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

Adopted 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, and 22.35; and 7:27A-3.10

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

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

Proposed: August 7, 2017, at 49 N.J.R. 2373(a).

Adopted: December 14, 2017, by Bob Martin, Commissioner, Department of Environmental Protection.

Filed: December 18, 2017 as R.2018 d.036, **with non-substantial changes** not requiring additional public notice and comment (see N.J.A.C. 1:30-6.3).

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.

DEP Docket Number: 12-17-06.

Effective Date: January 16, 2018.

Operative Date: February 12, 2018.

Expiration Dates: N.J.A.C. 7:27, Exempt; N.J.A.C. 7:27A, March 21, 2020.

The Department is adopting 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 adopted amendments provide exemptions from permitting rules at N.J.A.C. 7:27-8 and N.J.A.C. 7:27-22 for some equipment used during an emergency and for a limited period of time in the aftermath of an emergency. The adopted amendments also exempt certain equipment from the rules regulating emissions of volatile organic compounds (VOC) reasonably available control technology (RACT) and NO_x RACT at N.J.A.C. 7:27-16 and N.J.A.C. 7:27-19 during an emergency and for a limited period of time in the aftermath of an emergency. The rules also exempt from permitting requirements (but not other applicable rules) certain equipment that has a negligible environmental impact.

Hazardous air pollutants (HAPs) are pollutants, exposure to which presents, or may present, a threat of adverse human health effects or adverse environmental effects. (See 42 U.S.C. § 7412(b)(2).) The HAP reporting thresholds are one of the factors the Department uses to determine the type of permit modification that a facility must submit under N.J.A.C. 7:27-8. The Department is updating the thresholds to reflect the most recent science. In addition to updating the HAP reporting thresholds, the Department is consolidating the various HAP thresholds into one subchapter at N.J.A.C. 7:27-17, Control and Prohibition of Air Pollution by Toxic Substances.

The Department is repealing N.J.A.C. 7:27-30, CAIR NO_x Trading Program, and 7:27-31, NO_x Budget Program, all references to the subchapters throughout the Air Pollution Control rules, and the related penalty provisions at N.J.A.C. 7:27A. Both of these programs have been Federally preempted.

Summary of Hearing Officer's Recommendation and Agency's Response:

The Department held a public hearing on this rulemaking and the associated State Implementation Plan (SIP) revision on September 6, 2017, at the Department's Public Hearing Room, 1st Floor, 401 East State Street, Trenton. Kenneth Ratzman, Assistant Director, Air Quality, Regulation, and Planning, served as Hearing Officer. Two people provided oral comments. After reviewing the comments received during the public comment period, the Hearing Officer recommended that the Department adopt the proposed rules with the non-substantial changes described below in the Summary of Public Comments and Agency Responses and in the Summary of Agency-Initiated Changes below. The Department accepts the Hearing Officer's recommendations.

A record of the public hearing is available for inspection in accordance with applicable law by contacting:

Department of Environmental Protection

Office of Legal Affairs

ATTN: Docket No. 12-17-06

401 East State Street, 7th Floor

Mail Code 401-04L

PO Box 402

Trenton, New Jersey 08625-0402

This adoption document can also be viewed or downloaded from the Department's website at http://www.nj.gov/dep/rules/adoptions.html.

Summary of Public Comments and Agency Responses:

The Department accepted comments on the notice of proposal through October 6, 2017. The following individuals provided timely written and/or oral comments:

1. Bob Frank, County Conservation Company
2. Joseph J. Green, Manganese Interest Group
3. William M. Hanna, III, PA, Environmental Resource Management
4. Dennis Hart, Chemistry Council of New Jersey
5. Joann Held, Air Toxics Analysis Services
6. Marie Kruzan, Association of New Jersey Recyclers
7. Brian Montag, K&L Gates LLP
8. Christou Prokopis
9. John Purves
10. Jeff Tittel, New Jersey Sierra Club
11. Michael Trupin and Sundar Sadashivam, Trinity Consultants Inc.
12. Kirk Weiber, EPA Region 2

The comments received and the Department's responses are summarized below. The number(s) in parentheses after each comment identify the respective commenter(s) listed above.

Air Emission Control and Permitting Exemptions

Quantification of Environmental Benefit

1. COMMENT: As the Department states in the Environmental Impact section of the notice of proposal, expanding the use of emergency generators during non-emergency electrical power disruption will have a positive environmental impact; the proposed deletion of the 500-hour limit for the use of fuel oil during the period of natural gas curtailment will have a negligible environmental impact; and the proposed exemption of portable equipment used for construction, repair and maintenance activities will have a negligible environmental impact. The Department should quantify the air quality impact, where feasible, and submit the analyses as part of its SIP revision submittal to the United States Environmental Protection Agency (EPA) to demonstrate that the revision to New Jersey's Reasonably Available Control Technology (RACT) rules will not interfere with attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) pursuant to the Clean Air Act section 110(1). (12)

RESPONSE: It is not feasible for the Department to further quantify the air quality impact of allowing the use of onsite “emergency generators” during non-emergency electrical power disruption. The emissions from these sources are not reported to the Department unless these sources are located at a facility with a facility-wide potential-to-emit that is equal or greater than the reporting thresholds in Table 1 at N.J.A.C. 7:27-21.2(a). In most cases the permit required for a generator used during an emergency does not require the facility to report that data to the Department. Nevertheless, as the Department states in the notice of proposal Environmental Impact statement, 49 N.J.R. at 2386, the adopted rules will have a positive impact. The newer onsite generators are usually natural gas fired and are better maintained than the generators

available for rent, which are typically diesel fuel fired. As explained in the notice of proposal Summary, 49 N.J.R. at 2375, the Department has received a significant increase in applications for permits for natural gas fired emergency generators in the past few years. By expanding the use of the natural gas fired emergency generators (for which the Department also requires permits) during non-emergency electrical power disruption, the Department expects that facilities that have an onsite emergency generator will no longer rent the more polluting diesel fuel fired generators.

Support for the Department's statement that the amended rule will provided an environmental benefit is provided in the following table of emission factors in pounds per million British thermal units (lbs/MMBtu) for diesel fuel fired and natural gas fired reciprocating internal combustion engines (AP-42, Fifth Edition Compilation of Air Pollutant Emission Factors, Chapter 3), which demonstrates how natural gas fired engines are by their nature less polluting than diesel fuel fired engines due to the different pollutant properties of the fuel they use. Though this comparison does not provide an exact measure of the positive impact, it supports the Department's analysis.

Pollutant	Diesel Fuel	Natural Gas
NO_x	4.41	4.08
CO	0.95	0.32
SO_2	0.29	0.0006
PM_{10}	0.31	0.01

The decrease in pollutant emissions resulting from the use of natural gas fired generators during a non-emergency power disruption represents a positive environmental impact. A facility that uses an onsite diesel engine for non-emergency power disruption, rather than rent a diesel engine for the purpose, will not see as great an environmental benefit; however, there will be some benefit to the extent that the onsite emergency generator is newer and better maintained than its rental counterpart.

It is not feasible to offer additional analysis regarding the deletion of the 500-hour limit for the use of fuel oil during the period of natural gas curtailment, formerly at N.J.A.C. 7:27-19.25(c)4. The Department does not require facilities to report the use of fuel oil during natural gas curtailment; therefore, the information needed to calculate the emissions impact is not available. Additionally, it is not possible to predict or project when and for how long a natural gas curtailment may take place in the future, and to what extent it is likely to exceed the 500-hour limit previously in effect. However, as noted in the notice of proposal, 49 N.J.R. at 2376 and 2386, the deletion of the 500-hour limit will have a negligible, albeit unquantifiable, environmental impact because the use of the exemption for more than 500 hours will be an exceptional event. Specifically, the exemption from the NO_x emission limits may be invoked only when natural gas is unavailable to the owner or operator of the source. For instance, gas may be unavailable when the utility diverts natural gas during an extreme weather event or when the supply line is not functioning properly. The 500-hour limit equates to almost 21 days of non-stop operation. The Department's discussions with stakeholders suggest that natural gas curtailments are rare and short in duration, making it extremely unlikely that a source would need to use the exemption for more than 500 hours. As further explained in the response to Comment 7, the exemption does not remove the requirement that a source control its emissions.

If a source has controls, it must operate the controls whenever technically feasible, regardless of the fuel type being combusted. Given how infrequently conditions would give rise to the use of the exemption for more than 500 hours and the requirement that the source continue to operate its controls during that time, the environmental impact will be insignificant.

It is also not feasible to offer additional analysis regarding the exemption of portable equipment used for construction, repair, and maintenance activities since the Department cannot easily obtain the data. The Department's long-standing practice of exempting this equipment from permitting and reporting requirements is reflected in the August 4, 2011 Memorandum "Permit Applicability for Equipment and Source Operations Operated During Construction, Repair and Maintenance Events," which clarified the Department's interpretation of its rules, and is the basis for the new provisions at N.J.A.C. 7:27-8.2(d)15 through 19 and N.J.A.C. 7:27-22.1 paragraphs 15 through 19 of the definition of "exempt activity." (http://www.state.nj.us/dep/aqpp/permitguide/CRM.pdf). Because to a large extent these amendments codify the Department's interpretation of its existing rules, the Department concluded that the environmental impact will be negligible.

The Department is submitting this adoption document as part of its SIP submittal, to support its demonstration that these rules will not interfere with attainment and maintenance of the NAAQS.

Exemptions for equipment used in emergencies, emergency aftermath and in situations similar to emergencies

2. COMMENT: The rule is too broad because almost any excuse can be presented to run generators. There is also no cumulative impact analysis required for generators, which means

every neighborhood can have many diesel generators. Blanket air permitting exemptions allow generators to be placed anywhere at any time and keep polluting for many months without any restrictions. There could be dozens of polluting generators in a neighborhood impacting people's lungs regardless of air quality. This means there could already be a Bad Air Quality Alert Day, but people can still use these generators causing all types of health risks and hospitalizations. (10)

RESPONSE: The Department interprets this comment as a concern that the amendments will result in the use of a greater number of generators in industrial, commercial, and residential settings for longer periods of time resulting in greater pollution. To the extent that the commenter raises concerns about the use of generators for power at private residences, that equipment is outside the Department's regulatory authority and the scope of this rulemaking. For those generators within the Department's authority to regulate, the amendments do not provide a blanket exemption to the air permitting rules.

The permit exemptions may be exercised only for short periods of time and under specific conditions. For portable equipment used during an emergency management activity, not only must the conditions rise to the level of an emergency as defined in the rules, but operation of the source is limited to 90 days. Similarly, the use of an onsite emergency generator is limited to non-emergency power disruption. In the non-emergency scenario, the generators, which are subject to a permit but are exempt from the VOC RACT requirements (N.J.A.C. 7:27-16) and the NO_x RACT requirements, other than recordkeeping, (N.J.A.C. 7:27-19), may be used for only 30 days in a calendar year, and only as a result of a 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 (49 N.J.R. at 2375).

When approving permits or modifications to permits, the Department reviews multi-source air quality modeling required under the prevention of significant deterioration (PSD) of air quality program pursuant to 40 CFR 52.21. However, this Federal requirement is triggered only if an increase in emissions is large enough to adversely impact air quality. Due to the minimal increase in emissions produced by these generators during the narrow circumstances and the limited time period allowed by these exemptions, a significant deterioration of air quality is not a concern, and it is not necessary for the Department to conduct a cumulative impact analysis for each of these sources.

3. COMMENT: The proposed revision to New Jersey's SIP should be rejected because it will weaken rules and responsibilities and lead to more pollution from construction, residential, and any other generators and other industrial facilities. (10)

RESPONSE: The Department anticipates, based on its preliminary discussions with the EPA and the comments it submitted on the proposed revision to the SIP, that the EPA will approve the revised SIP. The amendments will help maintain air quality protections while improving resiliency. As explained in the notice of proposal Summary, 49 N.J.R. at 2374 through 2377, in the past the Department has suspended its permitting requirements during extreme weather events and power disruptions to prevent the total cessation of normal activities at regulated facilities. For example, the Department's Compliance Advisory 2012-19 issued in the aftermath of Superstorm Sandy allowed industrial/commercial facilities throughout the State to use rental

emergency generators and rental boilers (for heat and steam power generation) without going through the permitting process that would otherwise be required. (See http://www.nj.gov/dep/enforcement/advisories/2012-19.pdf.) The amendments will allow New Jersey to more readily respond to major weather events.

The Department anticipates that rather than increase pollution, the rules will result in less pollution when New Jersey businesses are required to respond to extreme weather events and power disruptions. In most cases, rental generators are diesel fuel fired for portability reasons. As explained in the response to Comment 1, allowing facilities to use existing natural gas fired emergency generators instead of renting diesel fired generators has a positive environmental impact because natural gas is a less polluting fuel alternative than diesel.

Because the activities and practices allowed under the amendments are consistent with the Department's interpretation of its permitting and RACT rules during Superstorm Sandy, the amendments should not negatively affect air quality. By limiting the duration of the exemptions under specific conditions, the Department has been able to minimize the impact on air quality and has otherwise been able to maintain air quality protections, as demonstrated in recent inventories of pollutant emissions in the State.

In 2015, the Department submitted to the EPA the 2011 Emissions Inventory, "State Implementation Plan (SIP) Revisions: 75 ppb 8-Hour Ozone National Ambient Air Quality Standard Reasonably Available Control Technology (RACT) Determination, 2011 Periodic Emission Inventory, and 8-Hour Carbon Monoxide National Ambient Air Quality Standard Maintenance and Monitoring Plan, June 2015" (2015 SIP Revisions) (http://www.nj.gov/dep/baqp/ozoneco2011inv/ozone2011co-inv-sip-final.pdf). This inventory reflects the significant decrease from 2002 to 2011 of the emissions of all of the criteria

pollutants in the State (2015 SIP Revisions, page viii, Figures ES-1 through ES-6). The Department's "2012 Statewide Greenhouse Gas Emissions Inventory" also shows progress in the reduction of greenhouse gas emissions in the State since 2005. (See http://www.nj.gov/dep/aqes/docs/GHGinventoryFinal.pdf).

4. COMMENT: There are no mitigations or offsets examined to make up for the additional sources of pollution. These generators will not only release fine particulates, which impact the elderly and children with asthma, but they will further contribute to harmful ozone pollution. Diesel generators are so dirty that they emit toxins like benzene, arsenic and formaldehyde and other pollutants that are carcinogenic. Allowing these generators to operate for up to 90 days during a calendar year without a permit is dangerous. These rules will lead to more pollution and more climate change impacts leaving the people of New Jersey to suffer. The State needs to have stronger, not weaker, standards for clean air that protect human health. (10)

RESPONSE: There is a positive environmental impact when a diesel fuel fired generator is replaced with a natural gas fired generator or a newer model (and, as such, less polluting) diesel fuel fired generator, as discussed in response to Comment 1. Also, as discussed in response to Comment 2, the exemptions apply only in a narrow set of circumstances. If the amendments result in an increase in the overall emissions Statewide, which the Department does not anticipate, such an increase would be minimal and would not trigger the emission offsets requirements at N.J.A.C. 7:27-18.7, Table 3, which lists the significant net emissions increase levels for each regulated pollutant. Because the values in Table 3 apply to the entire facility, the

short-term use of exempted generators would not result in emissions high enough to trigger the significant net emissions increase levels.

The Department maintains a comprehensive network of air monitoring stations for criteria pollutants and air toxics (http://www.njaqinow.net/). The State is currently in attainment for all applicable NAAQS except ozone. Although New Jersey is part of two multi-state nonattainment areas for ozone, the monitors with measurements indicating nonattainment are situated in other states (Connecticut in the north and Pennsylvania in the south); all New Jersey monitors are measuring attainment. As shown in the 2011 Emissions Inventory referenced in the response to Comment 2 and the air monitoring data, levels of all of the criteria pollutants and their precursors have decreased in the State.

Additionally, the Department reduces air toxics emissions by means of the risk assessment component of the permitting process. Implementation of the amended HAP reporting thresholds, which are part of this rulemaking, will provide even greater protection of the environment and public health, especially in the State's more densely populated communities. 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.

5. COMMENT: The proposal contains no analysis concerning alternatives to the dirty diesel fuels, like using natural gas, CNG, or clean biodiesel. There are other alternatives, such as battery storage and portable solar panels. The State should be working to make the grid more resilient by implementing distributed generation, microgrids, or battery storage. Communities throughout New Jersey are already heavily impacted by air pollution. From the fracking wells to

pipelines, compressor stations, and power plants, methane leaks have significant impacts to greenhouse gas emissions. The Department should not adopt the proposed revisions. (10)

RESPONSE: The Department continues to encourage the use of clean fuels and energy in New Jersey; however, requiring the use of fuels or power sources other than those currently used by the equipment regulated by these rules is outside the scope of this rulemaking and outside the Department's regulatory authority. The recommendation that the Department make the grid more resilient by implementing distributed generation, microgrids, battery storage, and portable solar panels is also outside the scope of this rulemaking and beyond the Department's authority. Policy decisions concerning regional distribution of energy are determined by the New Jersey Board of Public Utilities at the State level and the Federal Energy Regulatory Commission at the Federal level. The Department establishes the emission limits that the regulated community must meet, but it does not mandate the technology that the regulated community uses to structure the grid.

Emergency generators used during non-emergency power disruptions

6. COMMENT: The allowance for operating an existing permitted emergency generator during periods of onsite construction, repair, and maintenance for 30 days per year is helpful. However, the intended flexibility may otherwise be capped by air permit limits (commonly 100 hours per year) for testing and maintenance, and the 40 CFR Part 60, New Source Performance Standard (NSPS), limit of 100 hours per year for testing, maintenance, and nonemergency operation. The Department should consider providing language in N.J.A.C. 7:27-8 and 22 to clarify that the 30-days per year allowance is in addition to any operating limit in the air permit, and also provide

clarification of whether the NSPS would not treat this type of operation as testing and maintenance or nonemergency operation, because it is generally outside the control of the operator. (3 and 4)

RESPONSE: The Department acknowledges the commenters' support for the adopted rules. The Department intended to provide a 30-day exemption from the VOC RACT and NO_x RACT requirements, which would be in addition to any operating limit prescribed in the air permit for testing and maintenance of the generator. As stated in the notice of proposal Summary, 49 N.J.R. at 2375, 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." This use is separate from testing and maintenance of the generator itself.

The commenters' statements indicate that the Department's intent is not clear from the proposed rule text. N.J.A.C. 7:27-16 and 19 contain the VOC RACT and NO_x RACT requirements for a permitted emergency generator. The definition of "emergency generator" at N.J.A.C. 7:27-16.1 impacts the applicability of N.J.A.C. 7:27-16 to emergency generators. The adopted definition of "emergency generator" at N.J.A.C. 7:27-19.1 and amended N.J.A.C. 7:27-19.2(d) exempt an existing permitted emergency generator from all requirements of N.J.A.C. 7:27-19 other than the recordkeeping requirements at N.J.A.C. 7:27-19.11 if it operates for no more than 30 days in any calendar year when the primary source of energy is unavailable as a result of construction, repair, or maintenance activity at the facility. The Department is modifying the definition of "emergency generator" at N.J.A.C. 7:27-16.1 and 19.1 to expressly

state that the limit of 30 days does not include operation during the performance of normal testing and maintenance procedures.

The amendments do not affect the applicability of Federal requirements and limitations on the operation of the equipment for maintenance and testing. In the absence of an applicable Federal exemption, the operation of a combustion engine during construction, maintenance, and repair activity would need to comply with the Federal emission limits at 40 CFR Part 60, NSPS, and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, as applicable.

Combustion sources burning fuel oil during curtailment of natural gas supply

7. COMMENT: Under the proposed amendments, a combustion source that has the capacity to combust both natural gas and fuel oil during a natural gas curtailment will be exempted from the NO_x emission limits under N.J.A.C. 7:27-19.25 (for combustion of liquid fuel during the full period of natural gas curtailment). The Department should clarify that any existing installed NO_x RACT controls pursuant to N.J.A.C. 7:27-19.25 for liquid fuel combustion are still required, and must continue to operate during the period of natural gas curtailment. (12)

RESPONSE: The amendments to N.J.A.C. 7:27-19.25 do not create an unlimited exemption to NO_x emission limits. They eliminate the 500-hour limit on the exemption, but do not affect requirements that a source continue to operate existing emission controls during the period of natural gas curtailment. N.J.A.C. 7:27-19.25 provides, under limited circumstances, a temporary exemption from the applicable NO_x emission limits in N.J.A.C. 7:27-19 for a combustion source combusting fuel oil or other liquid fuel during natural gas curtailment. There did not appear to

be any confusion in the regulated community regarding the continuing requirement to run any existing installed NO_x RACT controls during the natural gas curtailment. In fact, this requirement is specifically addressed in the source's permit. The Department includes a permit requirement for the combustion of liquid fuels during natural gas curtailment that ensures that large combustion sources, which are equipped with add-on control devices, comply with the applicable NO_x emission limits by continuing to operate these add-on control devices while firing liquid fuels during periods of natural gas curtailment. Neither the rules nor the air permit would allow a source to discontinue operation of its existing emission controls. Therefore, the Department is not modifying the rule on adoption in response to this comment.

Exemptions for low-emitting temporary and portable equipment

8. COMMENT: The Department is proposing to exclude portable equipment, such as a concrete crusher, that is moved from place to place within a construction site, or from one site to another, from having to install NO_x controls to operate. As the Department states in the proposal, portable equipment cannot be easily retrofitted to meet NO_x emission standards. The Department should clarify that additional required provisions to limit the potential emissions for these sources, such as constraints on operating hours or fuel consumption, are unnecessary and that not requiring RACT or additional provisions for these sources will not interfere with attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) pursuant to Clean Air Act section 110(1). (12)

RESPONSE: As explained in the notice of proposal Environmental Impact statement, the temporary use of this low-emitting equipment results in negligible emissions and has no

environmental impact (49 N.J.R. at 2386). There is no need to impose additional restrictions on the operation of this equipment, such as limitations on operating hours, fuel consumption or RACT, other than restrictions otherwise imposed by a general permit, as discussed below, to ensure that the permitted use of these sources will not interfere with the State's attainment and maintenance of the NAAQS.

RACT, which is required for existing sources, is defined as the lowest emission limitation that a source can achieve by applying control technology that is reasonably available, taking into account technological and economical feasibilities. As explained in the notice of proposal Summary, 49 N.J.R. at 2376, it is neither practical nor economical to install controls on the portable sources that the amendments exempt from RACT requirements. Therefore, the Department has determined that RACT does not apply. Although these portable sources are not subject to RACT, most of these sources will require permits, which will impose emission limitations. For example, the general permit for portable equipment, GP-019 (http://www.state.nj.us/dep/aqpp/downloads/general/GP-019.pdf), contains specific requirements such as limits on operating hours based on engine size. Given the limitations on emissions built into the permits for most of the portable equipment subject to the RACT exclusion, the Department has determined that exempting these sources from RACT requirements will not interfere with New Jersey's attainment and maintenance of the NAAQS; accordingly, there is no need for additional requirements.

Construction engines and construction, repair, and maintenance equipment

9. COMMENT: Codification of the Department's policies concerning the treatment of construction, repair, and maintenance operations in the air permit and RACT rules is based on

extensive stakeholder discussion spanning many years and makes sense; therefore, the regulated community appreciates Department's determination to incorporate those policies in their entirety. (3 and 4)

RESPONSE: The Department acknowledges the commenters' support for these adopted rules.

10. COMMENT: The Department needs to clarify the proposed definition with regard to self-propelled track-mounted equipment. Is track-mounted equipment being classified as a stationary source? Are engines smaller than one MMBTU exempt? Will equipment such as cranes, dozers, excavators, skid steers, and drill rigs be subject to the new definition if they do not leave a facility? (6)

11. COMMENT: The proposed amendments to the definition of "stationary reciprocating engine" to include engines that propel track-mounted machines will place a heavy financial burden on the recycling industry and will clearly prevent part of this industry from obtaining permits. Many facilities will have to close down, with much of the business going to Pennsylvania. There will be no improvement in air quality, since New Jersey will receive the emissions from these facilities. (9)

12. COMMENT: The proposed amendments to the definition of "stationary reciprocating engine" at N.J.A.C. 7:27-8.1, 16.1, 19.1, and 22.1 to include engines that propel track-mounted machines is unduly burdensome, arbitrary, and promises to be disproportionately expensive for small businesses that provide construction, demolition, and vegetative waste recycling services for municipalities across New Jersey. If approved as drafted, the definition will include dozers, cranes, excavators, and drill rigs at major infrastructure projects, quarries, mines, and recycling

centers. Requiring air permits for tracked machines, but not rubber-tired equipment that perform similar functions, appears arbitrary. (1)

13. COMMENT: If the proposed permitting requirements are imposed on facilities using dual-use or tracked engines, this will result in substantial permit fee increases. The initial permit application fee is $2,527 and other substantial fees for testing, professional services and even applicable Federal permits may be imposed. For small business owners, these fees and costs would be unduly burdensome, and impose a severe hardship. Since these fees are non-trivial they should have been included in the financial impact analysis of the proposed amendments. The Department failed to properly assess the financial impact of the proposed amendments on the regulated community, which raises concerns over the Department's compliance with the Administrative Procedure Act. (1, 7, and 9)

14. COMMENT: The proposed addition of the amended definition of "stationary reciprocating engine" to the permitting rules at N.J.A.C. 7:27-8 and 22 would extend permitting requirements to this equipment. This is preempted by Federal rules, which preempt state regulation of mobile equipment, including nonroad engines, which are included in the definition of "stationary reciprocating engine." An exemption for dual use engines from regulation under N.J.A.C. 7:27-8 and 22 is consistent with this Federal preemption and court law. The Department recognized in 2003, in discussing enforcement initiatives for equipment engines, single, dual-use engines used both in applications such as powering dredges, pumps, cranes, lifts, conveyors, tumblers, crushers, and generators, and to move equipment from location to location, are exempt and should not require a permit. (See, June 2003 Compliance Advisory Enforcement Alert #2003-05). There is clearly no legal basis for the Department to reverse course now and impose permitting requirements on this equipment. (7)

15. COMMENT: The 30-day threshold for a source to be considered a stationary reciprocating engine does not seem consistent with applicable Federal definitions. The criteria for determining if a nonroad engine is otherwise considered stationary is typically 12 consecutive months. The proposed addition of the definition of "stationary reciprocating engine" to the permitting rules at N.J.A.C. 7:27-8 and 22 will cause considerable conflict with Federal rules applicable to stationary engines (that is, engines that are not nonroad engines as defined by the EPA). Regardless of the inclusion of a similar definition within existing N.J.A.C. 7:27-19, by including this definition in N.J.A.C. 7:27-8 and 22, the Department will effectively require permitting of nonroad engines that were never intended to be permitted or included in such regulation. (11)

RESPONSE TO COMMENTS 10 THROUGH 15: The Department did not intend that the proposed new and amended definitions of "stationary reciprocating engine" at N.J.A.C. 7:27-8.1, 16.1, 19.1 and 22.1 would change the applicability of permitting requirements to dual-use or self-propelled equipment. For more than a decade, the Department has consistently applied the definition of "stationary reciprocating engine" at N.J.A.C. 7:27-16.1 and 19.1 in determining permit applicability pursuant to 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. As the Department stated in the notice of proposal Summary, 49 N.J.R. at 2376, "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 amend them to read better." The Department's intention in proposing to amend the definitions of the term at N.J.A.C. 7:27-16.1 and 19.1, and add identical definitions at N.J.A.C. 7:27-8.1 and 22.1, was to provide consistency without changing the applicability of

these permitting requirements. Because the Department intended no substantive change as a result of the amended definition, the Department did not include in the notice of proposal an economic analysis of the proposed amendments to the definitions.

The prior definition of "stationary reciprocating engine" at N.J.A.C. 7:27-16.1 and 19.1 included the phrase "is self-propelled on tracks." That phrase did not then, nor does it now, refer to the track-mounted equipment to which the commenters refer. Rather, it refers to self-propelled equipment that runs on tracks (or rails) that are completely within a facility, such that the equipment does not leave the facility on those tracks (or rails). This limited category of equipment is not excluded from permitting and RACT requirements. The Department created this narrow exception because, while technically "self-propelled," this equipment never leaves the facility and is essentially a stationary source.

Therefore, to dispel confusion, and consistent with the Department's intent, the Department is modifying paragraph 2 of the definition of "stationary reciprocating engine" at N.J.A.C. 7:27-8.1, 16.1, 19.1, and 22.1 on adoption to replace the word "tracks" with the word "rails." As explained above, the tracks identified in the definition of stationary reciprocating engine are those that are comparable to railroad tracks, but the engine does not leave the boundary of the facility.

The definition of "stationary reciprocating engine" at N.J.A.C. 7:27-8.1, 16.1, 19.1, and 22.1 does not expand the Department's permitting rules to apply to nonroad engines, and does not conflict with the Federal regulations applicable to nonroad engines. The amendments to the definition of "stationary reciprocating engine" were intended to clarify, not expand the rules' applicability. Federal regulations pertaining to nonroad engines were intended to deal with off-road mobile sources, not stationary electrical generation equipment. EPA's definition of a

nonroad engine specifically exempts engines regulated under 40 CFR part 60, Standards of Performance for New Stationary Sources, or Federal New Source Performance Standards (40 CFR 1068.30 and 40 CFR 89.2). To avoid a potential conflict between the Department's definition of a stationary reciprocating engine and a nonroad engine (or off-road mobile source), the Department excluded construction engines from the definition of stationary reciprocating engine. Also, consistent with the limitation in the Federal definition of a nonroad engine, the definition of "construction engine" at N.J.A.C. 7:27-8.1, 16.1, and 22.1 (and the unchanged definition of the term at N.J.A.C. 7:27-19.1) excludes from the definition an engine that remains at the same location for more than 12 months.

As a commenter noted, in June 2003 the Department issued a compliance advisory that clarifies the types of internal combustion engines for which permits are required. (See http://www.nj.gov/dep/enforcement/advisories/2003-05.pdf). Single, dual-use engines, used both to power equipment and to move equipment from location to location (self-propelled) are specifically exempted from permitting requirements. This exemption is reflected in paragraph 1 of the definition of stationary reciprocating engine at N.J.A.C. 7:27-16.1 and 19.1, which provides that a stationary reciprocating engine is "not self-propelled, but may be mounted on a vehicle for portability." The new and amended definitions also do not change the applicability requirements at N.J.A.C. 7:27-8.2(c)1 and 21 and the parallel provisions at paragraphs 11 and 20 of the definition of "significant source operation" at N.J.A.C. 7:27-22.1 regarding the maximum rated heat input criteria applied in determining classification as a significant source, and so would not affect the applicability of permitting requirements to an engine "smaller than one MMBTU" as queried by the commenter.

Rental facility equipment exemption

16. COMMENT: According to the proposal, an owner (other than a rental facility) of a portable emergency generator that conducts testing/maintenance at the facility must obtain a permit for the generator. The new general permits allow the owner to dispatch that generator for use during emergencies anywhere in the State, such as to a sister facility. Under the proposal, the site of the sister facility that receives the generator could be exempt from permitting requirements as long as the generator meets the criteria of temporary use for emergency management or construction/repair/maintenance.

The proposed rules exempt facilities that rent portable emergency generators from permitting and allows testing/maintenance. However, the proposed rules do not exempt other persons who choose to own or lease a portable generator for preparedness so that they can dispatch it timely to any of their sites that may need it during an emergency.

The exemption provided for portable emergency generators at rental facilities should be extended to any person who leases or owns a portable generator for the purpose of dispatching it for use at any of its sites in New Jersey during emergencies. The justification for providing the exemption is the same as for rental facilities. (8)

RESPONSE: The Department interprets this comment as a request to allow owners of portable generators, who are not rental facilities, to combine two of the permit exemptions to avoid having to obtain a permit for an emergency generator that is maintained in a central location and dispatched to sister facilities. The rationales for the two exemptions to the permitting requirements (for emergency generators and for rental facilities only operating equipment for demonstration, inspection and maintenance) do not apply equally to the scenario described by the

commenter. Historically, the Department has required permits for generators because they are sources of emissions of criteria pollutants, including NO_x and VOC, and could be subject to NO_x and VOC RACT requirements. A permit allows the Department to more readily monitor and enforce emission and use limits on equipment. Any time the Department deviates from permitting requirements, the exemption must be supported by countervailing social or economic considerations, such as those raised in emergency situations. Even before this rulemaking, the Department had recognized the special circumstances of operating these generators in an emergency, and had carved out a limited exemption for their operation. In response to concerns from the regulated community, the Department had also created two general permits for such emergency equipment so that it would not be necessary to obtain a permit for each generator each time it was used in an emergency (GP-005A and GP-005B - general permits for emergency generators burning distillate fuels and gaseous fuels, respectively). As explained in the notice of proposal Summary, 49 N.J.R. at 2375, while a generator may be a significant source for which a permit must be obtained, its limited use during an emergency is the basis for the conditional exemption from the RACT requirements at N.J.A.C. 7:27-16 and 19, other than recordkeeping designed to document that its operation satisfies the criteria for "emergency generator." The amendments expand this exemption, by expanding the definition of "emergency generator" to cover the use of a generator to power equipment for certain limited non-emergency use. However, as was the case in creating earlier exceptions for emergency generators, the Department carefully weighed the environmental costs involved against the social and economic benefit in expanding these exemptions to permitting and RACT requirements.

As explained in the notice of proposal, 49 N.J.R. at 2374, in the course of recent extreme weather events, the Department recognized that the time required to obtain a permit for a

generator or other portable equipment to be used in an emergency could result in unacceptably delayed responses to emergency situations. During Superstorm Sandy, the Department issued a compliance advisory that allowed a "Hurricane Sandy-affected facility to operate an emergency generator and/or packaged boiler of any size without an approved air permit until… electrical power and/or thermal energy is back to normal service to the critical operations of the facility" (www.nj.gov/dep/enforcement/advisories/2012-19.pdf). The amendments codify the Department's obligation to balance the need to protect the environment through preemptive measures like permits and the need for the State to respond quickly to a disaster. The permit exemptions impose the same 90-day limit on use that applies to this equipment under the general permit. The rationale for exempting the use of equipment from permitting requirements during an emergency is that a permit generally cannot be obtained quickly enough. This rationale would not apply in the situation described by the commenter, because the facility already owns an emergency generator and had the opportunity to obtain the permit before the emergency situation arose. To the extent the commenter is suggesting that the Department extend this permit exemption to a facility as described in the comment, there is no justification in this case for the weakening of environmental protections that such a permit exemption would entail.

As to the exemption provided to the rental facility for demonstration, inspection, and maintenance operations, the Department recognizes that environmental safeguards would be maximized if a permit on all rental equipment was issued to a single entity. However, there is a distinction between a rental facility and a facility that controls the sites to which it sends equipment. Unlike a facility that owns equipment for its own use, the business model of a rental facility is unique in that it has no control over the ultimate use of the equipment by the end user who rents it. Moreover, a rental facility's equipment stock is wide-ranging and frequently

changes. Accordingly, the permit requirements to which the rental facility was subject before this adoption concerned only the operation of the equipment on its property. Responsibility for obtaining and complying with any permits required pursuant to N.J.A.C. 7:27-8 and 22 rested with the facility that rented the equipment from the rental facility (the end user), which was in a better position to comply with this responsibility. The Department recognizes that the infrequent operation of a rental facility's equipment for demonstration, inspection, and maintenance operations while it is on the premises of the facility results in negligible emissions that do not warrant the cost and burden that the permit requirements imposed. Likewise, the frequent stock changes required constant modification of the rental facility's permit, creating an additional administrative obstacle and burden on the facility and the Department alike. Nevertheless, if the rental facility operates its equipment for a non-exempt use at the rental facility, that equipment remains subject to the VOC and NO_x RACT emission requirements.

An equipment owner dispatching equipment to sites it also owns and operates is an entirely different business model with none of the same concerns about the "unknown" end use or frequently changing stock. As stated above, the Department addressed this business model when it created the two general permits for emergency equipment that allow an owner to dispatch its emergency equipment to multiple locations using a single permit. The general permit covers the operation of the equipment at the main facility and at the sites to which they are sent and includes limits on the number of hours of operation for inspection and maintenance. The general permit imposes minimal administrative burden on this type of business entity.

17. COMMENT: The rental facility exemption is appropriate. The Department should clarify that this exemption also applies to service providers that bring their equipment to a facility

permitted under N.J.A.C. 7:27-8 or 22 for construction, repair, and maintenance. Examples include tank-cleaning contractors, and contractors that provide nitrogen-inerting services, both of which commonly have equipment that might require an air permit. These operations would not require permitting under the proposed construction, repair, and maintenance provisions, and should not require permitting or compliance with RACT for their set-up and testing at the service provider's storage location. (3 and 4)

RESPONSE: Tank-cleaning contractors and contractors that provide nitrogen-inerting services are not required to obtain permits under the construction, repair, and maintenance provisions. However, the air permits for the facilities contracting for this service must account for any VOC emissions that occur during storage tank cleaning and tank cleaning operations.

Rulemaking process

18. COMMENT: The Department's proposal of new rules, repeals, and amendments was created during secret stakeholder conversations without public input. (10)

RESPONSE: As outlined in the notice of proposal Summary at 49 N.J.R. 2374, the Department sought stakeholder and public input in developing the rules. 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). The Department also held meetings with stakeholders outside of the ISG to discuss all the components of the rulemaking. Soliciting and considering the views and opinions of interested parties prior to promulgating rules is consistent with the Administrative Procedure Act at N.J.S.A. 52:14B-4(e), which recognizes that agencies may use informal conferences, appoint committees or otherwise consult with parties who may have an interest or expertise in the rulemaking being considered by the agency.

Updating and Consolidating the Reporting Thresholds for Hazardous Air Pollutants

Support for amended HAP reporting thresholds

19. COMMENT: The Department is to be commended for undertaking the important work of updating the reporting thresholds for HAPs.

The current thresholds for reporting emissions on permit applications (as required by N.J.A.C. 7:27-8 and 22) are, for the most part, much too high and fail to protect public health. Re-evaluating the science behind these limits and proposing updated values is eminently important since so many aspects of the Air Toxics program depend on the information gathered (or not gathered) on permit applications.

A number of factors have conspired to make the current values of the reporting thresholds inappropriate for this use. First, the original values were derived from the EPA thresholds that were intended to trigger case-by-case maximum achievable control technology (MACT) determinations in the event that a large new source was built before the relevant MACT standard was promulgated. As such, it was assumed that the new emissions would occur for no more than seven years before the source became subject to MACT (with the potential for new control

requirements). In contrast, New Jersey permits, although subject to renewal every five years, are not routinely re-evaluated for possible community exposures, thus impacts could take place over 20 or more years with no review at all if the emissions are below reporting thresholds. Second, the EPA analysis assumed that there would be a substantial distance between the emission sources and the nearest residence. This is just not the case in many of New Jersey's urban areas; therefore, the modeling used by the EPA is inappropriate for developing reporting thresholds. Third, lacking quantitative health information for many of the HAPs, the EPA inserted placeholder de minimis values. New values have since been developed for many more of the HAPs but this new information had not been incorporated into the reporting thresholds prior to this proposed rule.

The reporting thresholds have been in desperate need of updating, and the proposed amendments to the Air Pollution Control rules accomplish this. The proposed rules accomplish this by: selecting more realistic source characteristics (such as distance to property line); using the latest dispersion models; using the latest health benchmarks; and resolving inconsistencies between N.J.A.C. 7:27-8 and 22.

The overall reporting threshold cap of 2,000 lbs/year that has been proposed is appropriate. The major source threshold in Title III of the Clean Air Act Amendments is set at 2,000 lbs/year, so it makes sense that all major sources should be reported in New Jersey permits. Also appropriate are the proposed reporting thresholds for mercury at two lbs/year and for lead at two lbs/year. These thresholds recognize the multi-media exposure potential that can result from air emissions of these two pollutants. They utilize existing well-established analyses that were prepared with the objective of protecting public health. (5)

RESPONSE: The Department acknowledges the commenter's support for the adopted rules.

Procedure for determining HAP reporting thresholds

20. COMMENT: The proposal failed to provide the need, the rationale and the methodology to adjust the HAPs reporting thresholds in sufficient detail for public comment. Though the goal to have appropriate thresholds for protection of the environment and public health is well-intentioned, the science to adjust the thresholds was not made public. Without such information, it is not possible to assess if these new thresholds are appropriate. (6)

RESPONSE: The notice of proposal Summary outlined the need, rationale, and methodology that the Department used to revise the HAP reporting thresholds (49 N.J.R. at 2377). Prior to this rulemaking, the Department had not updated these thresholds since promulgating them more than 25 years ago. Over the last two and a half decades, there have been advances in science and technology that make these values obsolete.

The notice of proposal contains a summary of the methodologies the Department used in determining the HAP reporting thresholds (49 N.J.R. at 2378 and 2379). Additionally, the Department provided greater detail than what was set forth in the notice of proposal by making a description of the modeling methodologies, statistical analysis, and assumptions available during the public comment period in the document titled, *Technical Support Document Updating Hazardous Air Pollutant Reporting Thresholds* (Technical Support Document), which was posted at http://www.nj.gov/dep/airmon/airtoxics/. In the notice of proposal Summary (49 N.J.R. at 2378), the Department identified this document and discussed the importance of it to the proposed HAP reporting thresholds, and also provided an internet link to the document.

21. COMMENT: The change in the reporting thresholds in permits has no environmental benefit. (6)

RESPONSE: Although the Department's primary purpose in amending the HAP reporting thresholds is to ensure that HAP emissions will not result in a significant health risk, the amended reporting thresholds are also expected to have environmental benefits, as discussed in the notice of proposal Environmental Impact statement (49 N.J.R. at 2386). While it is not possible for the Department to determine the magnitude of the decrease in HAP emissions that will result from the amended HAP reporting thresholds and the additional risk assessments they may generate, any reduction in levels of ozone and $PM_{2.5}$ and limit to emissions that can contribute to stratospheric ozone depletion will have a positive environmental impact.

22. COMMENT: The new HAP reporting thresholds significantly increase costs to New Jersey companies, which continue to make New Jersey companies non-competitive in a regional economy. An increase in societal costs should be justified with proportional necessary environmental benefits. The proposal did not address the increasing costs for the additional initial detection of potential air contaminants, and the additional costs for monitoring, recordkeeping, and reporting across the industry sectors, which are of great concern. This omission makes the rule proposal incomplete for public comment. In the notice of proposal Economic Impact statement, the Department states its belief that determining and listing any additional new HAPs emissions will not have a significant economic impact, since there would have been an initial calculation of the HAPs emissions to determine whether they exceeded the

prior HAPs reporting thresholds and had to be included in the initial air permit application for the facility. This does not take into account that this prior calculation information may no longer be available for facilities in operation for many years. (6)

RESPONSE: As discussed in the notice of proposal Economic Impact statement, 49 N.J.R. at 2384 through 2386, the adoption of the new HAP reporting thresholds should not significantly increase costs to New Jersey companies. Under both the prior and adopted rules, facilities must calculate their HAP emissions to determine if the emissions need to be listed on air pollution control permit applications and emission statements. The adopted rules do not mandate additional testing beyond what the previous rules required. The Department's ability to request testing and monitoring of HAP emissions to verify compliance with the maximum emissions listed on permits or verify that the emissions are below the published reporting thresholds is not new with this rulemaking.

The commenter stated that prior emissions calculation information may no longer be available for facilities in operation for many years. The Emission Statement rules at N.J.A.C. 7:27-21 and the Right to Know program rules at N.J.A.C. 7:1G require the owner and operator of a facility to know what HAPs are used and stored at the facility, and to keep records of the HAPs used and stored. Additionally, the facilities are required to maintain records, including supporting documentation, for five years, which is the duration of an air pollution control permit. This means that any calculations made by a facility for the purposes of determining whether HAP reporting is required must be kept on file for the duration of that permit. Each time a permit is renewed or modified, the facility must update its documentation to ensure that any changes to the HAP reporting determination are included in the latest permits.

Overall, the cost of implementing the amended HAP thresholds should not be so great as to affect the competitiveness of New Jersey companies in a regional economy. The projected cost, and the balance between the cost of these measures and the positive social, health and environmental impacts implementation are discussed in the notice of proposal Economic Impact statement, 49 N.J.R. at 2384 through 2386.

23. COMMENT: The Department has relied on an outdated EPA Integrated Risk Information System (IRIS) reference concentration (RfC) and a California Environmental Protection Agency (CalEPA) value that do not reflect the latest science. Instead, under the Department's guidelines, the more recently updated minimal risk levels (MRL) for manganese developed by the Agency for Toxic Substances and Disease Registry (ATSDR) in 2012, which includes consideration of the latest science (as of 2012), should be utilized to derive the manganese reporting threshold.

Several years ago, when developing air toxics standards for the ferroalloys production sector, the EPA recognized that the IRIS Mn RfC is outdated and no longer consistent with the latest and best available science. Accordingly, the EPA ceased relying on the Mn RfC and opted instead to utilize the recently updated MRL developed by ATSDR. Further, in 2014, the EPA Office of Air Quality Planning and Standards revised its database of benchmark values for use in assessing risks from air emissions by replacing reference to the IRIS Mn RfC with the ATSDR MRL. Other states have made similar determinations to rely on the ATSDR MRL.

Accordingly, the Department should revise the proposed reporting threshold for manganese by applying the ATSDR MRL for manganese. Of the three authoritative sources cited by the Department for toxicity data used to derive reporting thresholds, the MRL is the only one that reflects consideration of the best and latest science on manganese toxicity. It should also be noted

that the MRL is overly conservative, and that full consideration of the best available science, including the PBPK models discussed above, likely would result in a risk threshold at least an order of magnitude higher.

In addition, it is important to emphasize that the risk thresholds established by ATSDR, the EPA, and the CalEPA are based on manganese concentrations in the respirable particle size (particles of five microns or less, PM_5), which represents the biologically relevant fraction of total particulates. Reliance on total dust concentrations overstates significantly the potential risks associated with inhalation of manganese in respirable dust. For risk assessment purposes, evaluation of the potential risks associated with manganese inhalation should compare the chosen risk value (that is, the ATSDR MRL) to PM_5-Mn concentrations. Absent PM_5 data, an adjustment should be made to the manganese risk value that reflects the application to total particulate or PM_{10}-Mn air concentrations. The appropriate PM_5 adjustment factor should be determined on a case-by-case basis, using particle size reference values from industry/source-specific published documents or from actual source emission testing with particle size distribution information. (2)

RESPONSE: The Department used the latest published toxicity data available to calculate each HAP reporting threshold. The Department reviewed the most recent list of reference concentrations issued by IRIS, CalEPA, and ATSDR. While the commenter is correct that ASTDR published an updated chronic MRL for manganese in 2012 and simultaneously established a daily reference exposure level (REL) at the same concentration (0.3 micrograms per cubic meter or $\mu g/m^3$), CalEPA revised its list of RELs in 2014 and chose to maintain the short-term, eight-hour REL of 0.17 $\mu g/m^3$. Consistent with the methodology discussed in the

notice of proposal Summary and the Technical Support Document, the manganese reporting threshold was based on the most recent published acute or chronic reference concentration, which was the 2014 CalEPA eight-hour REL.

The manganese reporting threshold assumes that all manganese emitted by a source operation is respirable. This assumption was necessary since the Department could not account for each of the potential sources of manganese emissions when it developed the threshold. If a source operation emits total manganese above the reporting threshold, it must be listed on a permit application. However, the Department will consider an adjustment factor on a case-by-case basis as part of the permit application. An applicant may provide the Department with data available on particle size distribution, in order to make the necessary adjustments to the amount of respirable manganese emitted, so long as the data has been certified.

24. COMMENT: In the Technical Support Documentation provided as part of this proposed rule, the Department states that modeling was focused on shorter stacks (less than 35 feet) that were relatively close to the property line (less than 100 feet). Further, it states that this conservative scenario was used because over 70 percent of the stacks permitted in New Jersey meet this criterion. However, it is not clear what percentage of those stacks have the potential to emit HAPs. The Department should consider evaluating the stack height and the distance to property line for only those stacks/processes that emit HAPs. The potential exists for HAP-emitting stacks to be considerably higher in elevation and further from facility property lines. The Department has indicated that the modeling utilized to develop the revised HAP reporting thresholds is considerably conservative. For example, the Department indicated that the model setup represented a range of source operations with relatively low exit velocities and stack

temperatures that are subject to aerodynamic downwash. The Department further contributed to developing very high ambient concentrations (within their modeling) by considering impacts only for stacks 35 feet high or less and receptor distances of 100 feet or less. Has the Department evaluated the impact to ambient concentrations (and thus resulting reporting thresholds) by considering stack velocities, temperatures, heights and distances to property line that are more consistent with actual HAP-emitting operations/processes? Furthermore, has the Department considered the level of conservatism that was already built into the selected toxicity data (used to develop the reporting thresholds from modeling results)? The modeling conservatism and the conservatism of the toxicity data (that is, the methods used to develop the data) may be driving the Department's revised HAP reporting thresholds considerably lower than what is necessary or justified. This potential may be demonstrated in the number of HAPs with decreasing reporting thresholds and the rather dramatic decrease in certain reporting thresholds. If the conservative process used to develop the new HAP reporting thresholds yields a determination that a reporting threshold should be over 2,000 lbs/yr, why is the Department not increasing the proposed reporting threshold accordingly? It does not appear to be scientifically sound to utilize the Department's methodology to lower certain reporting thresholds by orders of magnitude, but not increase reporting thresholds (for applicable pollutants) to above 2,000 lbs/yr, if justified by the Department's approach. The maximum reporting threshold of 2,000 lbs/yr would appear to be a rather arbitrary value, considering the Department's reporting threshold development methodology. (11)

RESPONSE: As explained in the Technical Support Document, the Department modeled combinations of hypothetical source operation discharge points at distances to property lines that

ranged from 20 to 3,000 feet and stack heights that ranged from 15 to 250 feet. Rather than simply basing the proposed HAP reporting thresholds on a single stack height/property-line combination, the Department used a robust statistical approach that looked at approximately 300 stack height/distance from property line combinations. Given New Jersey's unique land use makeup and population density, the Department took a conservative approach and focused on the parameters that result in the highest potential risk to the communities and sensitive receptors in the vicinity of source operations. This approach is reasonable given the fact that more than 70 percent of permitted source operations discharge from stacks with heights of 35 feet or less. In actuality, the percentage of permitted source operations that discharge from stacks with heights that are 35 feet or less is much greater than 70 percent, since the analysis did not include stacks of equipment that have general permits, as those stacks are mostly in the 10 to 20 feet range.

It is not feasible to base the modeling solely on stacks that emit HAPs because many source operations emit HAPs below the previous reporting thresholds, which were not based on HAP toxicity and exposure assessments. It is true that the unit risk factors and reference concentrations are developed with a degree of conservatism to reflect their use in determining the health risks to the general population. However, the exposure assessment based on the modeling study was not overly conservative, since the study had to assume that many discharge points have poor dispersion characteristics, which could be caused by horizontal discharges, stack heights that do not meet the Good Engineering Practice criteria, and building-induced cavity effects.

The Department did not propose to increase HAP reporting thresholds above 2,000 lbs/yr for any individual HAP, even if the risk evaluation conducted demonstrated that a threshold above this level would result in a negligible risk. The 2,000 lbs/yr threshold is the same as the maximum threshold in N.J.A.C. 7:27-8 and 22 before this rulemaking. The Department

concluded that it was necessary for facilities to continue to list these HAPs in their applications so that the Department can verify that these emissions were correctly determined and that the contaminants were being adequately controlled, as necessary. This is consistent with the EPA's anti-backsliding guidance, designed to prevent regression from the benefits of existing environmental policies. In addition, communities in and around larger facilities should be able to continue to determine if a source operation in their neighborhood has the potential to emit a HAP in excess of 2,000 lbs/yr.

The 2,000 lbs/yr maximum reporting threshold has been used for more than 20 years as a benchmark for listing HAP emissions and conducting risk assessments. The public has become accustomed to this level for identifying whether source operations near their residences are emitting HAPs.

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

25. COMMENT: The Department proposes to lower the reporting threshold for 106 HAPs and raise the reporting threshold for 15 HAPs. The Department should carefully consider the implementation of these requirements to avoid permit approval delays and additional expense for applicants. Significantly more air permit applications will be subject to health risk assessment with these proposed changes. The assessment of health risk must become a more streamlined process for the Department and the applicants, to compensate for the expected increase in volume for both parties. These new, lower thresholds likewise should not result in additional burden for monitoring, recordkeeping, reporting, and compliance risk. The Department's permitting policies should be adjusted accordingly. The regulated community would be happy to

participate in a stakeholder group to help develop and implement a simplified process as a necessary complement to these proposed rules. (3 and 4)

RESPONSE: In recent years, the Department has streamlined the risk assessment process for air permits by providing the regulated community with a simple-to-use Risk Screening Worksheet (Worksheet) (http://www.nj.gov/dep/aqpp/risk.html). The use of this Worksheet eliminates the need to perform refined air quality modeling for a significant number of permittees. If the facility has the potential to emit one or multiple HAPs, the Worksheet can assess risk at the same time for multiple HAPs. Similarly, when a permittee runs an air quality model for the refined risk assessment for one pollutant, the permittee can use the same run for multiple pollutants.

The new rules and amendments do not include any new monitoring, recordkeeping, reporting, or testing requirements. As stated in the response to Comment 22, existing rules require that all records be kept for five years for each permit, including renewals. The new streamlined process should easily accommodate any increase in air permit applications subject to the health risk assessment requirement. The Department will continue the stakeholder process for any future efforts in rulemaking and updates of technical manuals, along with the quarterly Industrial Stakeholder Group meetings.

26. COMMENT: For permit modifications submitted after the effective date of this rulemaking, the proposed rule states that the permittee should evaluate all HAPs against the proposed reporting thresholds and show negligible health risk (via screening or refined modeling). Is this evaluation restricted to the emission units being modified or would a facility-wide risk assessment be required? (11)

RESPONSE: When preparing a significant modification or minor modification to an existing operating permit, the permittee needs to evaluate the new HAPs reporting thresholds for only those source operations that are being modified. For operating permits with an expiration date three years or later after the operative date of the amended rules, HAP emission rates listed for each source operation in the operating permit renewal application must be consistent with the new HAP reporting thresholds. The operating permit renewal application will include a facility-wide risk assessment that will assess the health risks of the revised HAP emissions as well as any unchanged HAP emissions.

Phase-in of the proposed HAP reporting thresholds

27. COMMENT: In the summary of the proposed rulemaking, 49 N.J.R. at 2381, the Department states that it 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. The Department should revise this wording on adoption to make it clear that an operating permit modification application would also not be required to incorporate the amended reporting thresholds if the modification application is submitted to the Department prior to the operative date of the amended rule. (6)

RESPONSE: It is not necessary to modify the rule on adoption to clarify that an application does not need to be updated if it is submitted before the operative date of the amended rules. The

Department applies the rules that are operative at the time that the application is submitted. Until the new reporting thresholds are operative, an application will not be subject to the new thresholds.

28. COMMENT: Phase-in of the new reporting thresholds is addressed for existing Title V operating permits, but no phase-in provisions were proposed for N.J.A.C. 7:27-8 air permits or for modifications to N.J.A.C. 7:27-22 operating permits. Without phase-in provisions, N.J.A.C. 7:27-8 air permits would require use of the new reporting thresholds for any new permit or permit revision submitted after the effective date of this proposed rule. For revisions, the Department should clarify that the reporting thresholds only need to be updated for the source being modified (not all the sources in the entire permit or emission unit). (3 and 4)

29. COMMENT: How much time will Title V facilities have to evaluate whether or not certain insignificant sources will be considered significant sources due to the lowering of HAP reporting thresholds and the potential loss of permit exemptions? What permitting mechanism will be expected of these facilities? After the effective date of this rulemaking, facilities that identify HAPs that are newly reportable (based on the new thresholds) would be required to modify their air permits. What are the expected timelines for submittal of these modifications? (11)

RESPONSE TO COMMENTS 28 AND 29: The applicability of the amended HAP reporting thresholds to existing preconstruction permits and operating permits is discussed in the "Phase-in of the proposed HAP reporting thresholds" section of the notice of proposal Summary (49 N.J.R. at 2381). The Department will not require updated HAP emission rates for existing

preconstruction permits, unless an application for a modification is filed. In an application for a modification to an existing preconstruction permit, the HAP reporting thresholds apply only to those source operations that are being modified, for purposes of determining the source's potential to emit. This is consistent with adopted N.J.A.C. 7:27-8.4(k)1, which refers only to a source operation's potential to emit.

Similarly, as stated in the notice of proposal Summary, the Department will not require use of the amended HAP reporting thresholds when determining potential to emit 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 less than three years after the operative date of the amended rules. When preparing a significant modification or minor modification to an existing operating permit, the permittee only needs to evaluate the new HAP reporting thresholds for those source operations that are being modified. This is consistent with the definitions of "exempt activity," "insignificant source operation," and "potential to emit" at N.J.A.C. 7:27-22.1, and N.J.A.C. 7:27-22.3(c), (e)1, and (f)5. The applicability of these definitions and rules is based on a source operation's potential to emit, and not on the facility's or multiple source operations' potential to emit.

In contrast, all Title V permits (that is, permits with an expiration date three years or later after the operative date of the adopted rules) will be required, upon renewal, to include HAPs evaluated based on the new reporting thresholds. In the renewal process, any sources previously considered to be insignificant that trigger the new HAPs reporting thresholds must be listed as significant sources. The rules do not change the existing permitting process, including renewals. For a Title V facility, if an insignificant source undergoes any modification, an evaluation must be performed to determine if any HAP will be emitted above the reporting thresholds. If there is

a potential to emit one or more HAPs above the reporting thresholds, a permit application for the modification must be filed and approved before the modification can be performed. There is no other set timeline for the submittal of any other type of air pollution control permit applications to address the revised HAP reporting thresholds.

30. COMMENT: Phase-in of the new reporting thresholds is addressed for existing Title V operating permits, but no phase-in provisions were proposed for N.J.A.C. 7:27-21 emission statements. Without phase-in provisions, annual emission statements would potentially require new reporting thresholds, new data, and new data acquisition and management for the reporting year prior to the adoption of the proposed rule (likely reporting year 2017). The companies' data systems for reporting new pollutants may not be in place, and back calculation of the emissions may not be possible for pollutants that were not required to be reported in the past. The regulated companies should be given time to assess the new reporting obligations and adjust their systems for collecting and reporting data for any new pollutants. Without this consideration, it may be impossible to accurately track and report pollutants that were not required to be reported in the past. Therefore, we suggest that the Department consider phasing in this emission statement requirement for the first full reporting year following the effective date of the proposed rule. (3, 4, and 11)

RESPONSE: The commenters' concerns about the difficulty in retroactively reporting data for the 2017 reporting year, pursuant to the amended thresholds, are valid. To address them, the Department is modifying N.J.A.C. 7:27-21.3(b)1 and 2 on adoption to retain the prior air toxic reporting thresholds, to be used in the 2017 Emission Statement reporting year, only. Facilities

have been determining their actual emissions using these thresholds. Thereafter, for the emission statements for reporting year 2018 and later, the adopted reporting thresholds apply.

The Department is modifying Appendix I of N.J.A.C. 7:27-21 to add Table 2 "Toxic Air Pollutants Reporting Year 2017 Reporting Thresholds," and is modifying N.J.A.C. 7:27-21.3(b)1ii and 2iii to refer to the new table. The purpose of Table 2 is to provide the air toxic reporting thresholds that are applicable for reporting year 2017. The adopted rules apply to reporting year 2018 and later, as discussed in N.J.A.C. 7:27-21.3(b)1iii and 2iv.

Miscellaneous Amendments

Annual adjustment of boilers

31. COMMENT: The proposed rule requires that if a combustion source did not operate during a quarter when it is required to perform the Subchapter 19 annual combustion adjustment, such a tune-up should be conducted within seven days of start-up of the unit. It typically takes longer for facilities to hire and schedule a contractor to come on site to perform this tune-up. It would be very helpful if this time-line is changed to 30 days from the start-up of the unit. (11)

RESPONSE: The amendment is consistent with the existing requirement at N.J.A.C. 7:27-19.4(c) that allows an owner or operator of any boiler serving an electric generating unit to adjust the boiler's combustion process within seven days of the first period of operation after May 1, if the boiler has not operated between January 1 and May 1 of that year. Therefore, it is appropriate to keep the seven-day time restriction in the amendment.

Summary of Agency-Initiated Changes:

The Department is modifying the rules on adoption to correct grammar and punctuation and replace a missing "or" from paragraph 11 of the definition of "significant source operation" at N.J.A.C. 7:27-22.1. Additionally, the Department is modifying the permitting exemption provisions to clarify the definition of "construction engine" by replacing the terms "site," "construction site," and "location," with "facility." The rules include a definition of "facility," but do not define "site," "construction site," or "location." At N.J.A.C. 7:27-19.2(d)1, the Department is removing the phrase "in writing" as regards to legal requirements that incorrectly repeated the use of this phrase in connection with manufacturer recommendations. The Department is also substituting "statute" for "law" to more clearly cover both the statutory and regulatory requirements of the Federal and State governments that may apply. The Department is modifying N.J.A.C. 7:27-16.1 and 19.1 on adoption to delete redundant definitions of "PJM." The Department proposed to define the term in each subchapter, but did not propose to delete the existing definitions.

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 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 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 notice of proposal Summary, 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.

Regulations

Full text of the adoption follows (additions to proposal indicated in boldface with asterisks *__thus__*; deletions from proposal indicated in brackets with asterisks *[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]* *__facility__* 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]* *__facility__*. Construction engine does not include:

1. An engine attached to a foundation;

2. An engine (including any replacement engines) at the same *[location]* *__facility__* 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]* ***facility*** to another in an attempt to circumvent the residence time criteria at paragraphs 2 or 3 above.

…

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

"Emergency 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. 7:26G-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.

…

"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]* ***rails*** 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 reporting thresholds 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 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;

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 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 reporting thresholds 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 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 in Table A 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 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 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 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 A 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 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 that would:

1. (No change.)

2. Result in emission of a new air contaminant at a level that would cause the source's potential to emit to exceed reporting thresholds 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 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 A or at 7:27-17.9(a); or

iii. (No change.)

6. Replacement of an entire permitted source with a replacement source that performs the same function as the replaced source and which, for each air contaminant listed in 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 A and 7:27-17.9(b);

7. (No change.)

8. A reconstruction, as described at N.J.A.C. 7:27-8.23, provided that the reconstructed source has the potential to emit each air contaminant listed in 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 (in lbs/hour)	SOTA Threshold (in tons/yr)
...		
Any air contaminant listed in footnote [1]	0.05	5.0

[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 when the primary source of energy is unavailable 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***, not including operation during the performance of normal testing and maintenance procedures, as provided at N.J.A.C. 7:27-19.2(d)1***;

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.

…

"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.

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

…

"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. (No change.)

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

…

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 applies to open top tanks and surface cleaners that contain VOC and to solvent cleaning operations.

(b)-(i) (Reserved)

(j) The following provisions 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. 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 (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 (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.

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

6. The maximum allowable emission rate 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.)

TABLE 16B

DETERMINANTS OF CONTROLS REQUIRED FOR PROCESS SOURCE GASES

Concentration of VOC by Volume, Percent

Vapor Pressure, PSIA @ 70°F		Range A	Range B		Range C		Range D		Range E		Range F		Range G	Range H
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			
0.8	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	0.1% (1000 PPM)	0.1% (1000 PPM)	1.0% (10,000 PPM)	1.0% (10,000 PPM)	38.0	38.0	55.0	55.0	86.0	86.0	97% Vapor	Greater Than 97% But Not Greater Than 99.5%	Greater Than 99.5%
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					55.0	55.0	71.0	71.0	95.5	95.5			
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					68.6	68.6	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 is the sum of the maximum allowable emission rates for the separate source gases as determined under N.J.A.C. 7:27-16.16(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 Table 16A in (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 (q) below, the owner or operator of any facility that contains a source operation subject to (a)1 above shall:

1. (Reserved)

2. (No change.)

(c) The following requirements 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 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(*o*) to submit the proposed plan:

i. – ii. (No change.)

4. – 5. (No change.)

(d) (No change.)

(e) (No change in text.)

(f) Within 30 days after receiving 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 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 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.

(g) Failure by an owner or operator to submit the additional information requested by the Department pursuant to (g) above within the time stated in the Department's notification shall constitute a violation of this subchapter. In such case, the Department may deny the submission and pursue its other remedies.

(h) The Department shall seek comments from the general public before making any final decision to approve or disapprove a proposed alternative or facility-specific VOC control plan. The Department shall publish a Notice of Opportunity for Public Comment in a newspaper for general circulation in the area in which the major VOC facility is located. In addition, the Department shall submit any approved alternative or facility-specific VOC control plan to EPA for approval as a revision to New Jersey's State Implementation Plan.

(*i*) Within six months after receiving a complete proposed alternative or facility-specific VOC control plan, the Department shall approve, approve and modify, or disapprove the proposed plan and notify the owner or operator of the decision in writing. The Department shall approve the proposed plan only if it satisfies the following requirements:

1. The proposed plan contains all of the information required under (d) above;

2. The proposed plan considers all control technologies available for the control of VOC emissions from the type of equipment or source operation in question;

3. For any control technologies described in (j)2 above which the owner or operator does not propose to use on the equipment or source operation, the proposed plan demonstrates that the control technology:

i. Would be less effective in controlling VOC emissions from the equipment or source operation than the proposed measures;

ii. Is unsuitable for use with the source operation, or duplicative of control technology or pollution prevention measure which the plan proposes to use;

iii. Would carry costs disproportionate to the improvement in the reduction of the VOC emissions rate which the control technology is likely to achieve, or disproportionately large in comparison to the total reduction in VOC emissions which the control technology is likely to achieve over its useful life; or

iv. Would carry costs disproportionate to the costs incurred for the control of VOC emissions from the same type of source operations used by all other persons in the owner or operator's industry;

4. The emission limit proposed for each source operation is the lowest rate which can practicably be achieved at a cost within the limits described in (j)3iii and iv above;

5. The cost of achieving an additional emission reduction beyond each proposed limit would be disproportionate to the size and environmental impact of that additional emission reduction; and

6. For any pollution prevention or other emission reduction measures proposed by the owner or operator, the proposed plan demonstrates that the measures:

i. Result in actual reductions in VOC emissions;

ii. Result in VOC emission reductions which are quantifiable; and

iii. Result in VOC emission reductions which are Federally enforceable.

(j) Within six months after receiving a complete compliance plan submitted pursuant to (f) above, the Department shall approve, approve and modify, or disapprove the proposed

compliance plan and notify the owner or operator of the decision in writing. The Department shall approve the proposed compliance plan only if it satisfies the following conditions:

1. The compliance plan contains all of the information required under (f) above;

2. The compliance plan demonstrates to the Department's satisfaction that actual emissions of VOC, including fugitive VOC emissions, in 1990 (or the first year of the facility's operations, if operations commenced after 1990) and each year thereafter are less than 25 tons;

3. The proposed recordkeeping requirements are sufficient to enable the Department to verify that the owner or operator is complying with the plan; and

4. The compliance plan demonstrates that the potential to emit VOC will be less than 25 tons if the plan is approved and implemented.

(k) As a condition of an approval issued under this section, the Department may impose requirements upon the operation of the source operation(s) necessary to minimize any adverse impact upon human health, welfare and the environment.

(*l*) Before altering any source operation which is included in an approved alternative or facility-specific VOC control plan, approved compliance plan or demonstration (except as authorized or required in the approval), the owner or operator shall:

1. Pursuant to this section, apply for and obtain the Department's approval of an amendment to the approved compliance plan, VOC control plan, or demonstration, reflecting the proposed alteration. If the owner or operator does not obtain the Department's approval of the amendment before commencing operation of the altered equipment or source operation, the Department may (in addition to assessing penalties under N.J.A.C. 7:27A-3.10) modify the VOC control plan, compliance plan or demonstration to reflect the alteration, in a manner satisfying the criteria set forth in (j), (k) or (*l*) above, respectively; and

2. Apply for and obtain any preconstruction permit and certificate, operating permit, or facility-wide permit, or change thereto, required for the alteration. Each application must be submitted with the application to amend the VOC control plan.

(m) The Department will revoke an approval of an alternative VOC control plan by written notice to the holder of the approval if EPA denies approval of the proposed VOC plan as a revision to the State Implementation Plan. The Department may revoke an approval of an alternative or facility-specific VOC control plan, compliance plan or demonstration by written notice to the holder of the approval, if:

1. Any material condition of the approval is violated;

2. The Department determines that its decision to grant the approval was materially affected by a misstatement or omission of fact in the owner or operator's submission or any supporting documentation; or

3. The Department determines that continued use of the subject source operation pursuant to the approval poses a potential threat to the public health, welfare or the environment.

4. For an alternative or facility-specific VOC control plan, EPA denies approval of the plan as a revision to the State Implementation Plan.

(n) A person may request an adjudicatory hearing in accordance with the procedure at N.J.A.C. 7:27-1.32, if:

1. The Department has denied the person's application for approval under this section for any other reason than an EPA rejection of the SIP revision;

2. The person seeks to contest one or more conditions of the Department's approval imposed under (m) above; or

3. The Department has revoked the person's approval pursuant to (o)1 through 3 above.

(o) After receipt of a written request from an owner or operator, the Department may authorize one non-renewable 60-day extension of the deadline set forth in (c)3 above. Written requests for the extension of a deadline shall be submitted to the address listed below:

Administrator

Air Compliance and Enforcement

Department of Environmental Protection

PO Box 422

401 East State Street, 4th floor

Trenton, New Jersey 08625-0422

(p) The owner or operator submitting a proposed alternative or facility-specific VOC control plan, compliance plan or demonstration shall send it to the Department at the following address:

Department of Environmental Protection

Division of Air Quality

Air Quality Permitting Program

Bureau of Air Permits

401 East State Street

Mail Code 401-02

PO Box 420

Trenton, New Jersey 08625-0420

(q) If a source operation is covered by a preconstruction permit and operating certificate or an operating permit, either of which requires the source operation to utilize a control apparatus which attains at least 90 percent capture and 90 percent control, the owner or operator need only

be in compliance with that permit or certificate to be deemed in compliance with this section; the owner or operator need not submit the demonstration required by (b) above.

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.

...

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

...

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

...

7:27-17.4 Discharge of GROUP II toxic substances

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, 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 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.

7:27-17.7 Applicability

(a) Operations and equipment covered by this subchapter shall include, but not be limited to, storage tanks, transfer operations, open top tanks, surface cleaning, surface coating, organic chemical manufacture, pharmaceutical manufacture, petroleum refining, and miscellaneous organic solvent uses in which one or more of the toxic substances in Table 1 are stored, used, or manufactured.

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

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

7:27-17.8 Exceptions

(a) The provisions of N.J.A.C. 7:27-17.3 and 17.6(c) do not apply to the benzene constituent of gasoline that is discharged to the atmosphere from storage tanks or transfer operations.

(b) N.J.A.C. 7:27-17.3, 17.5, 17.6(c), and 17.7 do not apply to any TXS 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
77781	Dimethyl sulfate	0.01	200
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]* * **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.

…

"Construction engine" means a mobile engine used for construction at a *[site]* ***facility*** 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]* ***facility***. Construction engine does not include:

1. An engine attached to a foundation;

2. An engine (including any replacement engines) at the same *[location]* ***facility*** 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]* ***facility*** 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 when the primary source of energy is unavailable 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***, not including operation during the performance of normal testing and maintenance procedures, as provided at N.J.A.C. 7:27-19.2(d)1***;

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.

…

"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.

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

"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), 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]* ***rails*** at a facility, but does not in the course of its normal operation leave the facility.

…

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 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. Except as specified at paragraph 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]* ***statute*** 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**.** 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;

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 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 37 kW or greater, fueled by gaseous fuel, and used for generating electricity, 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 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 37 kW or greater, fueled by gaseous fuel, and used for generating electricity, 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 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 37 kW or greater, fueled by liquid fuel, and used for generating electricity, 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 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 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 owner or operator satisfies the recordkeeping requirements of N.J.A.C. 7:27-19.19(d) and (e), and the reporting requirements of (d) below.

(d) The owner or operator shall keep records of curtailment periods and incorporate such records into the 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. The following three Table 1 air contaminants: VOC, NO_x and CO; *[and]*

ii. *[Each]* ***For reporting year 2017, each**** of the toxic air pollutants 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 at *[N.J.A.C. 7:27-17.9(a);]* ***N.J.A.C. 7:27-21 Appendix 1, Table 2; and**

iii. For reporting year 2018 and for each year thereafter, each of the toxic air pollutants 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 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. (No change.)

ii. Beginning with the Emission Statement for reporting year 2003 and for each year thereafter, the greenhouse gases CO_2 and CH_4; *[and]*

iii. *[Each]* ***For reporting year 2017, each**** of the toxic air pollutants 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 at *[N.J.A.C. 7:27-17.9(a).]*

***N.J.A.C. 7:27-21 Appendix 1, Table 2; and**

iv. For reporting year 2018 and for each year thereafter, each of the toxic air pollutants 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 at N.J.A.C. 7:27-17.9(a).*

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

APPENDIX 1

TABLE 1

(No change.)

***TABLE 2**

Toxic Air Pollutants Reporting Thresholds for Reporting Year 2017

Air Contaminant	**Reporting Threshold**
Acetaldehyde	**1800 lbs/yr**
Acrolein	**200 lbs/yr**
Acrylonitrile	**60 lbs/yr**
Arsenic and compounds	**1 lbs/yr**
Benzene	**0.01 lbs/hr**
Beryllium and compounds	**1.6 lbs/yr**
1,3-Butadiene	**14 lbs/yr**
Cadmium and compounds	**2 lbs/yr**
Carbon tetrachloride	**0.01 lbs/hr**
Chloroform	**0.01 lbs/hr**
Chromium and compounds	**1000 lbs/yr**
1,3-Dichloropropene	**200 lbs/yr**
1,4-Dioxane	**0.01 lbs/hr**
Dioxins	**0.00012 lbs/yr**
Ethylene dibromide	**20 lbs/yr**
Ethylene dichloride	**0.01 lbs/hr**
Ethylene imine[1]	**0.01 lbs/hr**
Ethylene imine[1]	**0.6 lbs/yr**
Ethylene oxide	**20 lbs/yr**
Formaldehyde	**400 lbs/yr**
Hexachlorobenzene	**2 lbs/yr**

Hydrazine	**0.8 lbs/yr**
Hydrochloric acid	**2000 lbs/yr**
Manganese and compounds	**160 lbs/yr**
Mercury and compounds	**2 lbs/yr**
Methylene chloride	**2000 lbs/yr**
Nickel and compounds	**200 lbs/yr**
Polychlorinated biphenyls	**1.8 lbs/yr**
Polycyclic organic matter	**2 lbs/yr**
Propylene dichloride	**200 lbs/yr**
Quinoline	**1000 lbs/yr**
1,1,2,2-Tetrachloroethane	**0.01 lbs/hr**
1,1,2,2-Tetrachloroethane	**60 lbs/yr**
Tetrachloroethylene	**0.01 lbs/hr**
1,1,1-Trichloroethane	**2000 lbs/yr**
1,1,2-Trichloroethane	**0.01 lbs/hr**
Trichloroethylene	**0.01 lbs/hr**
Vinyl chloride	**40 lbs/yr**

[1]If two emission rates are shown for an air toxic, both are applicable Reporting Thresholds*

SUBCHAPTER 22. OPERATING PERMITS

7:27-22.1 Definitions

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

…

"Construction engine" means a mobile engine used for construction at a *[site]* ***facility*** 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]* ***facility***. Construction engine does not include:

1. An engine attached to a foundation;

2. An engine (including any replacement engines) at the same *[location]* ***facility*** 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]* ***facility*** to another in an attempt to circumvent the residence time criteria in paragraphs 2 or 3 above.

…

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

"Emergency 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, that satisfies subparagraphs 14i, 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 reporting thresholds 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.

…

"Insignificant source operation" means equipment or a source operation 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 reporting thresholds 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.

…

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

…

"Significant source operation" means any source operation which is one 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 ***or*** greater to the burning chamber, including emergency generators;

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]* ***rails*** 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 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 NOx permit limit established pursuant to this subchapter.

(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 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 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);

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 that:

i. – ii. (No change.)

iii. Does not cause the emission of a new air contaminant not specified in the operating permit.

(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 at N.J.A.C. 7:27-17.9(a) or in 7:27-22 Appendix, Table A.

7:27 22.30 Renewals

(a) – (k) (No change.)

(*l*) An operating permit with an expiration date of February 12, 2021 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 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 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. 7:27-16.17(*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
. . .						

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

. . .

20. – 29. (No change.)

30. (Reserved)

31. (Reserved)

32. – 34. (No change.)

(n) – (t) (No change.)