that combusts fuel. This includes, but is not limited to, boilers, combustion turbines, and dryers. Some combustion sources have the capacity to combust both natural gas and fuel oil or other liquid fuel. If a combustion source uses liquid fuel only during natural gas curtailment (when natural gas is unavailable), then existing N.J.A.C. 7:27-19.25 exempts the combustion source from the NO_x emission limits during the time it combusts liquid fuel, provided the boilers combust liquid fuel for no more than 500 hours during a consecutive 12-month period. Existing N.J.A.C. 7:27-19.25(b) limits the time of year to which the exemption applies, depending on whether the combustion source uses natural gas as its primary fuel, or is operating under an approved seasonal plan. A condition of the exemption is that the unavailability of natural gas is beyond the control of the owner or operator of the combustion source. Examples of natural gas

curtailment are when a gas utility diverts natural gas from its industrial customers during an extended heat wave when the demand for power requires the utility to combust greater amounts of natural gas to generate electricity for air conditioning and other demands; or when the utility's supply line to an industrial facility is broken or unsafe to use.

The Department recognizes that the operation of a facility may be crippled if natural gas remains unavailable for more than 500 hours (roughly 20 days) during a consecutive 12-month period; the existing rule requires the owner or operator to obtain or modify its permit to enable the combustion source to operate on liquid fuel and to have the combustion source comply with the applicable NO_x emission limits in N.J.A.C. 7:27-19.4, 19.5, 19.7, 19.8, 19.9 or 19.10, or an applicable NO_x emission limit established under N.J.A.C. 7:27-19.13, 19.20, 19.21, 19.22 or 19.23, while the fuel oil or other liquid fuel is burned. The Department proposes to delete only the 500-hour limit at N.J.A.C. 7:27-19.25(c)4, and recodify the remaining paragraph. Under the proposed amended rule, a combustion source can continue to operate without interruption during the full period of natural gas curtailment. Once the supply of natural gas is restored, the combustion source must return to using only natural gas, or else obtain an appropriate permit. As a practical matter, few facilities have reached the 500-hour limit in N.J.A.C. 7:27-19.25(c)4, except during significant weather events and their aftermath, which are the circumstances this proposed rule is designed to address.

Proposed amended N.J.A.C. 7:27-19.25(d) addresses a discrepancy between existing N.J.A.C. 7:27-19.25(d) and 19.19(g). N.J.A.C. 7:27-19.25(d) refers to the submission of quarterly reports. However, N.J.A.C. 7:27-19.19(g) provides for either quarterly reports (N.J.A.C. 7:27-19.19(g)1) or annual reports (N.J.A.C. 7:27-19.19(g)2), depending on whether a combustion source is equipped with a continuous emission monitoring system (CEMS). By

replacing "required quarterly" with a reference to N.J.A.C. 7:27-19.19(g), the Department eliminates the discrepancy, that is, quarterly reports are required if a combustion source has a CEMS and annual reports if it does not.

Exemptions for low-emitting temporary and portable equipment

Engines powering portable equipment

Non-emergency stationary reciprocating engines with an electric output greater than 37 kilowatts (kW) must comply with the NO_x emission standards at N.J.A.C. 7:27-19.8. Engines that power portable equipment often fall into this category, which means that the owners or operators of those engines would have to install air pollution control devices in order to comply with the NO_x emission standards. An example is a concrete crusher, which is portable equipment that is moved from place to place within a construction site, and from one site to another. A contractor may bring the equipment on site to perform a specific job that requires concrete crushing. The engine powering this portable equipment cannot be easily or inexpensively retrofitted to meet NO_x emission standards. Any retrofitting would be bulky, so that the equipment would no longer be truly portable. The Department, therefore, proposes new N.J.A.C. 7:27-19.2(g) to exclude from the subchapter engines that are not connected to the electric power distribution grid, not replacing grid power, and are portable and supplying power only to portable equipment. The Department does not propose to exempt engines that are connected to the electric power distribution grid or are replacing grid power; such engines remain subject to the NO_x emission standards at N.J.A.C. 7:27-19.8. The Department does not

propose to amend the permitting requirements for generators powering portable equipment at N.J.A.C. 7:27-8 and 22.

Construction engines and construction, repair, and maintenance equipment

Construction engines are mobile engines used for construction at a site for a limited time period, and are defined at existing N.J.A.C. 7:27-16.1 and 19.2. The existing VOC RACT and NO_x RACT rules do not apply to construction engines; the VOC and NO_x rules apply to stationary reciprocating engines, which construction engines technically are, but construction engines are expressly excluded from the definitions of "stationary reciprocating engine" at N.J.A.C. 7:27-16.1 and 19.2. Accordingly, the VOC and NO_x provisions that apply to stationary reciprocating engines (specifically N.J.A.C. 7:27-16.10 and 19.8) do not apply to them, although the owner or operator must obtain a permit to operate the engine.

The Department proposes to exempt construction engines from the permitting requirements at N.J.A.C. 7:27-8 and 22. The proposed new definitions of "construction engine" at N.J.A.C. 7:27-8.1, 16.1, and 22.1 are identical to that at N.J.A.C. 7:27-19.1, which the Department proposes to put in the correct alphabetical order. There are no substantive changes in the proposed amended definitions of "stationary reciprocating engine" at N.J.A.C. 7:27-16.1 and 19.1; the Department proposes to ament them to read better. The Department used this amended language for the proposed new N.J.A.C. 7:27-8.1 and 22.1, where these terms are used, but not defined in the existing rules. Because a construction engine is excluded from the proposed definitions of "stationary reciprocating engine," existing N.J.A.C. 7:27-8.2(c)21 and paragraph 20 of the definition of "significant source operation" at N.J.A.C. 7:27-22, which require certain stationary reciprocating engines to obtain preconstruction permits and operating certificates and operating permits, will no longer apply to construction engines.

Portable equipment used for repair and maintenance activities at a facility is also mobile and is similarly used for a limited period of time. The Department proposes to amend the Air Pollution Control rules to exempt certain portable construction, repair, and maintenance equipment from the requirement to obtain an air permit. Proposed new N.J.A.C. 7:27-8.2(d)15 identifies construction, repair, and maintenance equipment as exempt from N.J.A.C. 7:27-8. The proposed amended definition of "exempt activity" at N.J.A.C. 7:27-22.1 exempts the construction, repair, and maintenance equipment from N.J.A.C. 7:27-22. The United States Environmental Protection Agency (EPA) considers portable equipment remaining on site for more than a year to be a stationary source, and, thus, subject to applicable Federal regulations. Therefore, the Department proposes to limit the exemptions to qualifying equipment that remains on site for no more than one year.

The Department also proposes to exempt from the permitting requirements portable equipment that is used to temporarily replace certain equipment shut down as part of construction, repair, and maintenance activities. If construction, repair, and maintenance activities result in the temporary shutdown of commercial fuel-burning equipment that has a maximum rated heat input of 1,000,000 BTU per hour or greater to the burning chamber or stationary reciprocating engines with a maximum rated power output of 37 kW or greater, used for generating electricity, then portable equipment replacing the shutdown equipment is exempt from the permitting requirements under the proposed rules. See proposed new N.J.A.C. 7:27-8.2(d)16 and proposed new paragraph 16 of the definition of "exempt activity" at N.J.A.C. 7:27-22.1. The proposed rules provide restrictions on the use of the equipment, the length of time that the equipment may be used, and the emissions from the equipment. Before the equipment is

used, and at the conclusion of its usage, the owner or operator must provide notice to the Department.

Rental facility equipment exemption

Some portable equipment for which an air pollution control permit is required under N.J.A.C. 7:27-8 or 22 is rented rather than purchased. The permitting requirement applies to the user (or lessee) of this equipment; however, because there is no exception for the use of this equipment while it is still at a rental facility, the rules also require the rental facility to obtain a permit for the rental equipment, or for the engine powering the rental equipment, because the equipment is being operated at the rental facility. The Department recognizes that the operation of the equipment at the rental facility is infrequent and of an extremely limited nature, producing negligible emissions, as it is exclusively for the purpose of inspecting, testing, or demonstrating the equipment. It is not the Department's intent to discourage rental facility owners from testing of rental equipment, since properly maintained equipment emits less than improperly maintained equipment. Nor is the cost to rental facilities warranted. Therefore, the Department proposes to add exemptions at N.J.A.C. 7:27-8.2(d)18 and new paragraph 18 of the proposed amended definition of "exempt activity" at N.J.A.C. 7:27-22.1, for rental facility equipment, so that the inspecting, testing, and demonstrating of this equipment at the rental facility is an exempt activity. The equipment, when operated at the rental facility, remains subject to the VOC and NOx RACT emission requirements. The proposed exemption does not extend to the operation of this equipment once the equipment has been taken away from the rental facility. For the purposes of this exemption, the Department proposes new definitions of "rental facility" at

N.J.A.C. 7:27-8.1 and 22.1 as a business that owns and rents or leases portable equipment to another person.

Portable hard drive and paper shredders

Portable hard drive and paper shredders provide an efficient mechanism for secure data destruction and for the proper handling of electronic waste and recycled paper. This equipment is typically mounted in trucks and taken to various locations as part of mobile hard drive and paper shredding events. Unlike units designed for consumer home use, these shredders are used to shred thousands of pounds of paper and hard drives per hour. This equipment is regulated at N.J.A.C. 7:27-8.2(c)19 and paragraph 6 of the definition of "significant source operation" at N.J.A.C. 7:27-22.1, which require a permit for such equipment if the combined weight of all raw materials used exceeds 50 pounds in any one hour. Equipment of this type would require a permit issued for a specific location, meaning a permit would be required each time the shredder is used at a different shredding event location. It is not practical to require permits for this type of equipment. Additionally, emissions at each location at which the material is shredded are expected to be minimal, unlike emissions generated by permanent shredding operations, for example, at a recycling or waste handling facility, which tend to use larger equipment that is operated for much longer hours. This results in a significantly greater environmental impact where the stationary shredding operation is located. Permits would still be required for hard drive and paper shredders operated as part of a stationary shredding operation. Therefore, the Department proposes new N.J.A.C. 7:27-8.2(d)19 and new paragraph 19 of the definition of "exempt activity" at N.J.A.C. 7:27-22.1 to exempt portable hard drive and paper shredders from the requirement of obtaining an air permit.

Conveyance and baling of source-separated materials

As explained above, N.J.A.C. 7:27-8.2(c)19 and paragraph 6 of the definition of "significant source operation" at N.J.A.C. 7:27-22.1 require an air permit for equipment that handles or processes more than 50 pounds of raw material in any one hour, and that has the potential to emit one or more air contaminants directly or indirectly into the atmosphere. This includes equipment that handles source-separated materials (glass, plastic, cans, and paper), which produce no or very few emissions. Considering the minimal emissions from these operations, there is little environmental value in requiring a permit applicant to perform complicated technical evaluations and calculations to show that particulate emissions are less than the reporting thresholds at N.J.A.C. 7:27-8, Appendix 1, Table A and N.J.A.C. 7:27-22, Appendix, Table A. Accordingly, the Department proposes to add an exemption at N.J.A.C. 7:27-8.2(d)21 and paragraph 21 of the definition of "exempt activity" at N.J.A.C. 7:27-22.1 to exempt conveyors and balers of source-separated material (glass, plastic, cans, paper) from the requirement of obtaining air permits.

Excavated materials placed directly into transportation vehicles

The Department's existing rules do not require an air permit for equipment associated with the excavation, loading, and transport of soil or sediment. The storage of piles of contaminated soil or sediment may, however, require an air permit as a significant source pursuant to N.J.A.C. 7:27-8.2(c)2, 10, or 16, because of the volatilization of the contaminants contained within the piles. Existing N.J.A.C. 7:27-8.2(c) considers the following to be significant sources: source operations or equipment with 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) (N.J.A.C. 7:27-8.2(c)2); tanks, reservoirs, containers, and bins with a capacity in excess of 2,000 cubic feet that are used for the storage of solid particles (N.J.A.C. 7:27-

8.2(c)10); and equipment that is used for treating waste soils or sludges, including municipal solid wastes, industrial solid wastes, or recycled materials, if the influent to the equipment has a solids content of two percent by weight or greater (N.J.A.C. 7:27-8.2(c)16). These provisions could be interpreted as also requiring an air permit for the act of directly transferring excavated materials, without intermediate staging (for example, stockpiling on plastic tarps or in containers, where volatilization can occur), into a vehicle such as a truck or a rail car for transport off site. This type of transfer creates only negligible emissions and is not an activity these provisions were intended to address. Accordingly, the Department proposes to exempt these activities from the requirement to obtain an air permit by adding an exemption at N.J.A.C. 7:27-8.2(d)20 and paragraph 20 of the definition of "exempt activity" at N.J.A.C. 7:27-22.1.

Updating and Consolidating the Reporting Thresholds for Hazardous Air Pollutants

Background

Hazardous air pollutants (HAPs) are pollutants, exposure to which present, or may present, a threat of adverse human health effects or adverse environmental effects. (See 42 U.S.C. § 7412(b)(2).) Congress promulgated an initial list of HAPs for regulation under the Clean Air Act, which the EPA was directed to review and where appropriate, revise, based on the EPA's determination that the substance is an air pollutant and that emissions, ambient concentrations, bioaccumulation or deposition of the substance are known to cause or may reasonably be anticipated to cause adverse effects to human health or adverse environmental effects (42 USC § 7412(b)(3)(B)). The existing Federal list contains 187 substances. The proposed amended Department rules will contain reporting thresholds for 185 of the Federally

listed HAPs. The Department regulates the two remaining Federally listed substances, radionuclides and mineral fibers, including asbestos, in its Radiation Protection rules.

The HAP reporting thresholds are values established by the Department, above which the HAP emissions must be identified on air permits. A facility must conduct a risk assessment for the HAPs that it identifies. If the risk assessment indicates that the risk from the emissions is non-negligible, then the facility will need to modify the source operation to lower the risk to the point where the output shows a negligible risk, or consider other risk reduction measures.

Existing N.J.A.C. 7:27-8.11 requires permit applicants to document that each significant source incorporates advances in the art of air pollution control (also called "state of the art" or "SOTA"), developed for the kind and amount of air contaminant emitted by the equipment and control apparatus. To regulate the control of HAP emissions, the Department has established SOTA thresholds for each Federally listed HAP. These are set forth at existing Table B of Appendix 1 to N.J.A.C. 7:27-8. Additional SOTA requirements for HAPs are set forth at N.J.A.C. 7:27-22.35. The Department does not propose to change these SOTA thresholds, as explained below. Existing N.J.A.C. 7:27-8.4(k)1 requires any source operation to report any HAP emissions above the applicable reporting thresholds in Appendix 1 of N.J.A.C. 7:27-8. Similarly, N.J.A.C. 7:27-22.6(f)5 requires the operating permit for a significant source operation to list the potential HAP emissions if the emissions exceed the applicable reporting threshold in Table B of the Appendix to N.J.A.C. 7:27-22. The Department has established reporting thresholds for each Federally listed HAP at existing Table B of Appendix 1 to N.J.A.C. 7:27-8, and existing Table B of the Appendix to N.J.A.C. 7:27-22. The HAP reporting thresholds are values established by the Department above which the HAP emissions must be identified on preconstruction permits and operating permits. Facilities and sources report these HAP

emissions by listing each HAP for which the source operation's potential to emit is equal to or exceeds the applicable reporting threshold on the permit application.

The Department then evaluates the HAP emission rates listed in a permit application to determine whether the emission of the HAPs presents a health risk that is "non-negligible." The first step of the health risk assessment, which can be performed by a consultant or the Department, is to use the "NJDEP Division of Air Quality Risk Screening Worksheet for Long-Term Carcinogenic and Noncarcinogenic Effects and Short-Term Effects" (Risk Screening Worksheet) (http://www.state.nj.us/dep/aqpp/risk.html). If the Risk Screening Worksheet shows negligible risks, no further analysis is necessary. If the Risk Screening Worksheet shows non-negligible risks, the Department or the applicant then conducts a refined risk analysis. If the refined risk assessment still shows non-negligible risks, the Department convenes the Risk Management Committee, comprised of representatives from the Department's air permitting and air enforcement bureaus. This committee discusses the risks and ways the facility can reduce them. Committee recommendations are then shared with the facility to determine which options could be implemented to lower the risks. Any requirements that are necessary to reduce the risk, such as a higher stack height or increased efficiency of the air pollution control device, are incorporated into the permit's compliance plan.

The Department promulgated the existing HAP reporting thresholds more than 25 years ago, and has not updated them since. Current research and scientific advancements in toxicology have generated new and modified HAP unit risk factors and reference concentrations. In addition, technological improvements have produced more accurate air quality modeling computer programs. In some cases, these improvements and advances indicate the existing HAP thresholds are not stringent enough to be protective of human health and the environment. In

others, the thresholds can be less stringent and still protect health and the environment, lessening the regulatory burden on the applicant. The Department, therefore, proposes to amend these HAP reporting thresholds to ensure that they remain protective of public health and welfare without placing undue burden on applicants. The purpose of updating the HAP reporting thresholds is to incorporate the latest scientifically generated risk factors and exposure assessment techniques. The Department's procedure for updating the thresholds is based on a robust statistical evaluation of maximum ambient concentrations of HAPs for a range of stack heights and property line distances that are representative of smaller source operations, as explained further below.

The Department also proposes to remove caprolactam and methyl ethyl ketone from the Department's list of HAPs, because the EPA has removed the substances from the Federal list. Their corresponding reporting and SOTA thresholds are also proposed to be deleted. At proposed new N.J.A.C. 7:27-17.9, the Department is amending and relocating the HAP reporting thresholds from Tables A and B of Appendix 1 to N.J.A.C. 7:27-8, and Table B of the Appendix to N.J.A.C. 7:27-22; the recodification is discussed separately below.

Procedure for determining HAP reporting thresholds

The Department used the following procedure to develop the proposed HAP reporting thresholds: 1) evaluate the modeling methodology; 2) analyze the modeling results; and 3) identify proposed threshold values. A detailed description of the analysis from the Department's document titled, Technical Support Document Updating Hazardous Air Pollutant Reporting Thresholds, (Technical Support Document) is available on the Department's website, http://www.state.nj.us/dep/airmon/airtoxics/. An overview of the procedure follows:

Evaluate the modeling methodology

The Department ran the AMS/USEPA Regulatory Model (AERMOD) modeling system (Version 15181) to generate the impacts used to calculate the proposed HAP reporting thresholds. AERMOD is the EPA-preferred model for regulatory modeling applications. AERMOD was run using the most recent five years (2010 through 2014) of processed model-ready meteorological data available. The Department generated this data using weather observations collected from the following three meteorological stations: Newark International Airport, Philadelphia International Airport, and Trenton Mercer Airport. Emission points and structures were entered into the model to represent a range of source operations with relatively low exit velocities and stack temperatures that are subject to aerodynamic downwash. Concentrations were calculated using a Polar receptor grid centered on the stacks and extending out to 3,000 feet.

Analyze the modeling results

This modeling methodology required 30 model runs to be performed for each of 11 hypothetical stacks. Using this process, the Department created tables of worst-case hourly and annual concentrations arranged by stack height and distance from the stack to the property line. The tables included stacks ranging from 15 to 250 feet in height and receptor distances ranging from 20 to 3,000 feet. Because the worst-case concentrations of HAPs are expected to occur from shorter stacks at close-in distances, the Department considered hourly and annual impacts only for stacks 35 feet high or less and receptor distances of 100 feet or less. The Department chose these parameters because 71 percent of the approximately 27,000 stacks in New Jersey for which the Department has issued permits (not including stacks covered by general permits) are

less than 35 feet tall, and 41 percent of these 27,000 stacks are located 100 feet or less from their property lines.

Identify proposed threshold values

Rather than updating the HAP reporting thresholds based on a single stack height/property-line distance combination, the Department used a robust statistical approach. The dataset of shorter stacks and close-in distances contained air concentration values for more than 300 combinations of stack heights and receptor distances. The Department used percentile values of air concentrations. A percentile identifies the air concentration value at which the percentage of modeled air concentrations in the dataset is less than the indicated air concentration value. For example, if the 90th percentile identifies an annual concentration of 45 micrograms per cubic meter ($\mu g/m^3$), this means that 90 percent of the modeled air concentrations fall below this value. This percentile equates to 14 different stack/property-line combinations that result in an annual air concentration of approximately 45 $\mu g/m^3$. The Department used these procedures to calculate the 80th, 85th, 90th, and 98th percentiles of the hourly and annual concentrations per unit of HAPs emitted. For a HAP that may result in an acute health effect, the unit of emission was per pound of HAP emitted. For a HAP that may result in a chronic health effect, the unit of emission was per ton of HAP emitted.

The Department calculated the proposed amended HAP thresholds using the latest toxicity data, the normalized air concentration percentiles determined from the modeling results, and the Department's risk benchmarks - that is, the level of risk the Department considers negligible, as listed in Section 5 of Technical Manual 1003, "Guidance on Risk Assessment for Air Contaminant Emissions" (Technical Manual 1003) (http://www.state.nj.us/dep/aqpp/downloads/techman/1003.pdf). The Department derived the

toxicity data from the latest updates of the EPA's Integrated Risk Information System (IRIS, www.epa.gov/iris), California Environmental Protection Agency (CalEPA) Toxicity Criteria Database (oehha.ca.gov/tcdb/index.asp), and the Agency for Toxic Substances and Disease Registry "Minimal Risk Levels for Hazardous Substances (MRLs)" (www.atsdr.cdc.gov/mrls/index.asp). The Department's negligible cancer risk benchmark for new or modified sources in Technical Manual 1003 is defined as an increased cancer risk of less than or equal to one in a million ($1x10^{-6}$). The non-cancer negligible risk benchmark is a hazard quotient less than or equal to one. A hazard quotient is the ratio of the HAP's predicted ambient concentration to the HAP's predicted reference concentration. Cancer risk-based thresholds were compared to long-term and short-term non-cancer risk thresholds for those HAPs that have carcinogenic and non-carcinogenic impacts. Pollutant-specific thresholds were calculated using the following two equations:

Equation 1: $Q = \frac{CR}{URF \times C'}$ Equation 2: $Q = \frac{RfC}{C'}$

where:

Q = maximum annual emission rate, ton/yr – threshold

CR = cancer risk; assumed to be 1×10^{-6}

URF = pollutant-specific inhalation unit risk factor, $(\mu g/m^3)^{-1}$

RfC = pollutant-specific reference concentration, $(\mu g/m^3)$

C′ = annual concentration percentile per unit of HAP emitted; $(\mu g/m^3)/(ton/yr)$ for chronic health effects, $(\mu g/m^3)/(lb/hr)$ for acute health effects

NOTE: Equation 1 provides the cancer risk for carcinogens. Equation 2 provides the health impact for non-carcinogens. For HAPs that have carcinogenic and non-carcinogenic health impacts, the lower Q-ton/yr value was used as the reporting threshold. The values of the URF and the RfC are listed in Appendix C of the Technical Support Document.

In addition to the three-step procedure above, the Department was guided by the following principles in establishing the proposed HAP reporting thresholds:

1. The existing maximum reporting threshold is 2,000 pounds per year (lb/yr). See N.J.A.C. 7:27-8 Appendix 1, Table B and 7:27-22 Appendix, Table B. The appropriateness of this maximum value has not changed and a higher value would not be as protective of human health and welfare. Accordingly, regardless of the values yielded by the three-step procedure, the Department would not propose a reporting threshold that exceeds (is less stringent than) this maximum reporting threshold;

2. The Department would not propose a reporting threshold for elemental mercury that is higher than (less stringent than) the existing level of two pounds per year. Although the three-step procedure yields a calculated elemental mercury reporting threshold of 13 pounds per year, in accordance with this principle the Department is maintaining the more stringent two pounds per year standard in the proposed rules. The basis for this principle is that in addition to health impacts from inhaling mercury, there are health risks from mercury that result from ingesting fish. High levels of mercury in fish result from air deposition of mercury in waterways and bioaccumulation through the aquatic food chain, in response to which the Department has issued warnings concerning the ingestion risk of eating certain kinds of fish. The Department did not evaluate the fish ingestion path of exposure in determining HAP reporting thresholds, but the

more protective standard in the proposed rules is intended to compensate for any additional risk from this source;

3. Similarly, the Department would not propose a reporting threshold for lead that is higher than (less stringent than) the existing level of two pounds per year. Although the calculated lead reporting threshold is 4.4 lb/yr, the Department is not changing the existing more protective standard. In addition to being a HAP, lead is a criteria pollutant, for which the EPA established a national ambient air quality standard (NAAQS). The entire State is in attainment of this health standard, but maintaining the standard is an additional concern for the Department, and supports retaining the existing, more stringent reporting threshold;

4. For 12 of the HAPs, the Department would base the proposed reporting thresholds on short-term toxicity data. For some of these 12 HAPs there was no available long-term toxicity data. For others, short-term exposure was associated with a non-negligible risk, even when the threshold values based on long-term exposure were not associated with a non-negligible risk. Additional information regarding these 12 HAPs is available in Appendix A of the Technical Support Document;

5. For 32 HAPs there is no published toxicity data; therefore, the Department is not proposing to amend the reporting thresholds for these HAPs. Additional information regarding these 32 HAPs is available in Appendix B of the Technical Support Document; and

6. Certain HAPs, such as arsenic, cadmium, and chromium, are listed in the Clean Air Act at 42 U.S.C. § 7412(b)1 and at existing N.J.A.C. 7:27-8 Appendix 1, Table B, and existing 7:27-22 Appendix, Table B, as "chemical compound classes." These listings are defined as including any unique chemical substance that contains the named HAP as part of that chemical's molecular structure. Because each compound or subgroup within a chemical compound class has its own

unique reporting threshold in the existing rules at N.J.A.C. 7:27-8 Appendix 1, Table B and 7:27-22 Appendix, Table B, the Department determined to evaluate each such compound or subgroup independent of the threshold the Department determines overall for the chemical compound class. For example, the existing reporting threshold for the chemical compound class "cyanide compounds" is 1,000 lb/yr and the reporting threshold for potassium cyanide (a cyanide compound) is 20 lb/yr. If a source operation emitted 21 lb/yr of potassium cyanide, a permit application for this source would have to list this individual compound, even though its emissions do not exceed the reporting threshold established for the chemical compound class to which it belongs. If a compound or subgroup is not individually listed among the chemical compound classes, the threshold for the entire chemical group would apply to each compound or subgroup included in the chemical group.

Using the three-step procedure, the Department proposes to lower the reporting thresholds of one or more of the HAP compounds in each of the following chemical compound classes: antimony, arsenic, beryllium, cadmium, chromium, cobalt, coke oven emissions, cyanide compounds, glycol ethers, manganese, nickel, and polycyclic organic matter. The Department does not propose to amend the reporting thresholds for lead compounds, mercury compounds, and total dioxins and furans. The only HAP compound class for which the Department is proposing to raise the reporting threshold is selenium compounds. Of the 169 HAPs that are not listed in the chemical compound classes, the Department proposes to lower the reporting threshold for 106 and raise the reporting threshold for 15. Additional information regarding the proposed HAP reporting thresholds compared to the existing thresholds is available in Table 3 of the Technical Support Document.

Impact of amended HAP reporting thresholds on the classification of equipment as a significant source

The Department uses HAP reporting thresholds as one of the criteria to determine if equipment will be classified as a significant source, and, thus, be required to file for and obtain a preconstruction permit. To the extent the proposed amended HAP reporting thresholds are more or less stringent that the existing thresholds, the classification of some equipment as a significant source, or not a significant source, may change from its classification under the existing rules. Existing N.J.A.C. 7:27-8.2(d) states that a stationary storage tank, even if it is listed in subsection (c) as a significant source, will not be classified as a significant source if subparagraphs (d)3i, ii, and iii are satisfied. Existing and proposed amended N.J.A.C. 7:27-8.2(d)3ii(4) require that the source not have the potential to emit any HAP above its reporting thresholds. Similarly, existing and proposed amended N.J.A.C. 7:27-8.2(e) state that equipment or a source operation that would be classified as a significant source solely because it meets the criteria in paragraph (c)19, is not a significant source, if paragraph (e)1, 2, and 3 are satisfied. Existing and proposed amended N.J.A.C. 7:27-8.2(e)2 require that the source not have the potential to emit any HAP above its reporting thresholds. Thus, whether a source will be subject to permitting requirements will depend upon whether its potential to emit a HAP would exceed the proposed amended HAP reporting threshold. In some cases, a more stringent HAP reporting threshold will trigger permitting requirements; in others, a less stringent HAP reporting threshold will mean that permitting requirements may not apply to sources subject to these permitting requirements under the existing rules.

Impact of amended HAP reporting thresholds on the classification of modification of existing permits and certificates

The HAP reporting thresholds are one of the factors the Department uses to determine the type of permit modification that a facility must file under both existing and proposed amended N.J.A.C. 7:27-8. N.J.A.C. 7:27-8.18(a) (both existing and as proposed to be amended) outlines the actions that require prior approval through a permit revision. One such action, specified at N.J.A.C. 7:27-8.18(a)3ii, is the use of a new material not specified in an existing permit, if it causes a new air contaminant, including HAPs, to exceed its reporting threshold. N.J.A.C. 7:27-8.20(d)2 provides that a seven-day-notice cannot be used for a permit modification if the change would result in emission of a HAP above its reporting threshold. A permittee would prefer to use a seven-day-notice for a permit change instead of a permit revision, since this notice needs no prior Department approval, but requires only that seven days elapse before the change can be implemented. (Seven-day notices are discussed further in the Economic Impact below.) N.J.A.C. 7:27-8.21(b)5i provides that an amendment cannot be used for a permit modification if 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, would result in the emission of a new HAP above its reporting threshold.

Both existing and proposed amended N.J.A.C. 7:27-22.27(e)1iii provide that an operating scenario can be added to an existing operating permit as a seven-day-notice, provided that any air contaminant not authorized by the existing operating permit would be emitted at a rate less than its HAP reporting threshold. A permittee may make a seven-day-notice change to the operating permit seven days after the Department's receipt of the notice of the change.

As discussed above, whether the potential to emit a HAP exceeds the proposed amended HAP reporting threshold will determine the type of permit modification necessary. In some

cases, a more stringent or a less stringent HAP reporting threshold will affect the applicability of these requirements.

Information listed on air pollution control permits and emission statements

As discussed above, existing N.J.A.C. 7:27-8.4(k)1 requires any source operation to report any HAP emissions above the applicable reporting thresholds and existing N.J.A.C. 7:27-22.6(f)5 requires the operating permit for a significant source operation to list the potential HAP emissions if the emissions exceed the applicable reporting threshold. To the extent the proposed amended HAP reporting threshold is lower than the existing threshold, a permittee may be required to report HAP emissions that were not previously reported. To the extent the proposed amended HAP reporting threshold is higher than the existing threshold, a permittee may be able to discontinue reporting. For example, the existing reporting threshold for formaldehyde is 400 pounds per year; the proposed reporting threshold is 3.5 pounds per year. Under the proposed amended rule, a facility with a new source operation that emits formaldehyde at a rate between 3.5 pounds per year and 400 pounds per year will have to include these emissions on the permit application, although it need not under the existing rule.

The proposed new thresholds would have the same effect in determining which activities are exempt from permitting requirements and do not need to be listed in an operating permit, as this determination, pursuant to sub-subparagraph 14ii(5) of the definition of "exempt activity" at N.J.A.C. 7:27-22.1, requires that the source not emit any HAP above its reporting thresholds. Under the proposed amended rules a previously exempt activity may no longer be exempt, and vice versa.

The same is true in the determination of whether certain stationary storage tanks and mixing and blending vessels are classified as insignificant source operations. Paragraph 2 in the definition of "insignificant source operation" at N.J.A.C. 7:27-22.1 requires that the tanks and vessels meet the criteria of subparagraphs 2i, ii, and iii, including the requirement at sub-subparagraph 2ii(4) that the equipment not have the potential to emit any HAP above its reporting threshold.

In keeping with past practice regarding new permit requirements for major sources, the Department is proposing to delay implementation of the amended HAP reporting thresholds for these sources. Proposed new N.J.A.C. 7:27-22.30(*l)*, therefore, requires operating permit renewals with an expiration date three years or later after the operative date of the amendments to include all HAPs that exceed the proposed reporting thresholds in proposed N.J.A.C. 7:27-17.9.

Proposed amended N.J.A.C. 7:27-21.3(b)1ii and 2iii require HAP emissions that exceed the applicable thresholds in proposed N.J.A.C. 7:27-17.9 to be included in emission statements. As discussed above, the proposed new HAP reporting thresholds will, in some cases, require the reporting of certain HAPs on emission statements that were not required under the existing thresholds. They will, in other cases, exempt certain HAPs from emission statement reporting requirements that no longer exceed the reporting threshold.

Recodification of the reporting threshold for toxic substances at N.J.A.C. 7:27-17

The existing HAP reporting thresholds and HAP SOTA thresholds for preconstruction permits are set forth at N.J.A.C. 7:27-8 Appendix 1, Tables A and B. The HAP reporting thresholds for operating permits are set forth at N.J.A.C. 7:27-22 Appendix, Table B. In

addition, N.J.A.C. 7:27-22.35(b) and (c) refer to HAP SOTA thresholds. The existing codification of these provisions has been confusing and somewhat problematic. For example, existing N.J.A.C. 7:27-21.3(b)1ii and 2iii identify the information that is required to be reported on an emission statement, and refer to the HAP reporting and SOTA thresholds in N.J.A.C. 7:27-8 Appendix 1, Table B. However, N.J.A.C. 7:27-21.3(b)1ii and 2iii apply to operating permits, which are otherwise subject to N.J.A.C. 7:27-22 and not to N.J.A.C. 7:27-8. At N.J.A.C. 7:27-22.1, the definition of "insignificant source operation" in the operating permit rules refers to the HAP reporting thresholds in N.J.A.C. 7:27-8, and not the HAP reporting thresholds in N.J.A.C. 7:27-22.

To simplify these cross-references, the Department proposes to consolidate all HAP reporting and SOTA thresholds at proposed new N.J.A.C. 7:27-17.9. Subchapter 17 of the Air Pollution Control rules regulates toxic substances. A HAP is described in 40 U.S.C. § 7412(b)(2) as a pollutant that may present a threat of adverse human health effects, and is known to be, or may reasonably be anticipated to be, carcinogenic, mutagenic, teratogenic, neurotoxic, which cause reproductive dysfunction, or that is acutely or chronically toxic. "Toxic" is defined (Merriam-Webster https://www.merriam-webster.com/dictionary/toxic) as, "containing or being poisonous material especially when capable of causing death or serious debilitation," which is how the EPA classifies a HAP. Therefore, it is appropriate for the Department to locate the HAP reporting and SOTA thresholds in the rules governing toxic substances. The Department proposes to amend references to these thresholds in N.J.A.C. 7:27-8, 21, and 22, which are N.J.A.C. 7:27-8.2(d)3ii(4) and (d)16iii and (d)16v(4); 8.2(e)2v; 8.4(k)1; 8.12(a)1; 8.18(a)3ii and 4; 8.20(d)2; 8.21(b)5ii, 6, and 8; 21.3(b)1ii and 2iii; 22.1, definition of "exempt activity" paragraphs 14ii(5) and 16iii and v(4), and definition of "insignificant operation" 2ii(4); 22.3(c);

22.6(f)5i and ii; 22.27(e)1iii; 22.30(*l*); and 22.35(b) and (c). The Department also proposes to add a definition of "Hazardous Air Pollutant" or "HAP" to N.J.A.C. 7:27-17.1 that is identical to the definition of that term at existing N.J.A.C. 7:27-22.1, because this term is used but not defined in existing N.J.A.C. 7:27-17. The proposed definition references the list of air contaminants in Federal rule 40 U.S.C. § 7412(b)(2).

The Department regulates only 13 HAPs in the existing toxic substances rules at N.J.A.C. 7:27-17. They are identified at existing N.J.A.C. 7:27-17.3, Table 1, as benzene, carbon tetrachloride, chloroform, dioxane, ethylenimine, ethylene dibromide, ethylene dichloride, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,1,2-trichloroethane, trichloroethylene, methylene chloride, and 1,1,1-trichloroethane. The existing reporting and SOTA thresholds for these substances (also referred to as TXS) are codified at N.J.A.C. 7:27-8 Appendix 1, Table A. The Department is deleting the reporting and SOTA thresholds for TXS from Table A. The Department proposes to relocate the existing Table A reporting threshold for TXS of 0.01 pounds per hour at proposed new N.J.A.C. 7:27-17.9(a)2. In addition to this TXS reporting threshold, the proposed amended reporting thresholds for TXS are in proposed new Table 2 of N.J.A.C. 7:27-17.9. The Department used the three-step procedure to develop these proposed new reporting thresholds, which are based on emissions of the TXS in pounds per year (lb/yr). If a source operation's potential to emit a TXS exceeds either the pounds per year or pounds per hour reporting threshold, the permit application must list the TXS emissions. Whether a source operation's potential to emit a TXS exceeds either the pounds per year or pounds per hour reporting threshold also determines if a preconstruction permit is required in accordance with N.J.A.C. 7:27-8.2(d)3ii(4) and 8.2(e)2v, and if the source is considered to be an insignificant source under the definition of "insignificant source" at N.J.A.C. 7:27-22.1.

Recodification of the state of the art thresholds

The Department proposes to relocate, but not change, the existing SOTA thresholds for permits. Permit applications for new and modified equipment that list air contaminants with a potential to emit above their respective reporting thresholds must demonstrate that the equipment and control apparatus incorporate advances in the art of air pollution control for the kind and amount of contaminant emitted. This is a state of the art, or SOTA, demonstration. SOTA can be demonstrated by meeting an applicable Federal requirement, such as Maximum Achievable Control Technology (MACT) (40 CFR Part 63), or Lowest Achievable Emission Rate (LAER) (40 CFR Part 51), or by conducting a case-by-case analysis that considers technical feasibility, and economic and environmental impacts.

Many of the existing reporting thresholds are one-tenth of the SOTA thresholds for the same HAPs, since SOTA values were established to trigger a technology assessment, and improvements in air pollution control efficiencies are necessary at increased emission levels. Lacking more sophisticated input, the Department based the existing HAP reporting thresholds on these SOTA values, using a fraction of the SOTA value for the HAP reporting threshold. The Department is, as discussed above, amending the HAP reporting threshold; however, since the SOTA analysis is for a different purpose than HAP reporting, the Department does not now propose to change the SOTA thresholds for the HAPs. The SOTA thresholds reflect emission reductions achievable using state of the art equipment. Potential health impacts, used in setting the HAP reporting thresholds, are not part of SOTA assessments.

Phase-in of the proposed HAP reporting thresholds

The proposed amended HAP reporting thresholds will apply to preconstruction permit applications for new equipment submitted on or after the operative date of the amended rules. The Department will not require a preconstruction permit application to be updated to incorporate the amended reporting threshold if it is submitted to the Department prior to the operative date of the rules. The Department will also not require updated information for existing preconstruction permits, or for preconstruction permits that are being renewed, unless an application for a modification to the permit is filed. The Department does not review preconstruction permits that are renewed without modification. The Department issues preconstruction permits to lesser-emitting facilities. Many of the operations at these facilities are subject to general permits which, if they pertain to HAPs, undergo risk assessments before the Department issues them.

The amended HAP reporting thresholds will also apply to facilities that submit an initial operating permit application on or after the operative date of the amended rules. The Department will not require an operating permit application to be updated to incorporate the amended reporting threshold if it is submitted to the Department prior to the operative date of the amended rules. The Department will not require updated information for existing operating permits unless an application for a minor or significant modification is filed or upon renewal of an operating permit with an expiration date three years or later after the operative date of the amended rules. This phased-in approach for both preconstruction and operating permits is consistent with how the Department has implemented other amendments affecting permit requirements.

Repeal of N.J.A.C. 7:27-30 and 31, CAIR NO_x Trading Program and NO_x Budget Program

The Department proposes to repeal N.J.A.C. 7:27-30, CAIR NO_x Trading Program, and 7:27-31, NO_x Budget Program, and all references to the subchapters throughout the Air Pollution Control rules. Both are unnecessary as a result of Federal actions.

In 1998, the Department promulgated N.J.A.C. 7:27-31, NO_x Budget Program, to reduce emissions of NO_x during the period from May 1 through September 30, when ozone is most readily formed. The NO_x budget program established a market-based approach to controlling NO_x emissions from electric generating units (EGUs) and large industrial boilers/process heaters by providing an economic incentive for facilities to reduce emissions (a cap and trade program). In 2003, the EPA adopted a cap and trade program that governed a similar universe of power plants and other large combustion sources, but over a larger geographical area encompassing the eastern United States. The EPA's NO_x budget program was designed to address the interstate transport of ozone that affects the ability of states to come into compliance with the 0.12 ppm one-hour ozone NAAQS. In 2000, the Department amended N.J.A.C. 7:27-31 to make it consistent with the Federal regulations in effect at that time.

In 2005, the EPA promulgated the Clean Air Interstate Rule (CAIR) to partially address interstate transport by requiring additional reductions of emissions of sulfur dioxide (SO_2) and NO_x from power plants in the eastern half of the United States. In 2007, New Jersey adopted its own allocation rule at N.J.A.C. 7:27-30, CAIR NO_x Trading Program, to implement the Federal CAIR requirement. As stated in the NO_x budget program rules at N.J.A.C. 7:27-31.23, the CAIR NO_x trading program replaced the NO_x budget program beginning May 2, 2009. Since that date has passed, the Department proposes to repeal the NO_x budget program rules at N.J.A.C. 7:27-31.

In 2008, the United States Court of Appeals for the District of Columbia Circuit issued a decision in which the court found that CAIR was fatally flawed. However, the court allowed the EPA to keep the program in place until a replacement could be implemented. The EPA subsequently replaced CAIR with the Cross State Air Pollution Rule (CSAPR), which went into effect in 2015. Similar to CAIR, CSAPR limits emissions of SO_2 and NO_x from power plants in the eastern half of the United States that contribute to downwind ozone or fine particle pollution in other states. Because the court invalidated CAIR, and CSAPR replaced CAIR, the CAIR NO_x trading program rules at N.J.A.C. 7:27-30 are obsolete; accordingly, the Department proposes to repeal N.J.A.C. 7:27-30.

Due to continued litigation of the Federal CSAPR rules, the Department has not promulgated its own rules to implement the Federal program. However, the Clean Air Act provides states the opportunity to implement national control programs. If a state does not adopt and implement its own EPA-approved plan, the EPA issues and enforces a Federal Implementation Plan (FIP). Rather than prepare a State Implementation Plan (SIP) for CSAPR and promulgate its own rules, the Department is administering and enforcing the CSAPR FIP. The EPA has provided a template for states to use as an attachment to existing permits that would allow sources to continue operation under current permit conditions along with the requirements of CSAPR. The Department is already using the permit attachment where applicable, but is adding the CSAPR requirements to a permit only upon renewal or revision for significant modification.

The Department proposes to delete references to the components of N.J.A.C. 7:27-30 or 31 that appear elsewhere in the Air Pollution Control rules. These deleted references are in the proposed amended definition of "potential to emit" at N.J.A.C. 7:27-8.1 and 22.1; proposed

amended N.J.A.C. 7:27-22.3(tt), and 22.22(c)6; and the proposed deletion and reserving of the Air Administrative Procedures and Penalties at N.J.A.C. 7:27A-3.10(m)30 and 31. This is also true of the proposed deleted definition "budget source" at N.J.A.C. 7:27-19.1, a term that was only used in this subchapter in connection with the NO_x Budget Program. Similarly, the Department proposes to delete the definition of "former DER credit user" at N.J.A.C. 7:27-22.1, a term only used in the portion of N.J.A.C. 7:27-22.22(c)6 that is proposed to be deleted. The term "DER credit user" is a remnant of the former Open Market Emissions Trading (OMET) Program, which predated the CAIR NO_x Trading Program rules at N.J.A.C. 7:27-30. The Department repealed OMET in 2004; accordingly, the reference to the OMET program does not belong in the existing rules.

Miscellaneous Amendments

Deletion of N.J.A.C. 7:27-17.4(a) and (b)

The health risk assessment procedure described above makes portions of existing N.J.A.C. 7:27-17.4, Discharge of toxic substances, unnecessary. If the Department receives a permit application that indicates that there are potential HAP emissions above the established threshold, it will require the applicant to demonstrate that there are no adverse health impacts from the source operation. The procedure for the health risk assessment is described in Technical Manual 1003.

As discussed above, this health risk assessment begins with the Risk Screening Worksheet, a conservative model in which HAP maximum potential emissions, stack height, and distance to the property line are input to determine chronic and acute risks. In addition, if the Risk Screening Worksheet shows significant risks, a refined risk analysis is performed, using the

most recent air quality computer models and meteorological data, facility specific parameters, such as stack discharge temperature, velocity, and potential for downwash, and impact on sensitive receptor communities.

The risk assessment procedure makes existing N.J.A.C. 7:27-17.4(a) and (b) unnecessary. N.J.A.C. 7:27-17.4(a) prohibits a source operation from emitting any Group I toxic substance into the outdoor atmosphere unless the discharge is from a stack with a minimum effective stack height of 40 feet, located a minimum distance from an area of human use or occupancy, and is discharged vertically upward. N.J.A.C. 7:27-17.4(b) prohibits such discharges unless the system, equipment, or control apparatus is Department-approved to prevent aerodynamic downwash. The 11 Group I toxic substances identified at Table 1 of N.J.A.C. 7:27-17.3 are a subset of the list of HAPs.

The purpose of N.J.A.C. 7:27-17.4(a) and (b) is to protect surrounding communities from the health impacts from the discharges. However, the Department's risk assessment procedure considers stack heights, discharge direction, potential for aerodynamic downwash, and health impact on the surrounding communities. In some cases, the risk assessment may indicate that a higher stack is needed; in others, a stack lower than 40 feet may be sufficient. In light of the risk assessment procedure, it is not necessary for the rules to require a specific stack height or distance from human use or occupancy. Accordingly, the Department proposes to delete N.J.A.C. 7:27-17.4(a) and (b) and the penalties for violations of these provisions at N.J.A.C. 7:27A-3.10(m)17. The risk assessment procedure gives facilities the flexibility to reduce risk and maintain the same health protections in the most cost effective and technically efficient way. Moreover, N.J.A.C. 7:27-17.4(a) and (b) evaluate only the 11 toxic substances identified in

Group I, all of which are HAPs; while the risk assessment procedure evaluates all 187 HAPs, thereby providing more protection to surrounding communities.

With the proposed deletion of N.J.A.C. 7:27-17.4(a) and (b), the definitions in N.J.A.C. 7:27-17.1 for terms used only in those provisions are no longer necessary. The Department proposes to delete the definitions of "aerodynamic downwash," "effective stack height," and "stack or chimney." Further, the proposed deletion necessitates an amendment to the exceptions at proposed recodified amended N.J.A.C. 7:27-17.8(a). Benzene is identified as a Group I toxic substance. Existing N.J.A.C. 7:27-17.9(a) provides an exception from the provisions of existing N.J.A.C. 7:27-17.4 for benzene constituents of gasoline discharged to the atmosphere from storage tanks or transfer operations. With the proposed deletion of N.J.A.C. 7:27-17.4(a) and (b), applicable to benzene, there is no longer a need for the exception. The remaining provisions of N.J.A.C. 7:27-17.4 apply only to Group II toxic substances, which do not include benzene.

Annual adjustment of boilers

Existing N.J.A.C. 7:27-19.7(g)1 through 3 require the owner or operator of a boiler or indirect heat exchanger subject to N.J.A.C. 7:27-19.7, Industrial/commercial/institutional boilers and other indirect heat exchangers, to perform an annual adjustment of the combustion process in the same calendar year quarter each year. The rule does not address the situation where a facility is not operating the boiler during the calendar year quarter when the adjustment is to be performed. The Department does not intend to require a facility to operate a boiler for the sole purpose of adjusting the combustion process. Accordingly, proposed new N.J.A.C. 7:27-19.7(g)4 requires the owner operator of an industrial/commercial/institutional boiler or other

indirect heat exchanger that is not used at least quarterly to adjust the combustion process within seven days after the next operation of the boiler or indirect heat exchanger.

Surface cleaners

The Department regulates surface cleaners, including those referred to as "open top" surface cleaners, at N.J.A.C. 7:27-8, 16, and 22, to control emissions from the VOC and HAP solvents used in this equipment. Some surface cleaners have covers that, when open, allow the emission of a certain amount of VOC or HAP solvents; therefore, despite the presence of a cover, these surface cleaners must be treated as "open top" surface cleaners for the purpose of controlling those emissions. The Department proposes to add a definition for "open top surface cleaner" at N.J.A.C. 7:27-8.1, 16.1, and 22.1. Under the proposed definition, an "open top surface cleaner" is a surface cleaner that may or may not have a cover, and has an opening that at any time exposes more than 25 percent of the surface area of the solvent to the atmosphere, or exposes more than 25 percent of the surface area of a sink-like work area where the surface cleaning occurs. The term "open top surface cleaner" is used in existing N.J.A.C. 7:27-8.2(c)4i and ii, 16.6(c) and (d), and subparagraphs 3i and ii of the definition of "significant source operation" at N.J.A.C. 7:27-22.1, but is not defined. The Department also proposes to add a definition of "surface cleaner" at N.J.A.C. 7:27-22.1, consistent with the existing definitions of this term at N.J.A.C. 7:27-8.1 and 16.1.

Miscellaneous non-substantive amendments

N.J.A.C. 7:27-8 and 22 use the term "de minimis" when referring to the HAP and SOTA reporting thresholds. At N.J.A.C. 7:27-8.2(d)3ii(4), for example, a stationary storage tank is

deemed not to be a significant source (and, therefore, does not need a preconstruction permit and operating certificate) if it meets the criteria in the rule, which include the "potential to emit each TXS and each HAP does not exceed the de minimis reporting thresholds" in the applicable table (emphasis added). "De minimis," which means "lacking significance or importance: so minor as to merit disregard" (Merrian-Webster, www.merriam-webster.com), is misused in the rule. The reporting thresholds are based upon the source operation's maximum potential to emit and are, as discussed above, not based on whether the emission is minor or should be disregarded, but whether the emission is in a quantity that poses a threat of adverse human health effects or adverse environmental effects. The term is similarly misused in N.J.A.C. 7:27-8.2(e)2v, the definitions of "exempt activity" and "insignificant source operation" at N.J.A.C. 7:27-22.1, and N.J.A.C. 7:27-22.35(b) and (c). Accordingly, the Department proposes to delete "de minimis" from those rules.

In N.J.A.C. 7:27-16, Control and Prohibition of Air Pollution by Volatile Organic Compounds, the Department provides equations at calculating the total calculated annual emissions rate from a stationary storage tank and from a delivery vessel. The existing equations at N.J.A.C. 7:27-16.4 do not provide units of measure for the VOCs; accordingly, the proposed amendment adds pounds per gallon (lb/gal) to the emission factor (EF), and pounds per pound-mole (lb/lb-mole) to the molecular weight (MW). The lack of units of measure in the existing rules could cause confusion, in that it is not clear whether the units for EF and MW are in English units, or international units. The proposed amendments to N.J.A.C. 7:27-16.4 add English units.

N.J.A.C. 7:27-16.6(a)1 provides that on and after June 29, 2004, N.J.A.C. 7:27-16.6(b) through (i) no longer apply to open top tanks and surface cleaners that contain VOC and to

solvent cleaning operations. As that date has passed, to simplify the codified rules, the Department proposes to delete N.J.A.C. 7:27-16.6(a) through (i) and reserve the subsections. The Department proposes to delete the corresponding penalty provisions at N.J.A.C. 7:27A-3.10(m)16.

Existing N.J.A.C. 7:27-16.6(j)3 prohibits the use of certain solvents in a cold cleaning machine or a heated cleaning machine. The Department never intended this provision to prohibit the use of water, which is technically a solvent, in these cleaning machines. Proposed amended N.J.A.C. 7:27-16.6(j)3 explicitly excludes water from this prohibition to avoid confusion.

Table 16B at N.J.A.C. 7:27-16.16 provides the determinants of controls required for process source gases. N.J.A.C. 7:27-16.16(d) provides the process for determining the maximum allowable emission rate. Table 16B provides the values for the first and second steps in the determination process. The Department proposes a new Table 16B to address an incorrect formatting of the existing table. Due to what appears to have been a printing error early in the history of this rule, the values in Range I, intended to address VOC with a vapor pressure greater than 14.7 psia, appear on the side of the table (as a column) as opposed to the bottom of the table (as a row), as originally intended by the Department. The existing Table 16B does not address VOC with a vapor pressure equal to or greater than 14.7 psia. The Department intended to provide a unique set of limitations for these VOCs. In addition, as a result of the incorrect formatting of this table, it would appear that VOCs discharged at a concentration greater than one percent or less than 97 percent can be simultaneously subject to Ranges C, D, E, or F, or Range I. This results in a source operation being subject simultaneously to more than one Maximum Allowable Hourly VOC Emission limit under Table 16A. In addition, existing N.J.A.C. 7:27-16.16(d)3 and 4 reference “steps” 1, 2, and 3, a holdover from a prior version of

these rules. The Department proposes to replace the reference to steps 1 and 2 in proposed amended N.J.A.C. 7:27-16.16(d)3 with a reference to N.J.A.C. 7:27-16.16(d)1 and 2 and replace the reference to step 3 in N.J.A.C. 7:27-16.16(d)4, proposed for recodification as N.J.A.C. 7:27-16.16(d)5, with a reference to N.J.A.C. 7:27-16.16(d)3 and 4.

Proposed new Table 16B is substantively identical to existing Table 16B, except the last column is removed so that the table no longer references VOC with a vapor pressure greater than 14.7 psia. Proposed new Table 16B provides a unique emission limitation for each set of variables (psia and percent by volume of source gas emission) and will provide the same source gas range classification as the existing Table 16B for VOC with a vapor pressure less than or equal to 14.7 psia. VOC with a vapor pressure greater than 14.7 psia are regulated by proposed new N.J.A.C. 7:27-16.16(d)4, which establishes the source gas range classification based solely on the percent by volume of the VOC in the source gas emitted from the source operation.

To correct a longstanding publication error, proposed amendments to N.J.A.C. 7:27-16.16(f)3 delete the references to N.J.A.C. 7:27-16.6(c), (h), (i), and (j). N.J.A.C. 7:27-16.16, Other source operations, refers to N.J.A.C. 7:27-16.6(c), (h), (i), and (j) for purposes of determining the maximum allowable emission rates for separate source gases that are physically combined (manifolded) for more than one source operation. However, N.J.A.C. 7:27-16.6 regulates open top tanks and solvent cleaning operations (sources expressly excluded from N.J.A.C. 7:27-16.6, as stated at N.J.A.C. 7:27-16.16(a)5), and the cited subsections do not provide formulae or other methods of calculating emission rates. Existing N.J.A.C. 7:27-16.16(f)3 correctly refers to N.J.A.C. 7:27-16.16(c) and (e) to determine maximum emission rates. This error appears to stem from the 1994 recodification of N.J.A.C. 7:27-16.6 as 16.16, at which point the references to N.J.A.C. 7:27-16.6(c), (h), (i), and (j) should have been deleted.

The Department is proposing to repeal N.J.A.C. 7:27-16.26, Variances, and the corresponding penalty provisions at N.J.A.C. 7:27A-3.10(m)16. The Department no longer issues variances under N.J.A.C. 7:27-16.26, and no facilities are operating under an existing variance. Under the existing rule, an applicant could obtain a variance by demonstrating that it was not possible to comply with the requirements of N.J.A.C. 7:27-16 with the then available advances in the art of control for the kind and amount of VOC emitted. Alternatively, one could submit an alternative VOC control plan pursuant to N.J.A.C. 7:27-16.17, for the Department's review and approval, based on the proposition that a VOC limit other than that required by N.J.A.C. 7:27-16.2 through 16.16 or 16.18 through 16.21 was justified.

The Department proposes to delete and reserve N.J.A.C. 7:27-16.17(b)1. This provision no longer has any effect, as it required the submission of a demonstration by certain source operations subject to N.J.A.C. 7:27-16.17(a)1. This submission was due by October 26, 1994. Also proposed for deletion are N.J.A.C. 7:27-16.17(e), (*l*), and (r), which relate only to N.J.A.C. 7:27-16.17(b)1. Proposed amended N.J.A.C. 7:27-16.17(b) and (c)3 change cross references within the section to reflect the proposed recodifications that result from the deletion of N.J.A.C. 7:27-16.17(e), (*l*), and (r). In addition, the Department proposes to delete related penalty provisions at N.J.A.C. 7:27A-3.10(m)16 for violations of N.J.A.C. 7:27-16.17(b)1 and (e), and proposes to amend the citation in the penalty table at N.J.A.C. 7:27A-3.10(m)16 from N.J.A.C. 7:27-16.17(n) to (*l*), to reflect the proposed deletion of existing N.J.A.C. 7:27-16.17(e) and (*l*).

There are several advantages to using the provisions of N.J.A.C. 7:27-16.17 to obtain an alternative VOC control plan, instead of N.J.A.C. 7:27-16.26 to obtain a variance. N.J.A.C. 7:27-16.17(d) explicitly outlines the type of information that needs to be listed in an alternative VOC control plan, while N.J.A.C. 7:27-16.26 is vague regarding the type of supporting documentation that must be included in the variance request. A plan approved under N.J.A.C. 7:27-16.17 has a 10-year

term, while a variance issued pursuant to N.J.A.C. 7:27-16.26 is valid for only three years. The longer term is reasonable, since it can take many years to demonstrate that newer technologies are technically and economically feasible. N.J.A.C. 7:27-16.26(a) refers to "advances in the art of control for the kind and amount of VOC emitted," which typically applies only to new or modified equipment. N.J.A.C. 7:27-16 applies to existing equipment, in addition to new or modified equipment.

The Department also proposes to repeal N.J.A.C. 7:27-17.7, Permit to construct and certificate to operate, and recodify the remaining sections in the subchapter. If equipment or a control apparatus from which TXS are emitted is subject to the preconstruction permit and certificate to operate provisions of N.J.A.C. 7:27-8, or the operating permit requirements of N.J.A.C. 7:27-22, then N.J.A.C. 7:27-17.7 states that equipment or control apparatus may not be constructed or installed until the applicable certificate or permit is obtained. Likewise, if the equipment or control apparatus is subject to the preconstruction permit requirements of N.J.A.C. 7:27-8, then the equipment or control apparatus may not be used until the operating certificate is obtained. All equipment must be operated in accordance with the relevant preconstruction and certificate to operate. These requirements are duplicative of both N.J.A.C. 7:27-8 and 22.

The Department proposes amendments to N.J.A.C. 7:27-19 to correct minor errors in the rules. Existing N.J.A.C. 7:27-19.8(a), (b), and (c) refer to stationary reciprocating engines used for generating electricity, capable of producing an output of "370 kW or more," and identify those engines as being subject to N.J.A.C. 7:27-19.8(e). Consistent with N.J.A.C. 7:27-19.2(c)3ii and 4, N.J.A.C. 7:27-19.8(e) correctly applies to stationary reciprocating engines with a maximum rated power output of 37 kW or greater. The output of "370 kW or more" in N.J.A.C. 7:27-19.8(a) through (c) is incorrect. Throughout the subchapter are references to

stationary reciprocating engines with a maximum rated power output of 37 kW or greater. For example, see N.J.A.C. 7:27-19.2(c)3ii and 4, and 19.8(a) through (c), discussed above. The recordkeeping requirements for emergency generators do not make sense if they are applicable to only those emergency generators with a maximum rated power output of exactly 37 kW hours. Proposed amendments to N.J.A.C. 7:27-19.8(a) through (c) correct 370kW to 37kW, and, in order that the terminology of N.J.A.C. 7:27-19.8(a) through (c) and (e) are consistent, replace "or more" with "or greater," when referring to engine output in (a) through (c). At N.J.A.C. 7:27-19.11(a) the Department proposes replacing "maximum rated output" with the correct term "maximum rated power output" and clarifying that the recordkeeping requirements extend to emergency generators with a maximum power output rating of 37 kW or more by adding the phrase "or greater," which was inadvertently omitted from this provision.

In the rules that are otherwise proposed to be amended and/or recodified through this rulemaking, the Department proposes to address the incorrect use of "which" by replacing it with "that," and correct the incorrect use of "shall." The Department also proposes to relocate the definition of "construction engine" in N.J.A.C. 7:27-19.1, so that it is in the proper alphabetical order.

The proposed amended definition of "hazardous waste" at N.J.A.C. 7:27-8.1 corrects a typographical error in the reference to 7:26G-5.1.

The proposed amendments to N.J.A.C. 7:27-19.16(a)5 correct a suggestion that oxygen (O_2) is to be measured in parts per million by volume on a dry basis (ppmvd). This is wrong. Only NO_x and CO are measured in ppmvd. O_2 is measured in percent, as is also reflected correctly in the instructions at N.J.A.C. 7:27-19.16(a)6.

The Department proposes to repeal N.J.A.C. 7:27-19.24, its rules concerning MEG alerts (periods when electric generating units operate at emergency capacity) that occurred on or before November 15, 2005. As this date has long passed, these provisions no longer have any effect. The defined terms "MEG alert" and "load dispatcher" are only used in the MEG alert rules and are also proposed for deletion.

Social Impact

The Department anticipates that the proposed new rule, amendments, and repeals will, overall, have a positive social impact.

Permit exemptions

The proposed amendments to the air permitting rules will have a positive social impact by enabling facilities to respond more quickly, and, thereby, minimize disruptions to affected business operations during emergencies, and providing exemptions from the permitting rules for equipment used during the recovery from such emergencies. These proposed amendments will enable the State to be more resilient, which will benefit both the public and the regulated facilities.

The proposed amended rules also provide permit exemptions for portable equipment specifically used in construction, repair, and maintenance activities. The Department proposes to exempt specific types of equipment or operations with negligible emissions, such as portable hard drive and paper shredders. The reduction in administrative delays and costs related to these types of equipment will allow construction, repair, and maintenance activities to be completed more easily. The proposed exemption for portable paper and hard drive shredders enable the secure destruction of sensitive business information to be completed more readily.

Amendments to HAP reporting thresholds

The proposed amendments lowering the reporting threshold of certain of the HAPs will have a positive social impact, primarily from improved public health and reduced medical costs. See the cost/benefit analysis section below. HAPs are substances that can cause serious health and environmental effects. As a result of the lower reporting threshold, facilities that did not previously have to report HAP emissions and conduct risk assessments for those HAP emissions may be required to do so. If the risk assessment indicates that the risk from the emissions is non-negligible, then the facility will need to modify the source operation to lower the risk to the point where the output shows a negligible risk, or consider other risk reduction measures. See the discussion of refined risk assessment in the Economic Impact below. The resulting reduction in HAP emissions will have a positive social impact, since exposure to HAPs can cause damage to the immune system, as well as neurological, reproductive, developmental, respiratory, and other health problems.

The Department is unable to predict how many permit applications or modifications will require HAPs to be identified as a result of the proposed amendments, or the number of risk assessments will result. The Department does not have records showing sources' potential to emit HAPs below the existing reporting thresholds. Nor can the Department predict the reduction in HAP emissions that will result from the proposed amendments. However, many of the permit applications that do not require HAP reporting because the potential to emit HAPs is below the applicable reporting threshold do show HAPs among the raw materials used at the facility. The Department anticipates that the proposed reductions in reporting thresholds will result in reporting and risk assessment of some of these raw materials.

Some HAPs may also be VOCs, which contribute to the formation of ozone and fine particles. Both ozone and fine particles cause significant health effects. Reducing long-term exposure to low concentrations of VOCs has additional beneficial health effects. The adverse health effects of VOCs may include elevation of serum enzyme levels, mild cellular changes and changes in lipid metabolism. Acute effects include eye irritation and watering, nose irritation, throat irritation, headaches, nausea/vomiting, dizziness, and asthma exacerbation. Chronic effects include cancer and damage to the liver, kidney, and central nervous system.

In addition to contributing to the formation of ozone, VOCs can also contribute to the formation of fine particles ($PM_{2.5}$), either through condensation or complex reactions with other compounds in the atmosphere. The health effects associated with exposure to $PM_{2.5}$ are significant, mainly because particles of this size can easily reach into the deepest regions of the lungs. Therefore, to the extent that the proposed rules result in a reduction in HAP emissions (including emissions of VOCs), there is a benefit to the public.

Repeal of CAIR trading and NO_x budget programs

The proposed repeal of the CAIR and NO_x budget rules will have no social impact. The repealed requirements do not increase or reduce the amount of SO_2 and NO_x emissions to which New Jersey residents are exposed. Neither the CAIR NO_x Trading Program nor the NO_x Budget Program, originally adopted by the Department to address Federal requirements to reduce the interstate transport of ozone-forming air pollutants, is in effect.

Economic Impact

The Department anticipates that the proposed new rule, amendments, and repeals will have an economic impact. Some facilities will incur costs, while others will receive an economic benefit. The Department anticipates no economic impact from the repeal of the CAIR NO_x Trading Program rules and NO_x Budget Program rules, or from the miscellaneous corrections to the rules. The proposed rules that are anticipated to have an economic impact are discussed below.

Permit exemptions

Regulated entities will benefit economically from the resiliency and permitting exemptions. Additional clarity on air permit applicability and new permit exemptions will directly save regulated entities the cost of the permit for the specific equipment and attendant consultant or engineering fees. For example, facilities with permitted emergency generators may benefit from the expanded use of these generators afforded by the proposed amendments. The cost savings will result from the avoided expense of renting additional emergency generators for a qualifying situation. The cost savings cannot be quantified as it will depend on many site-specific factors including type of equipment, duration of use, and individual administrative costs.

Amendments to HAP reporting thresholds

As discussed in the Summary above, facilities that emit HAPs for which the Department proposes lower reporting thresholds may have to list them in the Potential to Emit section of the air pollution control permit application. Determining and listing these HAP emissions will not have a significant economic impact, since the emissions would have had to be calculated even if the reporting threshold were not amended. The facilities must calculate their HAP emissions to

determine whether they must include them in the permit application. As explained in the Summary above, each listed HAP undergoes a risk screening procedure using the Department's "NJDEP Division of Air Quality Risk Screening Worksheet for Long-Term Carcinogenic and Noncarcinogenic Effects and Short-Term Effects" (Risk Screening Worksheet) (see www.state.nj.us/dep/aqpp/risk.html). This is an Excel spreadsheet and can be completed by an applicant without the need to hire a consultant by inputting HAP emission rates, distance to the property line, and stack height. If the Risk Screening Worksheet output shows a negligible risk, no further action is necessary, which is the case for the majority of the permit applications. However, if the Risk Screening Worksheet output shows a non-negligible risk, the facility can either modify the source operation to lower the risk to the point where the output shows a negligible risk, or have a refined risk assessment conducted before considering risk reduction measures.

A refined risk assessment consists of computer-generated atmospheric dispersion modeling that uses stack- and source-specific data as well as representative meteorological data. The EPA refined model AERMOD is normally used in these evaluations. The refined risk assessment often predicts air toxic concentrations that are lower than those estimated with the Risk Screening Worksheet. When a refined risk assessment is conducted, each individual air toxic must be evaluated for cancer risk and short- and long-term non-cancer risks, as appropriate. Each air toxic's health risk must be assessed: 1) at the receptor with the highest predicted air concentration in the five-year simulation (AERMOD); and 2) at sensitive receptors (such as nearest residence, daycare center, hospital, nursing home, playground, etc.) located within the defined modeling grid.

The refined risk assessment can be done by either the facility or the Department. If the facility conducts the risk assessment, it must prepare a protocol in accordance with Technical Manual 1003 for the Department's review and approval and a report which shows the results of the assessment. An assessment conducted by a consultant may cost in the range of $5,000 to $100,000. The cost of the assessment depends on the type of facility, the number of sources, and the number of HAPs that need to be evaluated. For larger facilities, air quality modeling may be necessary for one or more criteria pollutants (carbon monoxide, lead, ground-level ozone, nitrogen dioxide, particulate matter, and sulfur dioxide) pursuant to State and Federal regulations to confirm that a national ambient air quality standard (NAAQS), or New Jersey AAQS, will not be violated. This same modeling analysis can also be used to determine the health impacts of the HAPs at no additional cost. The Department assesses $2,527 to evaluate the facility's risk assessment protocol, and another $2,527 to review the results of the risk assessment performed in accordance with the protocol. This is in addition to the costs incurred by the facility to develop the protocol and conduct the risk assessment. The fees are the same for preconstruction permits and operating permits filed as significant modifications. There are no fees charged for an operating permit that is not filed as a significant modification; such costs are paid through annual emission fees that are fixed by the Air Pollution Control Act.

The facility can request the Department conduct the refined risk assessment by submitting a facility plot plan and paying the fees required in N.J.A.C. 7:27-8.12, for preconstruction permit applications, or N.J.A.C. 7:27-22.31, for operating permit applications filed as significant modifications. For this refined risk assessment, the Department performs a site-specific air quality dispersion modeling analysis to estimate the ambient air concentrations, and to assess the effect of aerodynamic downwash on plume dispersion. This analysis considers

actual site conditions, source parameters, and meteorology. To do this, the applicant must provide to the Department a detailed plot plan with the information listed in the document, "Information Required for Second-Level Risk Screening (http://www.state.nj.us/dep/aqpp/downloads/risk/2LEVEL.pdf.). Many facilities already have plot plans. However, if a plot plan must be drafted or an existing one needs to be upgraded, the cost can range between $500.00 and $2,000. The Department fee to conduct this refined risk assessment is $2,527, whether the application is for a preconstruction permit or an operating permit filed as a significant modification. If the refined risk assessment shows a negligible risk, no further action is necessary.

There are several ways that a facility can lower the health risk from a source operation. Reducing operating hours and restricting the operating hours can reduce risk at no or minimal cost. For all HAPs, increasing stack height and increasing stack discharge velocity would also lower the potential health risks by decreasing the HAPs ambient impact level. The risk is lowered because the emissions are reduced, or spread out over a larger geographic area. However, in some cases where the health risk is determined to be non-negligible, additional emission reductions may be necessary. The more dilute the HAP is in the ambient air, the lower the resulting health risk. Costs would vary based on how high the stack discharge point needs to be. Costs for increasing the stack discharge velocity would depend on if the existing fan could be used at a higher load or if a new fan would be necessary. Electricity costs would also increase with a higher load.

Substituting the HAP with a less toxic raw material would reduce or eliminate risk and could result in cost savings, depending on the price of the substitute. If a control device must be installed to reduce risk to a negligible level, cost to control HAPs which are VOCs can range

from $5,000 to $10,000 per ton controlled and cost to control HAPs which are particulates can range from $1,000 to $2,000 per ton controlled. These costs would vary based on the type and amount of HAP emitted, and the reduction in HAP emissions necessary to result in a negligible risk. If a facility already has a control device installed or will be installing a control device to achieve compliance with another regulation, the cost per ton of HAP controlled would be less. For example, this would be the case if an additional carbon adsorption unit is added to one or more carbon units which were already installed or if the temperature of an existing afterburner/thermal oxidizer is raised to increase destruction efficiency.

Fifteen individual HAP reporting thresholds and a reporting threshold in one chemical compound class are proposed to be raised, which will have a positive economic impact since raising the reporting threshold will eliminate the need to conduct risk assessments for some facilities.

Amendments to the HAP reporting thresholds could impact when a facility can make modifications to source operations covered by air pollution control permits. A permit modification is necessary pursuant to N.J.A.C. 7:27-8.18, for a preconstruction permit issued pursuant to N.J.A.C. 7:27-8, if the use of a new material not specified in an existing permit causes a new air contaminant, including HAP, to exceed its reporting threshold. If the criteria related to permit modifications are not applicable, a seven-day-notice, pursuant to N.J.A.C. 7:27-8.20, or amendment, pursuant to N.J.A.C. 7:27-8.21, may be filed for the change. Seven-day-notices and amendments do not require prior approval from the Department to implement the modification, while permit revisions do require prior approval. The lowering of the HAP reporting thresholds could result in a modification being delayed while the Department reviews the application for the modification. This delay could be shortened if the applicant evaluated the

potential health risk from the HAP and made any necessary changes to reduce the risk to a negligible level. The review and issuance of a permit decision could also be expedited if the applicant arranged a pre-application meeting with the Department to discuss the impact of having to include the HAP on the application. Similarly, the increase of the HAP reporting thresholds could result in a permit modification being done more quickly, if the facility does not emit HAPs in excess of the new threshold.

N.J.A.C. 7:27-8.6 lists the following fees:

Permit revision	$2,527 per new or changed piece of equipment $590.00 per each additional new or changed piece of equipment
Notice of a seven-day-notice change	$842.00
Notice of amendment	$842.00.

Potential economic impacts will be reduced for permit applicants that submit air pollution control preconstruction permit and operating permit applications prior to the operative date of the proposed rules. These facilities do not have to immediately update their applications to incorporate the amended reporting thresholds. Also, operating permit renewals with an expiration date less than three years after the operative date of the amended rules are not subject to proposed HAP reporting thresholds. This phased-in approach allows facilities to evaluate their existing source operations and provides the facilities time to make any necessary modifications to reduce health risks to negligible levels.

As a result of the proposed amendments to the HAP reporting thresholds, some activities that were previously exempt from operating permitting requirements will no longer be exempt, and vice versa. Sub-subparagraph 14ii(5) in the definition of "exempt activity" at N.J.A.C. 7:27-22.1 states that, in order to be exempt, the source may not emit any HAP above reporting thresholds. If the source emits a HAP for which the threshold has been lowered, such that the source now emits a HAP above the reporting threshold, the activity no longer qualifies as an exempt activity. The proposed amendments to the HAP reporting thresholds will also determine whether certain stationary storage tanks, and mixing and blending vessels, must be reclassified and listed in an operating permit as an insignificant source operation or as a significant source operation. The definition of "insignificant source operation" at N.J.A.C. 7:27-22.1 requires that the tanks and vessels meet certain criteria, one of which is that the equipment must not have the potential to emit any HAP above its reporting threshold. The Department does not anticipate this element of the proposed rules will increase costs for permitted facilities. The existing rules require a major facility to evaluate each source to determine if it is an exempt activity, an insignificant source, or a significant source operation. The proposed amendments do not change the requirement to conduct this evaluation, although they may change the results.

To the extent that the proposed amendments to the HAP reporting thresholds result in reduced emissions of HAPs, there will be an economic benefit to society through the resulting decrease in adverse health effects. As discussed in the Social Impact above, exposure to air pollution increases the risk of developing cancer. According to the National Cancer Institute, research has shown involuntary exposure to carcinogens in the environment is responsible for between four percent and 19 percent of total cancers. The American Cancer Society estimates that New Jersey will have 51,680 new cancer cases in 2017, and attribute the cause of cancer to

various factors including genetics, tobacco and alcohol use, environmental exposures, obesity, and lifestyle. The annual cost of cancer care on a national basis in 2017 will total approximately $147.3 billion, with New Jersey's proportional cost estimated to be $4.5 billion. Based on data collected between 2004 and 2008, more than 33 million disability days per year were attributed to American workers diagnosed with cancer. This translates to $7.5 billion per year of lost productivity (Health Day News December 17, 2012, https://consumer.healthday.com/cancer-information-5/breast-cancer-news-94/cancer-costs-billions-yearly-in-u-s-worker-productivity-study-671484.html). It is challenging to determine individual health cost and productivity savings that will result from the proposed amendments to the carcinogenic HAP reporting thresholds because of the complexity of how a person can contract cancer and because more than one factor can contribute to a cancer diagnosis. However, reducing the amounts and concentrations of HAPs in the atmosphere should result in a net economic benefit to New Jersey, since less will need to be spent on health care costs and fewer days out of work for the labor force broadly will improve business productivity.

Environmental Impact

The Department anticipates that the proposed new rule, amendments, and repeals will have a positive environmental impact. The proposed rules that are anticipated to have an environmental impact are discussed below.

Permit exemptions

The proposed amendments to the air permitting rules should have an overall positive environmental impact. As discussed in the Summary above, the Department is proposing

exemptions from the permitting rules for equipment used during emergencies and the recovery from such emergencies, and exemptions from permitting requirements of certain equipment that has a negligible environmental impact.

The Department is proposing to expand the allowable use of permitted emergency generators during non-emergency electrical power disruption up to 30 days in any calendar year. Many of the recent permitted generators operate on natural gas. To the extent that permitted emergency engines emit less air pollutants than diesel fired generators that permittees would otherwise rent to provide temporary power, there is a positive environmental impact from the proposed amendment.

As detailed in the Summary above, the Department proposes to allow combustion sources that ordinarily combust natural gas to continue emergency fuel oil fired operation for the duration of a natural gas curtailment. The proposed deletion of the 500-hour limit for the use of fuel oil is expected to have a negligible environmental impact because, historically, such lengthy curtailments (the equivalent of more than 20 days during a 12-month period) seldom occur.

The Department proposes to exempt portable equipment used for construction, repair, and maintenance activities for no more than one year. The Department also proposes to exempt portable combustion equipment used for construction, repair, and maintenance equipment replacement activities for less than 90-days. Due to the limited duration of operation, the air emissions generated from portable equipment during these activities are negligible; therefore, allowing them to operate without a permit will have no environmental impact. Similarly, the emissions from portable rental equipment operated intermittently for testing and maintenance or equipment demonstration purposes are negligible; exempting the equipment at the rental facility from the permit requirements will have a minimal environmental impact.

Other source operations and equipment that are proposed to be exempt from air permit requirements (portable hard drive and paper shredders, conveyance and baling, and excavated materials). Given the insignificant emissions generated when the equipment is in operation, these exemptions will have no environmental impact.

Amendments to HAP reporting thresholds

Many HAPs are VOCs that are precursors to ground-level ozone formation. The lower reporting thresholds of these VOCs will result in additional risk assessments. As discussed in the Social Impact above, the results of the risk assessment may result in facilities reducing their emissions of HAPs, and indirectly reduce their impact on ozone. In addition to impacting health, ozone interferes with the ability of plants to produce and store food, which makes them more susceptible to disease, insects, other pollutants, and harsh weather. Ozone damages the leaves of trees and other plants, ruining the appearance of cities, national parks, and recreation areas. Ozone reduces crop and forest yields, which impacts annual crop production throughout the United States, resulting in significant losses, and injures native vegetation and ecosystems. Ground- level ozone also damages certain man-made materials, such as textile, fibers, dyes, and paints, requiring more frequent upkeep and repair.

To a lesser extent, VOCs also contribute to the formation of $PM_{2.5}$. $PM_{2.5}$ (direct emissions and formed in the atmosphere) contributes to visibility impairment. Visibility impairment, called "regional haze," occurs when fine particles in the air reduce the amount of sunlight reaching the ground, decrease visibility, and increase haze. At elevated $PM_{2.5}$ concentrations, visual ranges are degraded and images of scenic views (for example, mountains, urban skylines, and other scenic views) are significantly obscured from view. In addition to

visibility impairment, ambient particulate matter also affects vegetation, ecosystems, soiling, materials and structure damage, and the radiative properties of clouds. The nutrient or acidifying characteristics of deposited particulate matter on both terrestrial and aquatic ecosystems contribute to adverse impacts on essential ecological attributes such as species shifts, loss of diversity, impacts to threatened and endangered species, and alteration of native fire cycles.

Several proposed HAPs contain chlorine and bromine, which can contribute to stratospheric ozone depletion. The release of chlorine and bromine can take two to five years to reach the stratosphere from Earth. Chlorine and bromine atoms destroy ozone and, in turn, ozone depletion increases the amount of UVB radiation that reaches the earth. Increased exposure to UVB radiation can lead to skin cancer and other harmful health effects. UVB radiation also damages plants. Minimizing the emissions of these HAPs will help protect the ozone layer and improve the health and environmental effects of ozone depletion. (See www.epa.gov/ozone-layer-protection/basic-ozone-layer-science and www.epa.gov/ozone-layer-protection/health-and-environmental-effects-ozone-layer-depletion.)

As discussed in the Social Impact above, the associated proposed decrease in HAPs emissions cannot be determined.

Federal Standards Statement

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. (P.L. 1995, c. 65), require State agencies that adopt, readopt, or amend State rules that exceed any Federal standards or requirements to include in the rulemaking document a Federal standards analysis.

Permit exemptions

The proposed amendments to the air permitting rules are consistent with Federal standards or requirements. Stationary engines, including stationary emergency engines, must comply with Federal requirements including: National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines (40 CFR Part 63, Subpart ZZZZ); New Source Performance Standards (NSPS) - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40 CFR Part 60 Subpart JJJJ); and Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60 Subpart IIII). The proposed amendments regarding use, operation, exemptions, testing and maintenance, and recordkeeping are consistent with, and do not exceed, the Federal engine requirements for stationary emergency engines. These Federal engine rules do not apply to portable and temporary engines or, in other words, engines that are transportable and in place for 12 months or less. Accordingly, a Federal standards analysis is not required.

Amendments to HAP reporting thresholds

As discussed in the Summary above, the Department regulates the same HAPs that are identified in the CAA at 42 U.S.C. § 7412(b). The EPA does not establish reporting thresholds. To calculate the proposed HAP reporting thresholds, the Department used the EPA's one in one million health benchmark based on the individual most exposed to the HAPs consistent with the Federal CAA risk criteria at 42 U.S.C. §7412(c)(9)(B), and the EPA's AMS/USEPA Regulatory Model (AERMOD) modeling system (Version 15181). AERMOD is the EPA-preferred model for regulatory modeling applications. No further analysis is required.

Repeal of CAIR trading and NO_x budget programs

The repeal of the CAIR NO_x Trading Program and NO_x Budget Program requirements is based on and consistent with Federal actions related to these interstate transport programs, as explained in the Summary above. The Department enforces the Federal Implementation Plan (FIP) for CSAPR, and is, therefore, consistent with the Federal requirements. Accordingly, no further analysis is required.

Jobs Impact

The Department anticipates that the proposed new rule, amendments, and repeals may have a small positive impact on job creation and retention in the State.

Permit exemptions

Air permittees often rely on consultants to prepare applications for permits. To the extent that the proposed amendments reduce the need for a facility to obtain a permit, there may be an impact on jobs for consultants. However, as discussed in the Summary above, many of the proposed permit exemptions based on resiliency efforts are already exempt from permit requirements as a result of memoranda of agreement, or the Department's interpretation of existing rules. Any impact on job creation or retention, therefore, is from the proposed exemptions for activities that cause minimal emissions. As stated in the Summary above, the Department does not anticipate that exempting portable hard drive and paper shredders and excavated materials placed directly into transportation vehicles from requirements to obtain a permit would have an impact on job creation or retention. However, the proposed exemption of conveyors and balers of source-separated materials may impact jobs for consultants that would otherwise be hired by affected facilities to obtain a permit as discussed in the Summary above.

Amendments to HAP reporting thresholds

The Department anticipates the proposed HAP amendments will have a positive impact on job creation and retention. In order to comply with the more stringent HAP reporting thresholds, owners, and operators of affected sources may need to conduct more-refined risk assessments, design modifications to source operations, and install equipment to lower potential health risks. This may result in additional work for engineering firms, air pollution control manufacturers, and related construction trades who provide services to facilities subject to the proposed HAP rules.

Agricultural Industry Impact

The Department has evaluated the proposed new rule, amendments, and repeals to determine the nature and extent of their impact on the agriculture industry. The proposed resiliency and permitting exemptions, as well as the repeals of the obsolete CAIR and NO_x budget programs will not have an impact on the agriculture industry. However, the proposed reporting thresholds for HAPs, many of which are VOCs, are expected to have a positive impact on the agriculture industry of New Jersey. As discussed in the Environmental Impact above, the proposed amendments will reduce VOCs, an ozone precursor, in turn reducing the formation of ground-level ozone and its harmful impacts to crop production, native vegetation, and ecosystems. As also discussed in the Environmental Impact above, several proposed HAPs contain chlorine and bromine, which contribute to stratospheric ozone depletion and increased UVB radiation that affects plants. Minimizing these air contaminants will help protect the ozone layer and improve plant growth.

Regulatory Flexibility Analysis

As required by the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq., the Department has evaluated the reporting, recordkeeping, and other compliance requirements that the proposed new rule, amendments, and repeals would impose upon small businesses. The Regulatory Flexibility Act defines the term "small business" as "any business which is a resident in this State, independently owned and operated and not dominant in its field, and which employs fewer than 100 fulltime employees." Based upon this definition, the Department expects that the proposed rules will affect small businesses.

Permit exemptions

The proposed amendments to the air permitting rules will reduce reporting, recordkeeping, and compliance requirements on all businesses, including small businesses, as discussed in the Summary above. The anticipated economic benefits are discussed in the Economic Impact, above.

Amendments to HAP reporting thresholds

The Department anticipates that the proposed amendments modifying the HAP reporting thresholds may impose recordkeeping, reporting, and compliance requirements on small businesses, because the proposed amendments may affect the availability of a general permit. More than 50 percent of new and modified minor source operations, such as small boilers, are covered by general permits, which contain standardized compliance requirements. A qualifying facility may register under a general permit, rather than apply for an individual permit. Small

businesses frequently make use of general permits because they can readily be obtained online by the owner/operator; individual permit applications are more complex, and usually require a consultant or other professional.

The proposed amendments to the HAP reporting thresholds will affect one general permit, GP-020, Research and Development. Some proposed HAP limits, such as for formaldehyde, listed in Table 3, Pollutant Specific Equipment Emission Limits, are lower. As such, in order to qualify for GP-020, a piece of individual equipment used for research and development purposes can emit HAPs in a quantity no greater than the proposed reporting thresholds that may exclude this permitting option for some small businesses.

The proposed amendments impose the same requirements on small businesses as on other regulated entities, as discussed in the Summary and Economic Impact statements above. Because the HAP emissions from a source at a business could pose a significant health risk, the Department is not able to except small businesses from the proposed requirements. However, the Department will work with the small business to reduce the risk in the most cost effective way. For example, the rules require either a consultant or the Department to perform the refined risk assessment, if the Risk Screening Worksheet shows a significant risk from the source's HAP emissions. In some cases, the Department can conduct a refined risk assessment at a cost lower than a consultant would charge.

Housing Affordability Impact Analysis

In accordance with N.J.S.A. 52:14B-4.1b, the Department has evaluated the proposed amendments, new rules, and repeals to determine their impact, if any, on the affordability of housing. The proposed rules relate to air pollution control permits, including exemptions and the

reporting of HAPs; and the repeal of the CAIR NO_x trading and NO_x budget programs. The proposed rules apply to businesses and industrial sources. It is extremely unlikely that the proposed rules will have an impact on the affordability of housing units or result in a change in the average costs associated with such housing.

Smart Growth Development Impact Analysis

Pursuant to N.J.S.A. 52:14B-4, the Department has evaluated the proposed amendments and repeals to determine the impact, if any, on housing production in Planning Areas 1 or 2, or within designated centers, under the State Development and Redevelopment Plan (State Plan). The proposed rules relate to air pollution control permits, including exemptions and the reporting of HAPs; and the repeal of the CAIR NO_x trading and NO_x budget programs. The proposed rules apply to businesses and industrial sources, and are not expected to affect the residential sector. Therefore, it is extremely unlikely that the proposed rules will evoke a change in housing production in Planning Areas 1 or 2, or within designated centers.

Full text of the rules proposed for repeal may be found in the New Jersey Administrative Code at N.J.A.C. 7:27-8 Appendix Table B, 16.26, 17.7, 7:27-22 Appendix Table B, 19.24, 30, and 31.

Full text of the proposed new rule and amendments follows (additions indicated in boldface **thus**; deletions indicated in brackets [thus]):

CHAPTER 27

AIR POLLUTION CONTROL

SUBCHAPTER 8. PERMITS AND CERTIFICATES FOR MINOR FACILITIES (AND MAJOR FACILITIES WITHOUT AN OPERATING PERMIT)

7:27-8.1 Definitions

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

…

"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 two years or longer; or**
4. **An engine that is moved from one location to another in an attempt to circumvent the residence time criteria at paragraphs 2 or 3 above.**

…

"Emergency" means any situation [which] **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, [which] **that** requires immediate corrective action to [restore normal operation and which causes the facility, due to unavoidable increases in emissions attributable to the emergency to exceed a technology-based emissions limitation set forth in its preconstruction permit and certificate in effect. This term shall not include noncompliance caused by improperly designed equipment, lack of preventive

maintenance, careless or improper operation, or operator error] **prevent system collapse or to restore normal operations at the facility**.

"Emergency management activity" means an activity to mitigate against, prepare for, respond to, and recover from threatened or actual natural disasters, acts of terrorism, or other man-made disasters.

. . .

"Hazardous waste" means those materials defined as hazardous waste under N.J.A.C. [7:26-8] **7:26G-5.1**.

. . .

"Open top surface cleaner" means a surface cleaner, including, but not limited to, a surface cleaner equipped with a cover, in which there is at any time an opening to the atmosphere greater than 25 percent of the surface area of the VOC solvent contained therein or greater than 25 percent of the surface area of a sink-like work area where the surface cleaning occurs.

. . .

"Portable" means not attached to a permanent foundation, and designed and capable of being carried or moved from one location to another by means of wheels, skids, carrying handles, dolly, trailer, platform, or similar device.

. . .

"Potential to emit" means the same as that term is defined by the EPA at 40 CFR 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, source-related fugitive emissions shall be included in the determination of potential to emit. However, the determination shall not include the holding by the owner or operator of either emission reductions that are banked pursuant to N.J.A.C. 7:27-18.8 [or NO_x budget allowances allocated pursuant to N.J.A.C. 7:27-31.7].

. . .

"Rental facility" means a business that owns and rents or leases portable equipment to another person.

. . .

"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), but does not include a mobile electric generator being used by the military, a locomotive engine, or a construction engine. A stationary reciprocating engine:

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.

. . .

7:27-8.2 Applicability

(a) - (b) (No change.)

(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), (e)**,** or (f) 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 **as defined at N.J.A.C. 7:27-19.1**;

2. – 21. (No change.)

(d) Even if a source is listed in (c) above, any of the following is not a significant source (and, therefore**,** does not need a preconstruction permit and operating certificate) if it is:

1.– 2. (No change.)

3. A stationary storage tank, provided that (d)3i, ii**,** and iii below are satisfied:

i. (No change.)

ii. The following criteria are met:

(1)– (3) (No change.)

(4) The tank's potential to emit each TXS and each HAP does not exceed the [de minimis] reporting thresholds [as specified in N.J.A.C. 7:27-8, Appendix 1, Table A for each TXS and Table B for each HAP] **at N.J.A.C. 7:27-17.9(a)**; and

(5) (No change.)

iii. (No change.)

4. - 12. (No change.)

13. Equipment at a commercial or non-commercial greenhouse or nursery operation [which] **that** is used to blend or mix potting soil (including, but not limited to, soil, compost, artificial media or soil-less media, and/or peat moss) that is used on site for plant propagation and that is not offered for sale or sold commercially; [and]

14. Dry cleaning equipment that uses only liquid carbon dioxide (CO_2) as the cleaning agent[.]**;**

15. Equipment used to conduct construction, repair, or maintenance (CRM) activities, provided that the equipment is portable and is located on site for no longer than one year;

16. Equipment used to temporarily replace commercial fuel burning equipment that has a maximum rated heat input of 1,000,000 BTU per hour or greater to the burning chamber, and/or stationary reciprocating engines with a maximum rated power output of 37 kW or greater, used for generating electricity, that are shut down as part of CRM activities, provided the replacement equipment:

i. Is portable;

ii. Is located on site no longer than 90 days;

iii. Does not emit any air contaminant in excess of the state of the art thresholds in N.J.A.C. 7:27-8 Appendix 1, Table A and 7:27-17.9(b);

iv. Is not moved from one location to another in an attempt to circumvent the requirement to be located on site no longer than 90 days;

v. Prior to operating, is listed in an electronic notification to the Department's Regional Air Enforcement Office, that:

(1) Describes the CRM activity, including the expected duration and start date;

(2) Lists the temporary replacement source operation;

(3) Lists the shutdown permitted significant source operation being replaced;

(4) States the replacement equipment will not emit any air contaminant in excess of the state of the art thresholds in N.J.A.C. 7:27-8 Appendix 1, Table A and 7:27-17.9(b);

(5) Attests that the replacement equipment will remain in compliance with all other applicable State or Federal air pollution requirements;

(6) Affirms the replacement source will not exceed the 90-day residency limit and will not be moved from one location to another in an attempt to circumvent the residency requirement; and

(7) Provides a statement, certified in accordance with N.J.A.C. 7:27-1.39, and signed by the responsible official, as defined at N.J.A.C. 7:27-1.4, that affirms that the replacement equipment meets all of the criteria listed in (d)16v(1) through (6) above; and

vi. Is listed in an electronic notification to the Department's Regional Air Enforcement Office submitted within 30 days after the operation of temporary replacement equipment or source operations has ceased, that:

(1) Describes the replacement equipment that was operated as part of the CRM activity, including total duration and the completion date of the CRM activity;

(2) Lists the total emissions for each piece of replacement equipment operated;

(3) Attests that the replacement equipment remained in compliance with all other applicable State or Federal air pollution requirements;

(4) Affirms the source did not exceed the 90-day residency limit and was not moved from one location to another in an attempt to circumvent the residency requirement; and

(5) Provides a statement, certified in accordance with N.J.A.C. 7:27-1.39, and signed by the responsible official, as defined at N.J.A.C. 7:27-1.4, that affirms that the equipment met all of the criteria listed in (d)16vi(1) through (4) above;

17. Portable equipment, including associated engines that power the equipment, that is being used for an emergency management activity, provided that the equipment is not used for incineration or open burning and is not located on site for more than 90 consecutive days from the start of operation;

18. Equipment available for rent at a rental facility that is operated for testing, maintenance, or demonstration purposes only;

19. Portable hard drive and paper shredders;

20. Equipment used in the excavation and transfer of soil or sediment directly from the soil or sediment pile or excavation hole, without intermediate staging, into a transport vehicle for removal from the site; and

21. Equipment used in the baling and conveying of glass, plastic, cans, cardboard, and paper.

(e) Equipment or a source operation[, which] **that** would be classified as a significant source solely because it meets the criteria in (c)19 above, is not a significant source (and**,** therefore**,** does not need a permit and certificate), provided that (e)1, 2**,** and 3 below are satisfied:

1. (No change.)

2. The following criteria are met:

i.-iv. (No change.)

v. The source's potential to emit each TXS and each HAP does not exceed the [de minimis] reporting thresholds [as specified in N.J.A.C. 7:27-8, Appendix 1, Table A for each TXS and Table B for each HAP] **at N.J.A.C. 7:27-17.9(a)**; and

vi. (No change.)

3. (No change.)

(f) – (j) (No change.)

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

(a) –(j) (No change.)

(k) An application, registration**,** or notice shall, if required by the applicable form, list each air contaminant [which] **that** meets either of the following conditions:

1. The source operation's potential to emit the air contaminant is equal to or higher than the applicable reporting threshold [set forth] in Table A [or B] in **N.J.A.C. 7:27-8** Appendix 1 or **7:27-17.9(a)**; or

2. (No change.)

(*l*) – (s) (No change.)

7:27-8.12 State of the art

(a) If an application proposes construction, installation, reconstruction, or modification of equipment and control apparatus [which] **that** is a significant source meeting the following criteria, the applicant shall document state of the art (SOTA) for the source:

1. The equipment and control apparatus has a potential to emit any HAP at a rate equal to or greater than the SOTA Threshold [in Appendix 1, Table B below] **at N.J.A.C. 7:27-17.9(b)**; or

2. (No change.)

(b) – (f) (No change.)

7:27-8.18 Permit revisions

(a) The following actions require prior approval from the Department through a permit revision:

1. - 2. (No change.)

3. Use of a new raw material not specified in the permit, if the use would cause any of the following results ([If] **if** the use would not cause any of these results, it shall be processed as a seven-day-notice under N.J.A.C. 7:27-8.20, or as an amendment under N.J.A.C. 7:27-8.21):

i. (No change.)

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 **N.J.A.C. 7:27-8** Appendix 1, Table[s] A [and B, incorporated herein by reference] **or at 7:27-17.9(a)**; or

iii. (No change.)

4. A reconstruction, as described in N.J.A.C. 7:27-8.23, unless the reconstructed source has the potential to emit each of the air contaminants listed in [Table A and B of] **N.J.A.C. 7:27-8** Appendix 1**, Table A and at 7:27-17.9(b)** in amounts less than the applicable SOTA threshold level; in that case, the owner or operator of the source shall notify the Department of the reconstruction using the amendment procedures set forth at N.J.A.C. 7:27-8.21;

5. - 7. (No change.)

(b) (No change.)

7:27-8.20 Seven-day-notice changes

(a) - (c) (No change.)

(d) A permittee shall not**,** under (b)1 above**,** use a seven-day-notice for a change [which shall] **that would**:

1. (No change.)

2. Result in emission of a new air contaminant at a level [which] **that** would cause the source's potential to emit to exceed reporting thresholds in [Table A or B in] **N.J.A.C. 727-8** Appendix 1**, Table A or at 7:27-17.9(a)**.

(e) - (h) (No change.)

7:27-8.21 Amendments

(a) (No change.)

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

1. - 4. (No change.)

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] **would** not cause any of the following:

i. (No change.)

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 **N.J.A.C. 7:27-8** Appendix 1, Table[s] A [and B] **or at 7:27-17.9(a)**; or

iii. (No change.)

6. Replacement of an entire permitted source with a replacement source [which] **that** performs the same function as the replaced source and which, for each air contaminant listed in [Table A and B of] **N.J.A.C. 7:27-8** Appendix 1**, Table A and 7:27-17.9(b)** 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 **N.J.A.C. 7:27-8** Appendix 1, Table[s] A [and B] **and 7:27-17.9(b)**;

7. (No change.)

8. A reconstruction, as described [in] **at** N.J.A.C. 7:27-8.23, provided that the reconstructed source has the potential to emit each air contaminant listed in [Table A and B of] **N.J.A.C. 7:27-8** Appendix 1**, Table A and 7:27-17.9(b)** in amounts less than the applicable SOTA threshold level.

(c) – (f) (No change.)

APPENDIX 1

TABLE A

Reporting and SOTA thresholds

(Potential to emit)

Air contaminant	Reporting Threshold[1] (in lbs/hour)	SOTA Threshold[2] (in tons/yr)
...		
[Each TXS	0.01	See Table B
Each HAP	See Table B	See Table B]
Any air contaminant listed in footnote [3]**1**	0.05	5.0

[1 If a source emits an air contaminant that both belongs to an air contaminant class that appears on Table A and is also a HAP found on Table B, emissions of the air contaminant must be taken into consideration in a permit application in determining if the Table A reporting threshold is met, as well as if the Table B reporting threshold is met. If both the Table A and the Table B reporting thresholds are met, emissions of that air contaminant must be included in the emissions reported in application forms for both Table 1 air contaminants and Table 2 HAPs.

2 If a source emits an air contaminant that appears on Table A and is also a HAP found on Table B, the lower of the two SOTA thresholds applies.]

[3]**1** Any 112(r) contaminant; any stratospheric ozone depleting substance, or any greenhouse gas**,** except carbon dioxide (CO_2).

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

7:27-16.1 Definitions

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

. . .

"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; **and**

2. Is the source of mechanical or thermal energy, or electrical power [during an emergency] when the primary source of energy is unavailable[; and] **as a result of:**

i. A power disruption that results from construction, repair, or maintenance activity at the facility. Operation of the combustion source under this subparagraph is limited to 30 days in any calendar year;

ii. A power outage or failure of the primary source of mechanical or thermal energy, or electrical power, because of an emergency; or

iii. A voltage reduction issued by PJM and posted on the PJM internet website (www.pjm.com**) under the "emergency procedures" menu.**

[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.]

. . .

"Open top surface cleaner" means a surface cleaner, including, but not limited to, a surface cleaner equipped with a cover, in which there is at any time, an opening to the atmosphere greater than 25 percent of the surface area of the VOC solvent contained therein or greater than 25 percent of the surface area of a sink-like work area where the surface cleaning occurs.

...

"PJM Interconnection" or "PJM" means the regional transmission organization that coordinates the movement of wholesale electricity in all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia, and the District of Columbia.

. . .

"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:] **but does not include a mobile electric**

generator being used by the military, a locomotive engine or a construction engine. A stationary reciprocating engine:

1. (No change.)

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.]

. . .

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

(a) - (c) (No change.)

(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 **(lb/gal)**;

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 **(lb/lb-mole)**; and

0.000024 = a constant to convert units;

2. – 3. (No change.)

(e) – (f) (No change.)

(g) For the purposes of (f) above, the total calculated annual emission rate of applicable VOC transferred into delivery vessels from each tank shall be determined in accordance with the following procedure:

1. Calculate the emission factor for each applicable VOC transferred from the storage tank to regulated delivery vessels as follows:

EF = 0.000024 x VP x MW

Where:

EF = the emission factor for each applicable VOC being transferred **(lb/gal)**;

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 **(lb/lb-mole)**; and

0.000024 = a constant to convert units;

2. – 3. (No change.)

(h) – (q) (No change.)

7:27-16.6 Open top tanks and solvent cleaning operations

(a) This section [shall apply] **applies** to open top tanks and surface cleaners [which] **that** contain VOC and to solvent cleaning operations[, except that:]**.**

[1. The provisions of (b) through (*i*) below shall not apply on and after June 29, 2004; and

2. The provisions of (j) through (m) shall not apply until June 29, 2004.]

[(b) No person shall cause, suffer, allow, or permit the use of any VOC in an unheated or heated open top tank unless:

1. The tank is covered by a lid which protects the VOC vapors from drafts and diffusion when the tank is not in active use;

2. The tank is an open top tank used solely for the application of electrophoretic dip prime coatings to automobiles and light duty trucks; or

3. The tank is an open top tank used in a waste water treatment system, and the VOC emitted from the tank does not exceed a concentration of 5,000 parts per million by volume measured at any point above the liquid surface at the height of the tank lip.

(c) No person shall cause, suffer, allow, or permit the use of any VOC in an unheated open top surface cleaner having a top opening of more than six square feet (0.56 square meters) but not more than 25 square feet (2.3 square meters) unless such cleaner:

1. Has a visible high-level liquid mark which shall not be exceeded by the contained VOC;

2. Is equipped with a rack or mechanism for ensuring that all of the draining liquid VOC returns into the surface cleaner VOC bath;

3. Is devoid of any flushing wand which produces any VOC droplets or mist or which delivers a stream of any VOC under a line pressure in excess of 15 pounds per square inch gauge (776 millimeters of mercury gauge);

4. Is devoid of any agitating system which causes splashing of the VOC; and

5. Has a freeboard ratio of 0.5 or greater.

(d) No person shall cause, suffer, allow, or permit the use of any VOC in an unheated open top surface cleaner having a top opening of more than 25 square feet (2.3 square inches) unless such cleaner:

1. Has a visible high-level liquid mark which shall not be exceeded by the contained VOC;

2. Is equipped with a rack or mechanism for ensuring that all of the draining liquid VOC returns into the surface cleaner VOC bath;

3. Is devoid of any flushing wand which produces any VOC droplets or mist or which delivers a stream of any VOC under a line pressure in excess of 15 pounds per square inch gauge (776 millimeters of mercury gauge);

4. Is devoid of any agitating system which causes splashing of the VOC; and

5. Blocks drafts from contact with VOC vapors by:

i. Having a freeboard ratio of 0.75 or greater; or

ii. Having a freeboard ratio of 0.5 or greater, and being separated from other activities, and from open windows and doors by means of walls or screens.

(e) No person shall cause, suffer, allow, or permit the use of any VOC in a heated open top tank which is operated at a temperature lower than the boiling point of such VOC unless such tank:

1. Has a visible high-level liquid mark which shall not be exceeded by the contained VOC;

2. Is devoid of any agitating system which causes splashing of the VOC;

3. Is devoid of any flushing wand which produces any VOC droplets or mist or which delivers a stream of any VOC under line pressure in excess of 15 pounds per square inch gauge (776 millimeters of mercury gauge);

4. Blocks drafts from contact with VOC vapors by:

i. Having a freeboard ratio of 0.75 or greater; or

ii. Having a freeboard ratio of 0.5 or greater, and being separated from other activities, and from open windows and doors by means of walls or screens; and

5. Has a thermostat or approved equivalent which automatically maintains the VOC temperature below the boiling point.

(f) No person shall cause, suffer, allow, or permit the use of any VOC in an open top vapor surface cleaner unless such cleaner:

1. Has a visible high-level liquid mark which shall not be exceeded by the contained liquid VOC;

2. Is equipped with a rack or mechanism for ensuring that all of the draining liquid VOC returns into the surface cleaner VOC bath;

3. Is devoid of any flushing wand which produces any VOC droplets or mist or which delivers a stream of any VOC under a line pressure in excess of 15 pounds per square inch gauge (776 millimeters of mercury gauge);

4. Is devoid of any agitating system which causes splashing of the VOC;

5. Blocks drafts from contact with VOC vapors by:

i. Having a freeboard ratio of 0.75 or greater; or

ii. Having a freeboard ratio of 0.5 or greater, and being separated from other activities, and from open windows and doors by means of walls or screens;

6. Has a visible high-level vapor mark which shall not be exceeded by the VOC;

7. Is free from the influence of any local exhaust ventilation system unless such ventilation system collects at least 80 percent by volume of the VOC vapors leaving the cleaner, and reduces the vapors collected by at least 85 percent by volume;

8. Is free from the influence of any positive pressure source located within 20 feet (6.1 meters) of the tank rim unless the cleaner is equipped with and operates a means of collecting at least 80 percent by volume of the VOC vapors leaving the cleaner, and reduces the vapors collected by at least 85 percent by volume;

9. Is operated with a condenser having heat removal capacity equal to or greater than the heat input rate into the liquid VOC bath;

10. Is equipped with a device which automatically shuts off the heat input to the VOC if the temperature above the condensing surfaces or the temperature of the condensate exceeds the manufacturer's specifications; and

11. Is equipped with a freeboard chiller through which circulates a cooling fluid having a temperature no higher than 40 degrees F (4.4 degrees C) at any point in the chiller, or with other apparatus approved by the Department as being equally or more effective in reducing emissions. Cleaners with top openings no greater than 25 square feet (2.3 square meters) are not subject to this requirement.

(g) No person shall cause, suffer, allow, or permit the use of any VOC in an unheated conveyorized surface cleaner unless such cleaner:

1. Has a visible high-level liquid mark which shall not be exceeded by the contained VOC;

2. Is devoid of any flushing wand which produces any VOC droplets or mist or which delivers a stream of any VOC under a line pressure in excess of 15 pounds per square inch gauge (776 millimeters of mercury gauge);

3. Is devoid of any agitating system which causes splashing of the VOC;

4. Is protected from drafts when not in active use by the installation of covers over the conveyor inlet and conveyor outlet ports and over any other openings;

5. Is protected from drafts when in active use by the installation of silhouette cutouts or hanging flaps to minimize the effective openings around the conveyor inlet and conveyor outlet ports; and

6. Is equipped with a vapor control system which reduces the total emissions of VOC from the cleaner by at least 85 percent by volume. Cleaners installed before December 17, 1979, are not subject to this requirement.

(h) No person shall cause, suffer, allow, or permit the use of any VOC in a conveyorized heated surface cleaner which is operated at a temperature lower than the boiling point of such VOC, unless such cleaner:

1. Has a visible high-level liquid mark which shall not be exceeded by the contained VOC;

2. Is devoid of any flushing wand which produces any VOC droplets or mist or which delivers a stream of any VOC under a line pressure in excess of 15 pounds per square inch gauge (776 millimeters of mercury gauge);

3. Is devoid of any agitating system which causes splashing of the VOC;

4. Has a thermostat or approved equivalent which automatically maintains the VOC temperature below the boiling point;

5. Is protected from drafts when not in active use by the installation of covers over the conveyor inlet and conveyor outlet ports and over any other openings;

6. Is protected from drafts when in active use by the installation of silhouette cutouts or hanging flaps to minimize the effective openings around the conveyor inlet and conveyor outlet parts; and

7. Is equipped with a vapor control system by February 1, 1987, which reduces the total VOC emissions from the cleaner by at least 85 percent by volume.

(i) No person shall cause, suffer, allow, or permit the use of any VOC in a conveyorized vapor surface cleaner unless such cleaner:

1. Has a visible high-level liquid mark which shall not be exceeded by the contained liquid VOC;

2. Is devoid of any flushing wand which produces any VOC droplets or mist or which delivers a stream of any VOC under a line pressure in excess of 15 pounds per square inch gauge (776 millimeters of mercury gauge);

3. Is devoid of any agitating system which causes splashing of the VOC;

4. Is operated with a condenser having heat removal capacity equal to or greater than the heat input rate into the liquid VOC bath;

5. Is equipped with a device which automatically shuts off the heat input to the VOC if the temperature above the condensing surfaces or the temperature of the condensate exceeds the manufacturer's specifications;

6. Is protected from drafts when not in active use by the installation of covers over the conveyor inlet and conveyor outlet ports and over any other openings;

7. Is protected from drafts when in active use by the installation of silhouette cutouts or hanging flaps to minimize the effective openings around the conveyor inlet and conveyor outlet ports; and

8. Is equipped with:

i. A freeboard chiller through which circulates a cooling fluid having a temperature no higher than 40 degrees F (4.4 degrees C) at any point in the chiller; or

ii. A vapor control system which reduces the total VOC emissions from the cleaner by at least 85 percent by volume.]

(b)-(i) (Reserved)

(j) The following provisions [shall] apply to a cold cleaning machine, that uses two gallons or more of solvents containing greater than five percent VOC content by weight for the cleaning of metal parts, and to any heated cleaning machine:

1. - 2. (No change.)

3. A person shall not use, in a cold cleaning machine or a heated cleaning machine, any solvent**, except water,** that has a vapor pressure of one millimeter of mercury or greater, measured at 20 degrees centigrade (68 degrees Fahrenheit); and

4. (No change.)

(k) - (n) (No change.)

7:27-16.16 Other source operations

(a) - (c) (No change.)

(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. - 2. (No change.)

3. [From] **If the vapor pressure of the VOC is less than 14.7 psia, from** Table 16B, find the source gas range classification by selecting the appropriate line for the vapor pressure as determined in [Step 1] **(d)1 above** and the appropriate column for the percent **by volume of the** VOC **in the source gas emitted from the source operation** as determined in [Step 2] **(d)2 above**.

4. If the vapor pressure of the VOC is equal to or greater than 14.7 psia:

i. The source gas range classification is Range A if the percent by volume of the VOC in the source gas emitted from the source operation as determined in (d)2 above is not greater than 0.1 percent (1,000 ppm).

ii. The source gas range classification is Range B if the percent by volume of the VOC in the source gas emitted from the source operation as determined in (d)2 above is greater than 0.1 percent (1,000 ppm) and is not greater than 1 percent (10,000 ppm).

iii. The source gas range classification is Range I if the percent by volume of the VOC in the source gas emitted from the source operation as determined in (d)2 above is greater than one percent (10,000 ppm) and is not greater than 97 percent.

iv. The source gas range classification is Range G if the percent by volume of the VOC in the source gas emitted from the source operation as determined in (d)2 above is greater than 97 percent and is not greater than 99.5 percent.

v. The source gas range classification is Range H if the percent by volume of the VOC in the source gas emitted from the source operation as determined in (d)2 above is greater than 99.5 percent.

[4.] **5.** From Table 16A, Column 2, determine the maximum allowable percent of process emissions for the source gas range as determined in [Step 3] **(d)3 and 4 above**.

[5.] **6.** The maximum allowable emission rate [shall be] **is** 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

(No change.)

NOTE: THIS IS A COURTESY COPY OF THIS RULE PROPOSAL. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE AUGUST 7, 2017 NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE PROPOSAL, THE OFFICIAL VERSION WILL GOVERN.

TABLE 16B

DETERMINANTS OF CONTROLS REQUIRED FOR PROCESS SOURCE GASES

Vapor Pressure, psia @ 70 F		Concentration of VOC by Volume, Percent													
		Range A	Range B		Range C		Range D		Range E		Range F		Range G	Range H	[Range I]
Greater Than	But not Greater Than	Not Greater Than	Greater Than	But not Greater Than	Greater Than	But not Greater Than	Greater Than	But not Greater Than	Greater Than	But not Greater Than	Greater Than	But not Greater Than			
0.0	0.1					-	-	-	1.0	18.0	18.0				
0.1	0.2					-	1.0	7.0	7.0	29.0	29.0				
0.2	0.3					6.0	6.0	13.0	13.0	40.0	40.0				
0.3	0.4					9.0	9.0	18.0	18.0	45.0	45.0				
0.4	0.5					12.0	12.0	22.0	22.0	50.0	50.0				
0.5	0.6					14.0	14.0	25.0	25.0	56.0	56.0				
0.6	0.7					16.0	16.0	28.0	28.0	60.0	60.0				
0.7	0.8					18.0	18.0	31.0	31.0	64.0	64.0				
0.9	0.9					20.0	20.0	34.0	34.0	67.0	67.0				
0.9	1.0					22.0	22.0	37.0	37.0	70.0	70.0				
1.0	1.2					26.0	26.0	41.0	41.0	74.5	74.5				
1.2	1.4					29.0	29.0	45.0	45.0	77.5	77.5				
1.4	1.6					32.0	32.0	49.0	49.0	80.5	80.5				
1.6	1.8					34.5	34.5	52.0	52.0	83.0	83.0				
1.8	2.1					38.0	38.0	55.0	55.0	86.0	86.0				
2.1	2.4					41.5	41.5	58.0	58.0	88.0	88.0				
2.4	2.7					45.0	45.0	61.0	61.0	90.0	90.0				
2.7	3.0					48.0	48.0	64.0	64.0	91.5	91.5				
3.0	3.5					52.0	52.0	68.0	68.0	93.5	93.5				
3.5	4.0	0.1% (1000 PPM)	0.1% (1000 PPM)	1.0% (10000 PPM)	1.0% (10000 PPM)	55.0	55.0	71.0	71.0	95.5	95.5	97.0%	Greater Than 97.0% But Not Greater Than 99.5%	Greater Than 99.5%	[Greater Than 1% but Not Greater Than 97%]
4.0	4.5					58.0	58.0	74.0	74.0	97.0					
4.5	5.0					61.0	61.0	76.0	76.0	97.0					
5.0	5.5					64.0	64.0	78.0	78.0	97.0					
5.5	6.0					66.5	66.5	79.5	79.5	97.0					
6.0	6.5					68.5	68.5	81.0	81.0	97.0					
6.5	7.0					70.5	70.5	82.5	82.5	97.0					
7.0	7.5					72.0	72.0	84.0	84.0	97.0					
7.5	8.0					73.5	73.5	85.0	85.0	97.0					
8.0	8.5					75.0	75.0	86.0	86.0	97.0					
8.5	9.5					77.5	77.5	87.5	87.5	97.0					
9.5	10.5					80.0	80.0	89.0	89.0	97.0					
10.5	11.5					82.0	82.0	90.5	90.5	97.0					
11.5	13.0					84.5	84.5	92.0	92.0	97.0					
13.0	14.7					87.0	87.0	93.0	93.0	97.0					

(e) (No change.)

(f) For the purpose of this section:

1. – 2. (No change.)

3. The maximum allowable emission rate for source gases physically combined (manifolded) for more than one source operation [shall be] **is** the sum of the maximum allowable emission rates for the separate source gases as determined under N.J.A.C. 7:27-[16.6(c), (h), (i), and (j) and] 16.16(c) and (e). The process emission rate shall be used as the maximum allowable emission rate of a separate source gas if it is less than the applicable exclusion rate contained in Table 16A, Column 3;

4. – 6. (No change.)

(g) Any person responsible for a source operation subject to (c) above shall maintain the following records for each source operation:

1. For each different kind of batch or continuous process for which the source operation is used:

i. Record the following information determined in accordance with the [Procedure for Using] **procedure for using** Table 16A in [(c)] **(d)** above: the chemical name and vapor pressure of each VOC used, the percent concentration by volume of VOC in the source gas, the volumetric gas flow rate, the source gas range classification, and the maximum allowable emission rate; also record the maximum actual emission rate and maintain the calculations and any test data used to determine the actual emission rate for each process; and, if the source

operation is used for more than one process, record the dates on which the source operation is used for each process; or

ii. (No change.)

2. – 4. (No change.)

7:27-16.17 Alternative and facility-specific VOC control requirements

(a) (No change.)

(b) Except as provided at [(t)] **(q)** 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.]

1. (Reserved)

2. (No change.)

(c) The following requirements [shall] apply to an owner or operator seeking approval of an alternative VOC control plan pursuant to (a)2 or 3 above:

1. – 2. (No change.)

3. Any owner or operator that has an alternative VOC control plan approved prior to May 19, 2009**,** by the Department and [who] **that** plans to continue operating with an alternative VOC control plan, shall submit a proposed plan by August 17, 2009. The owner or operator may request a 60-day extension pursuant to N.J.A.C. 7:27-16.17[(q)]**(o)** to submit the proposed plan:

i. – ii. (No change.)

4. – 5. (No change.)

(d) (No change.)

[(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 (l) below; and

5. A certification signed by the owner or operator, satisfying the requirements of N.J.A.C. 7:27-1.39.]

[(f)] **(e)** (No change in text.)

[(g)] **(f)** Within 30 days after receiving [a demonstration submitted pursuant to (b)1 above,] a proposed facility-specific VOC control plan submitted pursuant to (b)2 above, or a proposed compliance plan submitted pursuant to (f) above, the Department [shall] **will** 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] **will** 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.

Recodify existing (h) – (k) as **(g) – (j)** (No change in text.)

[(*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.]

Recodify existing (m) - (q) as **(k) – (o)** (No change in text.)

[(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.]

Recodify existing (s) - (t) as **(p) – (q)** (No change in text.)

SUBCHAPTER 17. CONTROL AND PROHIBITION OF AIR POLLUTION BY TOXIC SUBSTANCES **AND HAZARDOUS AIR POLLUTANTS**

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.]

...

["Effective stack height" means the distance to the plume center line from the ground as determined by adding the plume rise to the physical height of the stack. It shall be calculated by one of the following equations:

1. If the lowest possible temperature of the gas leaving the stack is 68 degrees Fahrenheit (20 degrees Celsius) or less:

Effective stack height = $H_s + 2.76(D)(B^{1/3})$

where:

H_s = the physical stack height above grade in meters

D = the stack outlet indiameter in meters

$B = (V^2)/T$

V = the stack gas exit velocity in meters per second

T = the stack gas temperature at the stack outlet in degrees Kelvin

2. If the lowest possible temperature of the gas leaving the stack is greater than 68 degrees Fahrenheit (20 degrees Celsius):

Effective stack height = $H_s + 8.28(F^{0.75})$

where:

H_s = the physical stack height above grade in meters

F = (V)(D2)(T-293)/T

V = the stack gas exit velocity in meters per second

D = the stack outlet diameter in meters

T = the stack gas temperature at the stack outlet in degrees Kelvin]

...

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

...

["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.]

...

"Toxic substance" or "TXS" means a substance listed in **N.J.A.C. 7:27-17.3,** Table 1 [of this subchapter].

...

7:27-17.4 Discharge of **GROUP II** toxic substances

[(a) No person shall cause, suffer, allow or permit any GROUP I TXS to be emitted from any source operation into the outdoor atmosphere unless such discharge is:

1. At an effective stack height of no less than 40 feet (12.2 meters) above grade;

2. No less than 20 feet (6.1 meters) higher than any area of human use or occupancy including, but not limited to, the roof of a building, which is within 50 feet (15.2 meters), measured horizontally from the point of discharge; and

3. Directed vertically upward.

(b) No person shall cause, suffer, allow or permit the emission of a GROUP I TXS into the outdoor atmosphere from a system, equipment, or control apparatus not approved by the Department as being effective in preventing aerodynamic downwash.]

[(c)] The Department has determined that GROUP II TXS should be subject to at least reasonably available control technology requirements. Accordingly, requirements for the implementation of control measures, including, but not limited to, requirements for the installation and use of control apparatus, set forth at N.J.A.C. 7:27-16 and 23, [shall] apply with full force to GROUP II TXS until the Department amends this rule in response to anticipated EPA rule-making or otherwise. For example, pursuant to this subsection and N.J.A.C. 7:27-16.4(b), certain transfers of methylene chloride may be conducted only with either a vapor control apparatus [which] **that** reduces by no less than 90 percent the concentration of methylene chloride in the air-vapor mixture displaced during the transfer, a floating roof, or certain types of vapor balance systems. For another example, pursuant to this subsection and N.J.A.C. 7:27-23.3, a lacquer may not contain more than 5.7 pounds per gallon of methylene chloride, nor may it contain more than 4.7 pounds of VOC together with one pound of methylene chloride.

7:27-[17.8]**17.7** (No change in text.)

7:27-[17.9]**17.8** Exceptions

(a) The provisions of [sections 3, 4 and 6(c) of this subchapter shall] **N.J.A.C. 7:27-17.3 and 17.6(c) do** not apply to the benzene constituent of gasoline [which] **that** is discharged to the atmosphere from storage tanks or transfer operations.

(b) [The provisions of this subchapter shall] **N.J.A.C. 7:27-17.3, 17.5, 17.6(c), and 17.7** do not apply to any TXS [which] **that**:

1. – 3. (No change.)

7:27-17.9 Hazardous air pollutant and toxic substance reporting thresholds and state of the art thresholds

(a) The reporting thresholds referenced in N.J.A.C. 7:27-8.2(d)3ii(4) and (e)2v, 8.4(k)1, 8.18(a)3ii, 8.20(d)2, 8.21(b)5ii, 21.3(b)1ii and 2iii, 22.1, 22.3(c), 22.6(f)5i and ii, 22.27(e)1iii, and 22.30(*l*) are:

1. For a HAP that is not a TXS, as listed in Table 2, below*;*

2. For a HAP that is both a HAP and a TXS:

i. As listed in Table 2; and

ii. 0.01 pounds per hour; and

3. For any HAP, the lower of the reporting threshold and the SOTA threshold in Table 2 below.

(b) The state of the art thresholds referenced in N.J.A.C. 7:27-8.2(d)16iii and v(4), 8.12(a)1, 8.18(a)4, 8.21(b)6 and 8, 22.1, and 22.35(b) and (c) are as listed in Table 2, below.

TABLE 2

Reporting Threshold
(Potential to emit)

CAS Number	Air Contaminant	Reporting Threshold (lbs/yr)	SOTA Threshold (lbs/yr)
75070	Acetaldehyde	21	10,000
60355	Acetamide	2	2,000
75058	Acetonitrile	2,000	8,000
98862	Acetophenone	1	2,000
53963	2-Acetylaminofluorene	0.04	10
107028	Acrolein	1	80
79061	Acrylamide	0.5	40
79107	Acrylic acid	45	1,200
107131	Acrylonitrile	1	600
107051	Allyl chloride	8	2,000
92671	4-Aminobiphenyl	0.01	2,000
62533	Aniline	28	2,000
90040	o-Anisidine	1	2,000
71432	Benzene	6	4,000
92875	Benzidine	0.001	0.6
98077	Benzotrichloride	0.01	12
100447	Benzyl chloride	1	200
92524	Biphenyl	18	10,000
117817	Bis(2-ethylhexyl)phthalate	18	10,000

542881	**Bis(chloromethyl)ether**	**0.001**	**0.6**
75252	**Bromoform**	**42**	**10,000**
106990	**1,3-Butadiene**	**1.5**	**140**
156627	**Calcium cyanamide**	**2,000**	**10,000**
133062	**Captan**	**70**	**10,000**
63252	**Carbaryl**	**2,000**	**10,000**
75150	**Carbon disulfide**	**2,000**	**2,000**
56235	**Carbon tetrachloride**	**8**	**2,000**
463581	**Carbonyl sulfide**	**1,000**	**10,000**
120809	**Catechol**	**1,000**	**10,000**
133904	**Chloramben**	**200**	**10,000**
57749	**Chlordane**	**0.5**	**20**
7782505	**Chlorine**	**9**	**200**
79118	**Chloroacetic acid**	**20**	**200**
532274	**2-Chloroacetophenone**	**1.5**	**120**
108907	**Chlorobenzene**	**2,000**	**10,000**
510156	**Chlorobenzilate**	**1.5**	**800**
67663	**Chloroform**	**2**	**1,800**
107302	**Chloromethyl methyl ether**	**0.07**	**200**
126998	**Chloroprene**	**0.15**	**2,000**
1319773	**Cresols/Cresylic acid**	**2,000**	**2,000**
95487	**o-Cresol**	**2,000**	**2,000**
108394	**m-Cresol**	**2,000**	**2,000**

106445	**p-Cresol**	**2,000**	**2,000**
98828	**Cumene**	**2,000**	**10,000**
94757	**2,4-D, salts and esters**	**2,000**	**10,000**
547044	**DDE**	**0.5**	**20**
334883	**Diazomethane**	**200**	**2,000**
132649	**Dibenzofurans**	**1,000**	**10,000**
96128	**1,2-Dibromo-3-chloropropane**	**0.02**	**200**
84742	**Dibutylphthalate**	**2,000**	**10,000**
106467	**1,4-Dichlorobenzene**	**4**	**6,000**
91941	**3,3-Dichlorobenzidine**	**0.14**	**400**
111444	**Dichloroethyl ether**	**0.14**	**120**
542756	**1,3-Dichloropropene**	**11.5**	**2,000**
62737	**Dichlorvos**	**0.5**	**400**
111422	**Diethanolamine**	**140**	**10,000**
121697	**N,N- Dimethylaniline**	**200**	**2,000**
64675	**Diethyl sulfate**	**200**	**2,000**
119904	**3,3-Dimethoxybenzidine**	**20**	**200**
60117	**4-Dimethyl aminoazobenzene**	**0.04**	**2,000**
119937	**3,3-Dimethyl benzidine**	**2**	**16**
79447	**Dimethyl carbamyl chloride**	**0.01**	**40**
68122	**Dimethyl formamide**	**1,300**	**2,000**
57147	**1,1-Dimethyl hydrazine**	**0.1**	**16**
131113	**Dimethyl phthalate**	**2,000**	**10,000** **200**

77781	**Dimethyl sulfate**	**0.01**	
534521	**4,6-Dinitro-o-cresol**	**20**	**200**
51285	**2,4-Dinitrophenol**	**200**	**2,000**
121142	**2,4-Dinitrotoluene**	**0.5**	**40**
123911	**1,4-Dioxane**	**9**	**10,000**
122667	**1,2-Diphenylhydrazine**	**0.2**	**180**
106898	**Epichlorohydrin**	**39**	**4,000**
106887	**1,2-Epoxybutane**	**900**	**2,000**
140885	**Ethyl acrylate**	**370**	**2,000**
100414	**Ethyl benzene**	**19**	**10,000**
51796	**Ethyl carbamate**	**0.15**	**1,600**
75003	**Ethyl chloride**	**2,000**	**10,000**
106934	**Ethylene dibromide**	**0.08**	**200**
107062	**Ethylene dichloride**	**1.8**	**1,600**
107211	**Ethylene glycol**	**2,000**	**10,000**
151564	**Ethylene imine**	**0.002**	**6**
75218	**Ethylene oxide**	**0.02**	**200**
96457	**Ethylene thiourea**	**3.5**	**1,200**
75343	**Ethylidene dichloride**	**30**	**2,000**
50000	**Formaldehyde**	**3.5**	**4,000**
76448	**Heptachlor**	**0.04**	**40**
118741	**Hexachlorobenzene**	**0.1**	**20**
87683	**Hexachlorobutadiene**	**2**	**1,800**

77474	**Hexachlorocyclopentadiene**	**9**	**200**
67721	**Hexachloroethane**	**4**	**10,000**
822060	**Hexamethylene-1,6-diisocyante**	**0.5**	**40**
680319	**Hexamethylphosphoramide**	**2**	**20**
110543	**Hexane**	**2,000**	**10,000**
302012	**Hydrazine**	**0.01**	**8**
7647010	**Hydrochloric acid**	**900**	**10,000**
7664393	**Hydrogen fluoride**	**600**	**200**
123319	**Hydroquinone**	**200**	**2,000**
78591	**Isophorone**	**2,000**	**10,000**
58899	**Lindane**	**0.15**	**20**
108316	**Maleic anhydride**	**32**	**2,000**
67561	**Methanol**	**2,000**	**10,000**
72435	**Methoxychlor**	**2,000**	**10,000**
74839	**Methyl bromide**	**230**	**10,000**
74873	**Methyl chloride**	**25**	**10,000**
71556	**Methyl chloroform**	**2,000**	**10,000**
60344	**Methyl hydrazine**	**12**	**120**
74884	**Methyl iodide**	**200**	**2,000**
108101	**Methyl isobutyl ketone**	**2,000**	**10,000**
624839	**Methyl isocyanate**	**45**	**200**
80626	**Methyl methacrylate**	**2,000**	**10,000**
1634044	**Methyl tert butyl ether**	**180**	**10,000**

101144	**4,4-Methylene bis(2-chloraniline)**	**0.1**	**400**
75092	**Methylene chloride**	**2,000**	**10,000**
101688	**4,4-Methylene diphenyl diisocyanate**	**27**	**200**
101779	**4,4'-Methylene dianiline**	**0.1**	**2,000**
91203	**Naphthalene**	**1.4**	**10,000**
98953	**Nitrobenzene**	**1**	**2,000**
92933	**4-Nitrobiphenyl**	**200**	**2,000**
100027	**4-Nitrophenol**	**1,000**	**10,000**
79469	**2-Nitropropane**	**0.02**	**2,000**
684935	**N-Nitroso-N-methylurea**	**0.002**	**0.4**
62759	**N-Nitrosodimethylamine**	**0.004**	**2**
59892	**N-Nitrosomorpholine**	**0.02**	**2,000**
56382	**Parathion**	**20**	**200**
82688	**Pentachloronitrobenzene**	**60**	**600**
87865	**Pentachlorophenol**	**9**	**1,400**
108952	**Phenol**	**2,000**	**200**
106503	**p-Phenylenediamine**	**2,000**	**10,000**
75445	**Phosgene**	**14**	**200**
7803512	**Phosphine**	**14**	**10,000**
7723140	**Phosphorus**	**3.2**	**200**
85449	**Phthalic anhydride**	**900**	**10,000**
1336363	**Polychlorinated biphenyls**	**0.5**	**18**
1120714	**1,3-Propane sultone**	**0.07**	**60**

57578	**beta-Propiolactone**	**0.01**	**200**
123386	**Propionaldehyde**	**350**	**10,000**
114261	**Propoxur**	**2,000**	**10,000**
78875	**Propylene dichloride**	**4.5**	**2,000**
75569	**Propylene oxide**	**12**	**10,000**
75558	**1,2-Propylenimine**	**0.6**	**60**
91225	**Quinoline**	**0.05**	**120**
106514	**Quinone**	**1,000**	**10,000**
100425	**Styrene**	**80**	**2,000**
96093	**Styrene oxide**	**1**	**2,000**
1746016	**2,3,7,8-TCDD**	**0.0000012**	**0.0012**
79345	**1,1,2,2-Tetrachloroethane**	**0.8**	**600**
127184	**Tetrachloroethylene**	**180**	**10,000**
7550450	**Titanium tetrachloride**	**4.6**	**200**
108883	**Toluene**	**2,000**	**10,000**
95807	**2,4-Toluene diamine**	**0.04**	**40**
584849	**2,4-Toluene diiscocyanate**	**3.3**	**200**
95534	**o-Toluidine**	**0.9**	**2,000**
8001352	**Toxaphene**	**0.14**	**20**
120821	**1,2,4-Trichlorobenzene**	**90**	**10,000**
79005	**1,1,2-Trichloroethane**	**3**	**2,000**
79016	**Trichloroethylene**	**8**	**10,000**
95954	**2,4,5-Trichlorophenol**	**200**	**2,000**

88062	**2,4,6-Trichlorophenol**	**15**	**10,000**
121448	**Triethylamine**	**325**	**10,000**
1582098	**Trifluralin**	**21**	**10,000**
540841	**2,2,4-Trimethylpentane**	**1,000**	**10,000**
108054	**Vinyl acetate**	**2,000**	**2,000**
593602	**Vinyl bromide**	**1.5**	**1,200**
75014	**Vinyl chloride**	**5**	**400**
75354	**Vinylidene chloride**	**2,000**	**800**
1330207	**Xylenes**	**2,000**	**10,000**
95476	**o-Xylenes**	**2,000**	**10,000**
108380	**m-Xylenes**	**2,000**	**10,000**
106423	**p-Xylenes**	**2,000**	**10,000**
CHEMICAL COMPOUND CLASSES			
	Antimony compounds[1]	**1,000**	**10,000**
7783702	**Antimony pentafluoride**	**20**	**200**
8300745	**Antimony potassium tartrate**	**200**	**2,000**
1309644	**Antimony trioxide**	**9**	**2,000**
1345046	**Antimony trisulfide**	**20**	**2,000**
	Arsenic & inorganic arsenic compounds	**0.01**	**10**
7784421	**Arsine**	**0.01**	**10**
	Beryllium compounds[1]	**0.02**	**16**
	Beryllium salts	**0.004**	**0.04**
	Cadmium compounds	**0.01**	**20**

130618	**Cadmium oxide**	**0.01**	**20**
	Chromium compounds[1]	**1,000**	**10,000**
	Hexavalent chromium compounds	**0.004**	**4**
	Trivalent chromium compounds	**1,000**	**10,000**
10025737	**Chromic chloride**	**2**	**20**
744084	**Cobalt metal and compounds[1]**	**0.005**	**200**
10210681	**Cobalt carbonyl**	**0.005**	**200**
62207765	**Fluomine**	**0.005**	**200**
	Coke oven emissions	**0.07**	**60**
	Cyanide compounds[1]	**35**	**10,000**
151508	**Potassium cyanide**	**20**	**200**
143339	**Sodium cyanide**	**20**	**200**
	Glycol ethers[1]	**1,000**	**10,000**
110805	**2-Ethoxy ethanol**	**1,000**	**10,000**
111762	**Ethylene glycol monobutyl ether**	**1,000**	**10,000**
109864	**2-Methoxy ethanol**	**350**	**10,000**
	Lead and compounds[1]	**2**	**20**
78002	**Tetraethyl lead**	**2**	**20**
75741	**Tetramethyl lead**	**2**	**20**
7439965	**Manganese and compounds[1]**	**0.6**	**1,600**
12108133	**Methylcyclopentadienyl manganese**	**0.6**	**200**
	Mercury compounds[1]	**2**	**20**
	Elemental mercury	**2**	**20**

748794	**Mercuric chloride**	**2**	**20**
10045940	**Mercuric nitrate**	**2**	**20**
62384	**Phenyl mercuric acetate**	**2**	**20**
	Nickel compounds[1]	**0.6**	**2,000**
13463393	**Nickel carbonyl**	**0.6**	**200**
12035722	**Nickel refinery dust**	**0.2**	**160**
	Nickel subsulfide	**0.1**	**80**
	Polycyclic organic matter[1]	**2**	**20**
56553	**Benz(a)anthracene**	**0.4**	**20**
225514	**Benz(c)acridine**	**2**	**20**
50328	**Benzo(a)pyrene**	**0.04**	**20**
205992	**Benzo(b)fluoranthene**	**0.4**	**20**
218019	**Chrysene**	**2**	**20**
53703	**Dibenz(a,h)anthracene**	**0.04**	**20**
189559	**1,2:7,8-Dibenzopyrene**	**0.004**	**20**
57976	**7,12-Dimethylbenz(a)anthracene**	**0.0007**	**20**
193395	**Indeno(1,2,3-c,d)pyrene**	**0.4**	**20**
7782492	**Selenium compounds[1]**	**925**	**200**
7783075	**Hydrogen selenide**	**20**	**200**
7488564	**Selenium sulfide (mono and di)**	**20**	**200**
13410010	**Sodium selenate**	**20**	**200**
10102188	**Sodium selenite**	**20**	**200**
	Total dioxin and furans[2]	**0.00012**	**0.0012**

[1] Some compounds or subgroups included in this chemical group are also individually named in this table. If a compound or subgroup is individually listed, the threshold listed for the compound or subgroup takes precedence over the threshold listed for the chemical group as a whole. If a compound or subgroup is not individually listed, the threshold for the entire chemical group applies to each compound or subgroup included in the chemical group.

[2] As defined in Interim Procedures for Estimating Risks Associated with Exposure to Mixtures of Chlorinated-p-Dioxins and Dibenzofurans (CDDs and CDFs), March, 1989 update, EPA-625/3-89/016, available from www.epa.gov.nscep.

SUBCHAPTER 19. CONTROL AND PROHIBITION OF AIR POLLUTION FROM OXIDES OF NITROGEN

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.

. . .

["Budget source" means those sources regulated in N.J.A.C. 7:27-31.]

. . .

["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.]

…

"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 paragraphs 2 or 3 above.

. . .

"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; **and**

2. Is the source of mechanical or thermal energy, or electrical power [during an emergency] when the primary source of energy is unavailable[; and] **as a result of:**

i. A power disruption that results from construction, repair, or maintenance activity at the facility. Operation of the combustion source under this subparagraph is limited to 30 days in any calendar year;

ii. A power outage or failure of the primary source of mechanical or thermal energy because of an emergency; or

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

[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.]

. . .

["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.]

. . .

["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.]

. . .

"PJM Interconnection" or "PJM" means the regional transmission organization that coordinates the movement of wholesale electricity in all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia, and the District of Columbia.

"Portable" means not attached to a permanent foundation, and designed and capable of being carried or moved from one location to another by means of wheels, skids, carrying handles, dolly, trailer, platform, or similar device.

. . .

"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:] **but does not include a mobile electric generator being used by the military, a locomotive engine, or a construction engine. A stationary reciprocating engine:**

1. (No change.)

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.]

…

7:27-19.2 Purpose, scope**,** and applicability

(a) – (c) (No change.)

(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] **Except** as specified at paragraph [3] **2** of the definition of emergency generator at N.J.A.C. 7:27-19.1**, and 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**;

2. For normal testing and maintenance **under 1 above, except as set forth in this paragraph,** 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]**. However, public water systems, wastewater and stormwater systems, and sludge management facilities may perform normal testing and maintenance on their emergency generators, regardless of air quality, during the 48 hours prior to a National Weather Service-designated named storm impacting the facility's area of the State. These entities must notify the Department by calling the hotline at 1-877-WARN-DEP (1-877-927-6337) before conducting such normal testing and maintenance if the air quality forecast at http://www.njaqinow.net/ is unhealthy or worse; and**

3. (No change.)

(e) – (f) (No change.)

(g) Notwithstanding the provisions of (b) and (c) above, this subchapter does not apply to a stationary reciprocating engine that:

1. Is not connected to the electric power distribution grid;

2. Is not replacing power from the electric power distribution grid (for example, PJM demand curtailment program, peak shavings, demand response, or replacing power to equipment currently powered by the electric power distribution grid); and

3. Is portable and supplying power only to portable equipment.

7:27-19.7 Industrial/commercial/institutional boilers and other indirect heat exchangers

(a) - (f) (No change.)

(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. (No change.)

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[.]**; or**

4. If the industrial/commercial/institutional boiler or other indirect heat exchanger is not operated during the quarter of the calendar year in which the annual adjustment is to be performed pursuant to (g)1, 2, or 3 above, the owner or operator shall perform the adjustment within seven days after the boiler or other indirect heat exchanger is next operated.

(h) - (i) (No change.)

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] **greater**, 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] **37** kW or [more] **greater**, fueled by gaseous fuel, and used for generating electricity, [shall be] **is** 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] **greater**, fueled by gaseous fuel, shall cause it to emit no more than 2.5 grams of NO_x per horsepower bhp-hr. Beginning March 7, 2007, a lean-burn stationary reciprocating engine capable of producing an output of [370] **37** kW or [more] **greater**, fueled by gaseous fuel, and used for generating electricity, [shall be] **is** 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] **greater**, 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] **37** kW or [more] **greater**, fueled by liquid fuel, and used for generating electricity, [shall be] **is** subject to (e) below, and not to this subsection.

(d) – (f) (No change.)

7:27-19.11 Emergency generators - recordkeeping

(a) The owner or operator of an emergency generator with a maximum rated **power** output of 37

kW **or greater**, shall maintain on site and record in a logbook or computer data system, the following information:

1. - 3. (No change.)

(b) (No change.)

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.- 4. (No change.)

5. Measure the concentrations in the effluent stream of NO_x[,] **and** CO [and O_2] in ppmvd, **and O_2 in percent,** before and after the adjustment is made; and

6. Convert the emission values of the NO_x[,] **and** 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)- (h) (No change.)

7:27-19.25 Exemption for emergency use of fuel oil

(a) - (b) (No change.)

(c) The owner or operator of the combustion source is eligible for the exemption under (a) above only if the following requirements are met:

1.- 2. (No change.)

3. The combustion source ceases using fuel oil or other liquid fuel in place of natural gas and resumes using natural gas as soon as a sufficient supply of natural gas becomes practicably available; **and**

[4. The use of fuel oil or liquid fuel does not exceed 500 hours during any consecutive 12-month period; and]

[5.] **4.** (No change in text.)

(d) The owner or operator shall keep records of curtailment periods and incorporate such records into the [required quarterly] reports submitted to the Department **as required at N.J.A.C. 7:27-19.19(g)**. Such records shall include the following information:

1.- 4. (No change.)

SUBCHAPTER 21. EMISSION STATEMENTS

7:27-21.3 General provisions

(a) (No change.)

(b) An Emission Statement shall include the information required under N.J.A.C. 7:27-21.5 and shall include emission information for the following air contaminants:

1. If the facility's potential to emit VOC is less than 25 tons per year and if the facility's potential to emit each of the other air contaminants listed in Table 1 at N.J.A.C. 7:27-21.2 is less than the applicable reporting threshold set forth in Table 1 such that the facility is subject to Emission Statement requirements only because its potential to emit VOC is equal to or greater than 10 tons per year, emission information shall be reported only for:

i. (No change.)

ii. [Beginning with the Emission Statement for reporting year 2005 and for each year thereafter, each] **Each** of the toxic air pollutants [which are] **that is** listed in N.J.A.C. 7:27-21[,] Appendix 1, Table 1 and for which the facility has a potential to emit that is equal to or greater than the applicable reporting threshold [given in N.J.A.C. 7:27-8, Appendix 1, Table B, Reporting and SOTA Thresholds for HAPs] **at N.J.A.C. 7:27-17.9(a)**;

2. If the facility's potential to emit VOC is equal to or greater than 25 tons per year or if the facility's potential to emit any other air contaminants listed in Table 1 at N.J.A.C. 7:27-21.2 is equal to or greater than the reporting threshold, emission information shall be reported for the following:

i. – ii. (No change.)

iii. [Beginning with the Emission Statement for reporting year 2003 and for each year thereafter, each] **Each** of the toxic air pollutants [which are] **that is** listed in N.J.A.C. 7:27-21[,] Appendix 1, Table 1 and for which the facility has a potential to emit that is equal to or greater than the applicable reporting threshold [listed in N.J.A.C. 7:27-8, Appendix 1, Table B, Reporting and SOTA Thresholds for HAPs] **at N.J.A.C. 7:27-17.9(a)**.

(c)-(h) (No change.)

SUBCHAPTER 22. OPERATING PERMITS

7:27-22.1 Definitions

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

. . .

"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 paragraphs 2 or 3 above.

. . .

"Emergency" means any situation [arising] **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, [which] **that** requires immediate corrective action to [restore normal operation, and which causes the facility, due to unavoidable increases in emissions attributable to the emergency to exceed a technology-based emission limitation set forth in its operating permit. This term shall not include noncompliance caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error] **prevent system collapse or to restore normal operations at the facility**.

"Emergency management activity" means an activity necessary to build, sustain, and improve the capability to mitigate against, prepare for, respond to, and recover from threatened or actual natural disasters, acts of terrorism, or other man-made disasters.

. . .

"Exempt activity" means one of the following:

1.- 13. (No change.)

14. Equipment or a source operation, [which satisfy] **that satisfies subparagraphs** 14i [through]**, ii, and** iii below:

i. (No change.)

ii. The following criteria are met:

(1) – (4) (No change.)

(5) The source's potential to emit each TXS and each HAP does not exceed the [de minimis] reporting thresholds [as specified in N.J.A.C. 7:27-8, Appendix 1, Table A for each TXS and Table B for each HAP] **at N.J.A.C. 7:27-17.9(a)**; and

(6) (No change.)

iii. The owner or operator of the source has readily available upon Department request a statement certified in accordance with N.J.A.C. 7:27-1.39, signed by the responsible official, as defined at N.J.A.C. 7:27-1.4 that:

(1) - (2) (No change.)

(3) Attests that the source is in compliance with all other applicable State or Federal air pollution requirements[.]**;**

15. Equipment used to conduct construction, repair, or maintenance (CRM) activities, provided that equipment is portable and is located on site no longer than one year;

16. Equipment used to temporarily replace commercial fuel burning equipment that has a maximum rated heat input of 1,000,000 BTU per hour or greater to the burning chamber and/or stationary reciprocating engines with a maximum rated power output of 37 kW or greater, used for generating electricity that are shut down as part of CRM activities, provided the replacement source operation:

i. Is portable;

ii. Is located on site no longer than 90 days;

iii. Does not emit any air contaminant in excess of the state of the art (SOTA) thresholds in N.J.A.C. 7:27-17.9(b) and 22.35;

iv. Is not moved from one location to another in an attempt to circumvent the requirement to be located on site no longer than 90 days;

v. Prior to operating, is listed in an electronic notification to the Regional Air Enforcement Office, where that notification:

(1) Describes the CRM activity, including the expected duration and start date;

(2) Lists the temporary replacement source operation;

(3) Lists the shutdown permitted significant source operation being replaced;

(4) States the replacement equipment will not emit any air contaminant in excess of the state of the art thresholds in N.J.A.C. 7:27-17.9(b) and 22.35;

(5) Attests that the replacement equipment will remain in compliance with all other applicable State or Federal air pollution requirements;

(6) Affirms the replacement source will not exceed the 90-day residency limit and will not be moved from one location to another in an attempt to circumvent the residency requirement; and

(7) Provides a statement, certified in accordance with N.J.A.C. 7:27-1.39, and signed by the responsible official, as defined at N.J.A.C. 7:27-1.4, that affirms that the replacement equipment meets all of the criteria listed in sub-subparagraphs 16v(1) through (6) above; and

vi. The Regional Air Enforcement Office is notified within 30 days after ceasing operation of temporary replacement equipment or source operations, through the submittal of an electronic notification that:

(1) Describes the replacement equipment that was operated as part of the CRM activity, including total duration and the completion date of the CRM activity;

(2) Lists the total emissions for each piece of replacement equipment operated;

(3) Attests that the replacement equipment remained in compliance with all other applicable State or Federal air pollution requirements;

(4) Affirms the source did not exceed the 90-day residency limit and was not moved from one location to another in an attempt to circumvent the residency requirement; and

(5) Provides a statement, certified in accordance with N.J.A.C. 7:27-1.39, and signed by the responsible official, as defined at N.J.A.C. 7:27-1.4, that affirms that the equipment meets all of the criteria listed in sub-subparagraphs 16vi(1) through (4) above.

17. Portable equipment that is being used for an emergency management activity, provided that the equipment is not used for incineration or open burning and is not located on site for more than 90 consecutive days from the start of operation;

18. Equipment available for rent at a rental facility, and operated at the rental facility only for testing, maintenance, or demonstration purposes;

19. Portable hard drive and paper shredders;

20. Equipment used in the excavation and transfer of soil or sediment directly from the soil or sediment pile or excavation hole into a transport vehicle for removal from the site, without intermediate staging; and

21. Equipment used in the baling and conveying of glass, plastic, cans, cardboard, and paper.

. . .

[“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.]

. . .

“Insignificant source operation” means equipment or a source operation [which] **that** is one of the following:

1. (No change.)

2. A stationary storage tank or mixing or blending vessel, provided that **subparagraph** 2i, ii**,** and iii below are satisfied:

i. (No change.)

ii. The following criteria are met:

(1) – (3) (No change.)

(4) The tank’s or vessel’s potential to emit each TXS and each HAP does not exceed the [de minimis] reporting thresholds [as specified in N.J.A.C. 7:27-8, Appendix 1, Table A for each TXS and Table B for each HAP] **at N.J.A.C. 7:27-17.9(a)**;

(5) (No change.)

iii. (No change.)

3. – 4. (No change.)

. . .

"Open top surface cleaner" means a surface cleaner, including, but not limited to, a surface cleaner equipped with a cover, in which there is at any time, an opening to the atmosphere greater than 25 percent of the surface area of the VOC solvent contained therein or greater than 25 percent of the surface area of a sink-like work area where the surface cleaning occurs.

. . .

"Portable" means not attached to a permanent foundation, and designed and capable of being carried or moved from one location to another by means of wheels, skids, carrying handles, dolly, trailer, platform, or similar device.

. . .

"Potential to emit" means the same as that term is defined by the EPA at 40 CFR [§] 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 the holding by the owner or operator of either

emission reductions that are banked pursuant to N.J.A.C. 7:27-18.8 [or NO_x budget allowances allocated pursuant to N.J.A.C. 7:27-31.7].

. . .

"Rental facility" means a business that owns and rents or leases portable equipment to another person.

. . .

"Significant source operation" means any source operation [which] **that** is one **of** the following unless the source operation is explicitly specified, in the definition of "exempt activity," as an exempt activity, and unless the source operation is explicitly specified, in paragraphs 1, 2**,** or 4 of the definition of "insignificant source," as an insignificant source:

1. – 10. (No change.)

11. Commercial fuel burning equipment, except for a source listed in paragraph 20 below, that has a maximum rated heat input of 1,000,000 BTU per hour greater to the burning chamber, including emergency generators **as defined at N.J.A.C. 7:27-19.1**;

12. – 20. (No change.)

"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), but does not include a mobile electric generator being used by the military, a locomotive engine, or a construction engine. A stationary reciprocating engine:

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.

. . .

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

. . .

7:27-22.3 General provisions

(a) - (b) (No change.)

(c) The owner or operator of a facility subject to this subchapter shall ensure that no air contaminant is emitted from any significant source operation at a rate, calculated as the potential to emit, that exceeds the applicable threshold for reporting emissions set forth in **N.J.A.C. 7:27-22 Appendix,** Table A [or B in the Appendix to this subchapter, incorporated herein by reference,] **or 7:27-17.9(a),** unless emission of the air contaminant is authorized by the operating permit.

(d) – (ss) (No change.)

(tt) 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 (qq) 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 allocated for calendar year 2003 or later, 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 of intent to use NO_x budget allowances as provided at N.J.A.C. 7:27-22.22, for each calendar year for which such NO_x budget allowances are used.]

(uu) - (vv) (No change.)

7:27-22.6 Operating permit application contents

(a) – (e) (No change.)

(f) An application for an initial operating permit shall include all information required by the application form, the instructions accompanying the application form, and the applicable completeness checklist(s) for the application. This shall include, but is not limited to, the following:

1.- 4. (No change.)

5. The following information pertaining to emissions at the facility:

i. For each significant source operation, each air contaminant that it may emit and its potential to emit that air contaminant, including any non-captured emissions, in tons per year, and any other units, for example pounds per hour, required to verify compliance with any applicable requirement. If the source operation's potential to emit a given air contaminant does not exceed the applicable threshold for reporting emissions set forth in **N.J.A.C. 7:27-22 Appendix,** Table A [or B in the

Appendix to this subchapter] **or at 7:27-17.9(a)**, the air contaminant need not be included;

ii. For the facility, each air contaminant, if any, emitted as fugitive emissions and not associated with any source operation; the cause of that air contaminant being emitted as fugitive emissions; and a reasonable estimate of the facility's fugitive emissions of that air contaminant, in tons per year, and any other units required to verify compliance with any applicable requirement. However, if the facility's potential to emit a given air contaminant as fugitive emissions does not exceed the applicable threshold for reporting emissions set forth in **N.J.A.C. 7:27-22 Appendix,** Table A [or B in the Appendix to this subchapter] **or at 7:27-17.9(a)**, the information required by this paragraph need not be given in respect to that air contaminant;

iii. - xii. (No change.)

6. – 12. (No change.)

(g) - (n) (No change.)

7:27 22.9 Compliance plans

(a) – (b) (No change.)

(c) A proposed compliance plan shall include the following:

1. – 5. (No change.)

6. The following statements:

i. The permittee will ensure the compliance of the facility with the accidental release provisions at 42 U.S.C. **§** 7412(r) [and N.J.A.C. 7:31];

ii. – iii. (No change.)

7. (No change.)

(d) – (e) (No change.)

7:27-22.22 Seven-day-notice changes

(a) - (b) (No change.)

(c) Except as provided at (b) above, any of the following changes may be made as seven-day-notice changes, pursuant to the procedures of this section:

1. – 3. (No change.)

4. Relocation of a temporary facility to a site not specifically authorized in the operating permit, unless air quality simulation modeling or risk assessment is required pursuant to N.J.A.C. 7:27-22.8(a)3; **or**

5. Any change to a significant source operation [which] **that**:

i. – ii. (No change.)

iii. Does not cause the emission of a new air contaminant not specified in the operating permit[; or]**.**

[6. 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.]

(d) – (o) (No change.)

7:27-22.27 Operating scenarios

(a) - (d) (No change.)

(e) In addition to the information required at (d) above, the following information shall be provided to the Department if the operating scenario is proposed to be added to an existing operating permit as a seven-day-notice:

1. For each source operation included in the operating scenario:

i. – ii. (No change.)

iii. A demonstration that, under the proposed operating scenario, any new air contaminant not authorized by the existing operating permit would be emitted at a rate less than the applicable threshold for reporting emissions [set forth in] **at N.J.A.C. 7:27-17.9(a) or in 7:27-22 Appendix,** Table A [or B in the Appendix to this subchapter].

7:27-22.30 Renewals

(a) – (k) (No change.)

(*l*) An operating permit with an expiration date of (the date three years after the operative date of this amendment) or later shall include in the application for renewal each HAP that may be emitted and its potential to emit, including any non-captured emissions, in tons per year, and any other units, for example, pounds per hour, required to verify compliance with any applicable requirement. If the source operation's potential to emit a given HAP does not exceed the applicable threshold for reporting emissions at N.J.A.C. 7:27-17.9(a), the application for renewal of the operating permit need not include the air contaminant.

7:27-22.35 Advances in the art of air pollution control

(a) (No change.)

(b) For equipment and control apparatus with a potential to emit hazardous air pollutants at less than the [de minimis levels specified by the EPA pursuant to 42 U.S.C. §7412(g)] **state of the art thresholds at N.J.A.C. 7:27-17.9(b)** and with a potential to emit less than five tons per year of any other air contaminant, except carbon dioxide (CO_2), the applicant need not document advances in the art of air pollution control, but instead shall document compliance with:

1.- 4. (No change.)

(c) For equipment and control apparatus with a potential to emit any hazardous air pollutant equal to or greater than the [de minimis levels specified by the EPA pursuant to 42 U.S.C. §7412(g)] **state of the art thresholds at N.J.A.C. 7:27-17.9(b)** or with a potential to emit five tons per year or more of any other air contaminant, except carbon dioxide (CO_2), the applicant shall document advances in the art of air pollution control, except for CO_2, in accordance with the following criteria, as applicable:

1.- 5. (No change.)

CHAPTER 27A

AIR ADMINISTRATIVE PROCEDURES AND PENALTIES

SUBCHAPTER 3. CIVIL ADMINISTRATIVE PENALTIES AND REQUESTS FOR ADJUDICATORY HEARINGS

7:27A-3.10 Civil administrative penalties for violation of rules adopted pursuant to the Act

(a) – (*l*) (No change.)

(m) The violations of N.J.A.C. 7:27, whether the violation is minor or non-minor in accordance with (q) through (t) below, and the civil administrative penalty amounts for each violation are as set forth in the following Civil Administrative Penalty Schedule. The numbers of the following subsections correspond to the numbers of the corresponding subchapter in N.J.A.C. 7:27. The rule summaries for the requirements set forth in the Civil Administrative Penalty Schedule in this subsection are provided for informational purposes only and have no legal effect.

CIVIL ADMINISTRATIVE PENALTY SCHEDULE

1. – 15. (No change.)

16. The violations of N.J.A.C. 7:27-16, Control and Prohibition of Air Pollution by Volatile Organic Compounds (VOC), and the civil administrative penalty amounts for each violation, per source, are as set forth in the following table:

Citation	Class	Type of Violation	First Offense	Second Offense	Third Offense	Fourth and Each Subsequent Offense
. . .						
[N.J.A.C. 7:27-16.6(b)	Tank Lids	NM	$500[3]	$1,000[3]	$2,500[3]	$7,500[3]
N.J.A.C. 7:27-16.6(c)	Unheated Surface Cleaner 25 square feet	NM	$500[3]	$1,000[3]	$2,500[3]	$7,500[3]

	or less					
N.J.A.C. 7:27-16.6(d)	Unheated Surface Cleaner greater than 25 square feet	NM	$1,000[3]	$2,000[3]	$5,000[3]	$15,000[3]
N.J.A.C. 7:27-16.6(e)	Heated Tank	NM	$1,000[3]	2,000[3]	$5,000[3]	$15,000[3]
N.J.A.C. 7:27-16.6(f)	Vapor Surface Cleaner	NM	$1,500[3]	$3,000[3]	$7,500[3]	$22,500[3]
N.J.A.C. 7:27-16.6(g)	Unheated Conveyorized Surface Cleaner	NM	$1,000[3]	$2,000[3]	$5,000[3]	$15,000[3]
N.J.A.C. 7:27-16.6(h)	Heated Conveyorized Surface Cleaner	NM	$1,500[3]	$3,000[3]	$7,500[3]	$22,500[3]
N.J.A.C. 7:27-16.6(i)	Conveyorized Vapor Surface Cleaner	NM	$2,000[3]	$4,000[3]	$10,000[3]	$30,000[3]]

. . .

Citation	Class	Type of Violation	First Offense	Second Offense	Third Offense	Fourth and Each Subsequent Offense
. . .						
[N.J.A.C. 7:27-16.17(b)1	Control Apparatus	NM	$2,000	$4,000	$10,000	$30,000]
. . .						

[N.J.A.C. 7:27-16.17(e)	Submittal	M	$300	$600	$1,500	$4,500]

N.J.A.C. 7:27-16.17[(n)]***(l)***	Submittal	M	$300	$600	$1,500	$4,500

. . .

17. The violations of N.J.A.C. 7:27-17, Control and Prohibition of Air Pollution by Toxic Substances, and the civil administrative penalty amounts for each violation, per source, are as set forth in the following table:

Citation	Class	Type of Violation	First Offense	Second Offense	Third Offense	Fourth and Each Subsequent Offense
. . .						
[N.J.A.C. 7:27-17.4(a)	Discharge Criteria	M	$1,000	$2,000	$5,000[3]	$15,000[3]
N.J.A.C. 7:27-17.4(b)	Aerodynamic Downwash	M	$1,000	$2,000	$5,000[3]	$15,000[3]]
. . .						

[3] (No change.)

18. (No change.)

19. The violations of N.J.A.C. 7:27-19, Control and Prohibition of Air Pollution from Oxides of Nitrogen, and the civil administrative penalty amounts for each violation, are as set forth in the following table:

Citation	Class	Type of Violation	First Offense	Second Offense	Third Offense	Fourth and Each Subsequent Offense
. . .						
[N.J.A.C. 7:27-19.24(b)	Report	M	$500	$1,000	$2,500	$7,500]
. . .						

20. – 29. (No change.)

[30. Violations of N.J.A.C. 7:27-30, CAIR NO_x Trading Program, and the civil administrative penalty amounts for each violation, are as set forth in the following table:

Citation	Rule Summary	Type of Violation	First Offense	Second Offense	Third Offense	Fourth and Each Subsequent Offense
N.J.A.C. 7:27-	Reporting requirements	M	$1,000	$2,000	$5,000	$10,000]

30.6

30. (**Reserved)**

[31. The violations of N.J.A.C. 7:27-31, and the civil administrative penalty amounts for each violation, are as set forth as follows:

i. Violation of N.J.A.C. 7:27-31.3(i) shall be considered a non-minor violation, not subject to a grace period. The penalty amounts for violation of N.J.A.C. 7:27-31.3(i), which requires a minimum number of allowances to be held in a budget source's compliance account as of the allowance transfer deadline, are set forth in the following table, directly dependent on the number of tons of shortfall (each ton of excess emissions is a separate violation):

Amount of Shortfall (in tons)	Civil Administrative Penalty Amounts (per ton)
1-100	$2,000
11-200	$4,000
21-500	$10,000
51-100	$30,000
over 1000	$50,000

ii. The base penalty amount as calculated in (m)31i above shall be limited by the statutory maximum penalty calculated as follows:

(1) For first offense levels (see N.J.A.C. 7:27A-3.5(f) for an explanation of determining offense levels), the penalty shall not exceed $10,000 per day for each day of violation within the control period ($10,000 per day x 153 days = $1,530,000);

(2) For second offense levels (see N.J.A.C. 7:27A-3.5(f) for an explanation of determining offense levels), the penalty shall not exceed $25,000 per day for each day of violation within the control period ($25,000 per day x 153 days = $3,825,000);

(3) For third and subsequent offense levels (see N.J.A.C. 7:27A-3.5(f) for an explanation of determining offense levels), the penalty shall not exceed $50,000 per day for each day of violation within the control period ($50,000 per day x 153 days = $7,650,000); and

(4) If the authorized account representative of the budget source can prove that the number of days of violation in the control period is less than 153 days, then the maximum penalty as calculated in (m)31ii(l) through (3) above shall be adjusted accordingly.

iii. The violations of other provisions at N.J.A.C. 7:27-31, and the civil administrative penalty amounts for each violation, are set forth in the following table:

Citation	Rule Summary	Type of Violation	First Offense	Second Offense	Third Offense	Fourth and Each Subsequent Offense
N.J.A.C. 7:27-31.13(g)	Designate AAR	M	$500	$1,000	$2,500	$7.500
N.J.A.C. 7:27-	Submit Monitoring Plan	M	$1,000	$2,000	$5,000	$15,000

31.14(b)						
N.J.A.C. 7:27-	Install/Operate Monitoring	NM	$10,000	$20,000	$50,000	$50,000
31.14(c)	System					
N.J.A.C. 7:27-	Certify Monitoring System	NM	$1,000	$2,000	$5,000	$15,000
31.14(c)						
N.J.A.C. 7:27-	Install/Operate Monitoring	NM	$10,000	$20,000	$50,000	$50,000
31.14(d)	System					
N.J.A.C. 7:27-	Certify Monitoring System	NM	$1,000	$2,000	$5,000	$15,000
31.14(d)						
N.J.A.C. 7:27-	Demonstrate Compliance	M	$2,000	$4,000	$10,000	$30,000
31.14(g)						
N.J.A.C. 7:27-	Monitoring	M	$2,000	$4,000	$10,000	$30,000
31.14(h)						
N.J.A.C. 7:27-	Records	M	$500	$1,000	$2,500	$7,500
31.15						
N.J.A.C. 7:27-	Submit Information	M	$300	$600	$1,500	$4,500
31.16(a)						
N.J.A.C. 7:27-	Emissions Reporting	M	$500	$1,000	$2,500	$7,500
31.16(e)						
N.J.A.C. 7:27-	Make Information Available	M	$500	$1,000	$2,500	$7,500
31.16(f)						
N.J.A.C. 7:27-	Submit Compliance Certification	M	$1,000	$2,000	$5,000	$15,000]
31.18(a) or (b)						

30.-31. (Reserved)

32. – 34. (No change.)

(n) – (t) (No change.)