State of New Jersey

PHILIP D. MURPHY
Governor

TAHESHA L. WAY
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION

AIR, ENERGY AND MATERIALS SUSTAINABILITY
Division of Air Quality and Radiation Protection
Bureau of Stationary Sources
401 E. State Street, 2nd floor, P.O. Box 420, Mail Code 401-02
Trenton, NJ 08625-0420

SHAWN M. LATOURETTE
Commissioner

Air Pollution Control Operating Permit
Renewal

Permit Activity Number: BOP190002 **Program Interest Number: 41810**

Mailing Address	Plant Location
SEAN WESSEL PLANT MANAGER LINDEN GENERATING STATION WOOD AVE S PKWY GENERATION OPERATING LLC Linden, NJ 07036	LINDEN GENERATING STATION Wood Ave South Linden Union County

Initial Operating Permit Approval Date: **September 9, 2005**
Operating Permit Approval Date: **PROPOSED**
Operating Permit Expiration Date: **Approval date + 5 years**

AUTHORITY AND APPLICABILITY

The New Jersey Department of Environmental Protection (Department) approves and issues this Air Pollution Control Operating Permit under the authority of Chapter 106, P.L. 1967 (N.J.S.A. 26:2C-9.2). This permit is issued in accordance with the air pollution control permit provisions promulgated at Title V of the Federal Clean Air Act, 40 CFR 70, Air Pollution Control Act codified at N.J.S.A. 26:2C and New Jersey State regulations promulgated at N.J.A.C. 7:27-22.

The Department approves this operating permit based on the evaluation of the certified information provided in the permit application that all equipment and air pollution control devices regulated in this permit comply with all applicable State and Federal regulations. The facility shall be operated in accordance with the conditions of this permit. This operating permit supersedes any previous Air Pollution Control Operating Permits issued to this facility by the Department including any general operating permits, renewals, significant modifications, minor modifications, seven-day notice changes or administrative amendments to the permit.

Changes made through this permit activity are provided in the Reason for Application.

PERMIT SHIELD

This operating permit includes a permit shield, pursuant to the provisions of N.J.A.C. 7:27-22.17.

COMPLIANCE SCHEDULES

This operating permit does not include compliance schedules as part of the approved compliance plan.

COMPLIANCE CERTIFICATIONS AND DEVIATION REPORTS

The permittee shall submit to the Department and to United States Environmental Protection Agency (US EPA) periodic compliance certifications, in accordance with N.J.A.C. 7:27-22.19. **The annual compliance certification** is due to the Department and EPA within 60 days after the end of each calendar year during which this permit was in effect. **Semi-annual deviation reports** relating to compliance testing and monitoring are due to the Department within 30 days after the end of the semi-annual period. The schedule and additional details for these submittals are available in Subject Item - FC, of the Facility Specific Requirements of this permit.

ACCESSING PERMITS

The facility's current approved operating permit and any previously issued permits (e.g. superseded, expired, or terminated) are available for download in PDF format at: https://dep.nj.gov/boss. After accessing the website, click on "Approved Operating Permits" listed under "Reports" and then type in the Program Interest (PI) Number as instructed on the screen. If needed, the RADIUS file for your permit, containing Facility Specific Requirements (Compliance Plan), Inventories and Compliance Schedules can be obtained by contacting the Helpline number given below. RADIUS software, instructions, and help are available at the Department's website at https://dep.nj.gov/boss.

HELPLINE

The Operating Permit Helpline is available for any questions at (609) 633-8248 from 9:00 AM to 4:00 PM Monday to Friday.

RENEWING YOUR OPERATING PERMIT AND APPLICATION SHIELD

The permittee is responsible for submitting a timely and administratively complete operating permit renewal application pursuant to N.J.A.C. 7:27-22.30. Only applications which are timely and administratively complete are eligible for an application shield. The details on the contents of the renewal application, submittal schedule, and application shield are available in Section B - General Provisions and Authorities of this permit.

COMPLIANCE ASSURANCE MONITORING

Facilities that are subject to Compliance Assurance Monitoring (CAM), pursuant to 40 CFR 64, shall develop a CAM Plan for modified equipment as well as existing sources. The rule and guidance on how to prepare a CAM Plan can be found at EPA's website: https://www.epa.gov/air-emissions-monitoring-knowledge-base/compliance-assurance-monitoring. In addition, CAM Plans must be included as part of the permit renewal application. Facilities that do not submit a CAM Plan may have their permit applications denied, pursuant to N.J.A.C. 7:27-22.3.

ADMINISTRATIVE HEARING REQUEST

If, in your judgment, the Department is imposing any unreasonable condition of approval, you may contest the Department's decision and request an adjudicatory hearing pursuant to N.J.S.A. 52:14B-1 et seq. and N.J.A.C. 7:27-22.32(a). All requests for an adjudicatory hearing must be received in writing by the Department within 20 calendar days of the date you receive this letter. The request must contain the information specified in N.J.A.C. 7:27-1.32 and the information on the NJ04 - Administrative Hearing Request Checklist and Tracking Form available at https://dep.nj.gov/wp-content/uploads/boss/applications-and-forms/administrative-hearing-request-checklist-and-tracking-form.pdf .

If you have any questions regarding this permit approval, please call Aliya M. Khan at (609) [940-5677].

Approved by:

_____
David J. Owen

Enclosure

CC: Suilin Chan, United States Environmental Protection Agency, Region 2

Facility Name: LINDEN GENERATING STATION
Program Interest Number: 41810
Permit Activity Number: BOP190002

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Section A

Facility Name: LINDEN GENERATING STATION
Program Interest Number: 41810
Permit Activity Number: BOP190002

POLLUTANT EMISSIONS SUMMARY

Table 1: Total emissions from all Significant Source Operations[1] at the facility.

Facility's Potential Emissions from all Significant Source Operations (tons per year)										
Source Categories	VOC (total)	NO_x	CO	SO_2	TSP (total)	PM_{10} (total)	$PM_{2.5}$ (total)	Pb	HAPs* (total)	CO_2e[2]
Emission Units Summary	106	630	328	37.2	329	570	570	0.07	53.1	
Batch Process Summary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Group Summary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Emissions	106	630	328	37.2	329	570	570	0.07	53.1	4,633,219

Table 2: Estimate of total emissions from all Insignificant Source Operations[1] and total emissions from Non-Source Fugitives at the facility.

Emissions from all Insignificant Source Operations and Non-Source Fugitive Emissions (tons per year)									
Source Categories	VOC (total)	NO_x	CO	SO_2	TSP (total)	PM_{10} (total)	$PM_{2.5}$ (total)	Pb	HAPs (total)
Insignificant Source Operations	5.19	4.26	2.14	0.03	0.54	0.61	0.61	N/A	0.54
Non-Source Fugitive Emissions	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

VOC: Volatile Organic Compounds
NOx: Nitrogen Oxides
CO: Carbon Monoxide
SO_2: Sulfur Dioxide
TSP: Total Suspended Particulates
Other: Any other air contaminant regulated under the Federal CAA
PM_{10}: Particulates under 10 microns
$PM_{2.5}$: Particulates under 2.5 microns
Pb: Lead
HAPs: Hazardous Air Pollutants
CO_2e: Carbon Dioxide equivalent
N/A: Indicates the pollutant is not emitted or is emitted below the reporting threshold specified in N.J.A.C. 7:27-22, Appendix, Table A and N.J.A.C. 7:27-17.9(a).

*Emissions of individual HAPs are provided in Table 3 on the next page.
Emissions of "Other" air contaminants are provided in Table 4 on the next page.

[1] Significant Source Operations and Insignificant Source Operations are defined at N.J.A.C. 7:27-22.1.
[2] Total CO_2e emissions for the facility.

Section A

Facility Name: LINDEN GENERATING STATION
Program Interest Number: 41810
Permit Activity Number: BOP190002

POLLUTANT EMISSIONS SUMMARY

Table 3: Summary of Hazardous Air Pollutants (HAP) Emissions from Significant Source Operations [3]:

HAP	TPY
1,3-Butadiene	0.062
1-Methylnapthalene	0.0054
2-Methylnapthalene	0.0080
Acetaldehyde	1.55
Acrolein	0.25
Arsenic	0.036
Benzene	0.59
Beryllium	0.001
Cadmium	0.023
Chromium	0.024
Ethylbenzene	1.24
Formaldehyde	28.4
Lead	0.063
Manganese	2.6
Mercury	0.025
Naphthalene	0.15
Nickel	0.081
n-Hexane	13.9
Polycyclic Aromatic Hydrocarbon	0.21
Polycyclic Organic Matter	0.21
Propylene Oxide	1.13
Toluene	4.5
Total Dioxin and Furans	1.2E-06

Table 4: Summary of “Other” air contaminants emissions from Significant Source Operations:

Other Air Contaminant	TPY
Ammonia	467
Sulfuric Acid	9.3
Methane	167
Nitrous Oxide	17.7

[3] Do not sum the values below for the purpose of establishing a total HAP potential to emit. See previous page for the allowable total HAP emissions.

Section B

Facility Name: LINDEN GENERATING STATION
Program Interest Number: 41810
Permit Activity Number: BOP190002

GENERAL PROVISIONS AND AUTHORITIES

1. No permittee shall allow any air contaminant, including an air contaminant detectable by the sense of smell, to be present in the outdoor atmosphere in a quantity and duration which is, or tends to be, injurious to human health or welfare, animal or plant life or property, or which would unreasonably interfere with the enjoyment of life or property. This shall not include an air contaminant that occurs only in areas over which the permittee has exclusive use or occupancy. Requirements relative only to nuisance situations, including odors, are not considered federally enforceable. [N.J.A.C. 7:27-22.16(g)8]

2. Any deviation from operating permit requirements which results in a release of air contaminants shall be reported to the Department as follows:

   a. If the air contaminants are released in a quantity or concentration which poses a potential threat to public health, welfare or the environment or which might reasonably result in citizen complaints, the permittee shall report the release to the Department:

      i. Immediately on the Department hotline at 1-(877) 927-6337, pursuant to N.J.S.A. 26:2C-19(e); and

      ii. As part of the compliance certification required in N.J.A.C. 7:27-22.19(f). However, if the deviation is identified through source emissions testing, it shall be reported through the source emissions testing and monitoring procedures at N.J.A.C. 7:27-22.18(e)3; or

   b. If the air contaminants are released in a quantity or concentration which poses no potential threat to public health, welfare or the environment and which will not likely result in citizen complaints, the permittee shall report the release to the Department as part of the compliance certification required in N.J.A.C. 7:27-22.19(f), except for deviations identified by source emissions testing reports, which shall be reported through the procedures at N.J.A.C. 7:27-22.18(e)3; or

      . If the air contaminants are released in a quantity or concentration which poses no potential threat to public health, welfare or the environment and which will not likely result in citizen complaints, and the permittee intends to assert an affirmative defense, consistent with General Provision #10 below, the violation shall be reported by 5:00 PM of the second full calendar day following the occurrence, or of becoming aware of the occurrence.

3. The permittee shall comply with all conditions of the operating permit including the approved compliance plan. Any non-compliance with a permit condition constitutes a violation of the New Jersey Air Pollution Control Act N.J.S.A. 26:2C-1 et seq., or the CAA, 42 U.S.C. §7401 et seq., or both, and is grounds for enforcement action; for termination, revocation and reissuance, or for modification of the operating permit; or for denial of an application for a renewal of the operating permit. [N.J.A.C. 7:27-22.16(g)1]

4. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of its operating permit. [N.J.A.C. 7:27-22.16(g)2]

5. This operating permit may be modified, terminated, or revoked for cause by the EPA pursuant to 40 CFR 70.7(g) and revoked or reopened and modified for cause by the Department pursuant to N.J.A.C. 7:27-22.25. [N.J.A.C. 7:27-22.16(g)3]

6. The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this operating permit; or to determine compliance with the operating permit. [N.J.A.C. 7:27-22.16(g)4]

7. The filing of an application for a modification of an operating permit, or of a notice of planned changes or anticipated non-compliance, does not stay any operating permit condition. [N.J.A.C. 7:27-22.16(g)5]

8. The operating permit does not convey any property rights of any sort, or any exclusive privilege. [N.J.A.C. 7:27-22.16(g)6]

9. Upon request, the permittee shall furnish to the Department copies of records required by the operating permit to be kept. [N.J.A.C. 7:27-22.16(g)7]

10. The permittee may not assert an affirmative defense to penalty liability for non-compliance with a provision or condition of the operating permit that is based on any federally delegated regulation, including but not limited to NSPS, NESHAP, or MACT. An affirmative defense to penalty liability for non-compliance with a provision or condition of the operating permit may be asserted by a permittee if:

    1. The provision or condition of the operating permit is based solely on State or local law; and
    2. The affirmative defense is asserted and established as required by N.J.S.A. 26:2C-19.1 through 19.5.

11. In the event of a challenge to any part of this operating permit, all other parts of the permit shall continue to be valid. [N.J.A.C. 7:27-22.16(f)]

12. Each owner and each operator of any facility, source operation, or activity to which this permit applies is responsible for ensuring compliance with all requirements of N.J.A.C. 7:27-22. If the owner and operator are separate persons, or if there is more than one owner or operator, each owner and each operator is jointly and severally liable for any fees due under N.J.A.C. 7:27-22, and for any penalties for violation of N.J.A.C. 7:27-22. [N.J.A.C. 7:27-22.3]

13. The permittee 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 the Appendix to N.J.A.C. 7:27-22 or 7:27-17.9(a), unless emission of the air contaminant is authorized by this operating permit. [N.J.A.C. 7:27-22.3(c)]

14. Consistent with the provisions of N.J.A.C. 7:27-22.3(e), the permittee shall ensure that all requirements of this operating permit are met. In the event that there are multiple emission limitations, monitoring, recordkeeping, and/or reporting requirements for a given source operation, the facility must comply with all requirements, including the most stringent.

15. Consistent with the provisions of N.J.A.C. 7:27-22.3(s), Except as otherwise provided in this subchapter, the submittal of any information or application by a permittee including, but not limited to, an application or notice for any change to the operating permit, including any administrative amendment, any minor or significant modification, renewal, a notice of a seven-day notice change, a notice of past or anticipated noncompliance, does not stay any operating permit condition, nor relieve a permittee from the obligation to obtain other necessary permits and to comply with all applicable Federal, State, and local requirements.

16. Applicable requirements derived from an existing or terminated consent decree with EPA will not be changed without advance consultation by the Department with EPA. N.J.A.C. 7:27-22.3(uu).

17. Unless specifically exempted from permitting, temporary mobile equipment for short-term activities may be periodically used at major facilities, on site for up to 90 days if the requirements listed below, (a) through (h) are satisfied.

a. The permittee will ensure that the temporary mobile equipment will not be installed permanently or used permanently on site.

b. The permittee will ensure that the temporary mobile equipment will not circumvent any State or Federal rules and regulations, even for a short period of time, and the subject equipment will comply with all applicable performance standards.

c. The permittee cannot use temporary mobile equipment unless the owner or operator of the subject equipment has obtained and maintains an approved Air Pollution Control Permit, issued pursuant to N.J.A.C. 7:27-8 or 22, prior to bringing the temporary mobile equipment to operate at the major facility.

d. The permittee is responsible for ensuring the temporary mobile equipment's compliance with the terms and conditions specified in its approved Air Pollution Control Permit when the temporary mobile equipment operates on the property of the permittee.

e. The permittee will ensure that temporary mobile equipment utilized for short-term activities will not operate on site for more than a total of 90 days during any calendar year.

f. The permittee will keep on site a list of temporary mobile equipment being used at the facility with the start date, end date, and record of the emissions from all such equipment (amount and type of each air contaminant) no later than 30 days after the temporary mobile equipment completed its job in accordance with N.J.A.C. 7:27-22.19(i)3.

g. Emissions from the temporary mobile equipment must be included in the emission netting analysis required of the permittee by N.J.A.C. 7:27-18.7. This information is maintained on site by the permittee and provided to the Department upon request in accordance with existing applicable requirements in the FC Section of its Title V permit.

h. Where short-term activities (employing temporary mobile equipment) will reoccur on at least an annual basis, the permittee is required to include such activities (and the associated equipment) within one year of the first use, in its Title V permit through the appropriate modification procedures.

18. Consistent with the provisions of N.J.A.C. 7:27-22.9(c), the permittee shall use monitoring of operating parameters, where required by the compliance plan, as a surrogate for direct emissions testing or monitoring, to demonstrate compliance with applicable requirements.

19. The permittee is responsible for submitting timely and administratively complete operating permit applications:

Administrative Amendments [N.J.A.C. 7:27-22.20(c)];
Seven-Day Notice changes [N.J.A.C. 7:27-22.22(e)];
Minor Modifications [N.J.A.C. 7:27-22.23(e)];
Significant Modifications [N.J.A.C. 7:27-22.24(e)]; and
Renewals [N.J.A.C. 7:27-22.30(b).

20. The operating permit renewal application consists of a RADIUS application and the application attachment available at the Department's website https://dep.nj.gov/boss/applications-and-forms/ (Attachment to the RADIUS Operating Permit Renewal Application). Both the RADIUS application and the Application Attachment, along with any other supporting documents must be submitted using the Department's Portal at: https://njdeponline.com/. The application is considered timely if it is received at least 12 months before the expiration date of the operating permit. To be deemed administratively complete, the renewal application shall include all information required by the application form for the renewal and the information required pursuant to N.J.A.C. 7:27-22.30(d). However, consistent with N.J.A.C. 7:27-22.30(c), the permittee is encouraged to submit the renewal application at least 15 months prior to expiration of the operating permit, so that any deficiencies can be identified and addressed to ensure that

the application is administratively complete by the renewal deadline. Only renewal applications which are timely and administratively complete are eligible for an application shield.

21. For all source emissions testing performed at the facility, the phrase "worst case conditions without creating an unsafe condition" used in the enclosed compliance plan is consistent with EPA's National Stack Testing Guidance, dated April 27, 2009, where all source emission testing performed at the facility shall be under the representative (normal) conditions that:

    i. Represent the range of combined process and control measure conditions under which the facility expects to operate (regardless of the frequency of the conditions); and

    ii. Are likely to most challenge the emissions control measures of the facility with regard to meeting the applicable emission standards, but without creating an unsafe condition.

22. Consistent with EPA's National Stack Testing Guidance and Technical Manual 1004, a facility may not stop an ongoing stack test because it would have failed the test unless the facility also ceases operation of the equipment in question to correct the issue. Stopping an ongoing stack test in these instances will be considered credible evidence of emissions non-compliance.

23. Each permittee shall maintain records of all source emissions testing or monitoring performed at the facility and required by the operating permit in accordance with N.J.A.C. 7:27-22.19. Records shall be maintained, for at least five years from the date of each sample, measurement, or report. Each permittee shall maintain all other records required by this operating permit for a period of five years from the date each record is made. At a minimum, source emission testing or monitoring records shall contain the information specified at N.J.A.C. 7:27-22.19(b). [N.J.A.C. 7:27-22.19(a) and N.J.A.C. 7:27-22.19(b)]

24. A Permittee may seek the approval of the Department for a delay in testing required pursuant to this permit by submitting a written request to the appropriate Regional Enforcement Office in accordance with N.J.A.C. 7:27-22.18(k). A Permittee may also seek advanced approval for a longer period for submittal of a source emissions test report required by the permit by submitting a request to the Department's Regional Enforcement Office in accordance with N.J.A.C. 7:27-22.19. [N.J.A.C. 7:27-22.18(k) and N.J.A.C. 7:27-22.19]

25. Any emission limit values in an operating permit shall be interpreted to be followed by inherent trailing zeros (0) in the decimal portion of the limit to three significant figures (e.g. a printed limit of "1 lb/hr" means a limit of "1.00 lb/hr") except for concentration limits less than 10 parts per million (ppm). For such concentration limits, the emission limit shall be interpreted to be followed by inherent trailing zeros (0) in the decimal portion of the limit to two significant figures (e.g. a printed limit of "1 ppm" means a limit of "1.0 ppm").

26. Testing every five years shall be defined as no later than the end of the 60th month after the first required and each subsequent stack test was completed for the new or modified source.

Section C

Facility Name: LINDEN GENERATING STATION
Program Interest Number: 41810
Permit Activity Number: BOP190002

STATE-ONLY APPLICABLE REQUIREMENTS

N.J.A.C. 7:27-22.16(b)5 requires the Department to specifically designate as not being federally enforceable any permit conditions based only on applicable State requirements. The applicable State requirements to which this provision applies are listed in the table titled "State-Only Applicable Requirements."

STATE-ONLY APPLICABLE REQUIREMENTS

The following applicable requirements are not federally enforceable:

SECTION	SUBJECT ITEM	ITEM #	REF. #
B	---	1	---
B	---	10	---
D	FC	---	3
D	FC	---	9
D	GR102	---	ALL
D	GR103	---	ALL

Section D

Facility Name: LINDEN GENERATING STATION
Program Interest Number: 41810
Permit Activity Number: BOP190002

FACILITY SPECIFIC REQUIREMENTS AND INVENTORIES

FACILITY SPECIFIC REQUIREMENTS PAGE INDEX

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Reason for Application

Permit Being Modified

Permit Class: BOP **Number:** 240001

Description of Modifications: PSEG Fossil LLC is submitting the enclosed application to renew the Title V Operating Permit for the Linden Generating Station. The Title V permit expires on September 8, 2020.

In accordance with N.J.A.C. 7:27-22.4(e), PSEG Fossil is submitting this renewal application at least 15 months prior to permit expiration, so that any deficiencies identified in the application can be addressed and the enclosed renewal application can qualify for an "application shield" pursuant to N.J.A.C. 7:27-22.7(b). The current Title V permit (BOP190003) was approved on December 30, 2019.

Please see the application package for more details.
This is a Permit Renewal and includes the following changes:

1.Facility Wide requirements (FC) section of the compliance plan was updated.
2.Section B, General Provisions and Authority of the Permit Text was updated.
3.The renewal stack testing requirement for emission units U4 and U43 was changed to conduct renewal stack testing 5 years from the date of the last stack test.
4.The emissions from insignificant combustion sources were reduced, to reflect the current inventory of these insignificant sources at the facility.
5.Sulfur dioxide and sulfuric acid emissions were reduced due to removal of the references to use low sulfur distillate oil as the facility no longer uses this oil and instead uses ULSD only.
6.The outdated N.J.A.C.7:27-19 RACT requirements that are no longer applicable were removed.
7.HAPs above the new lower revised reporting thresholds in N.J.A.C. 7:27-17 were included.
8.The requirements for Dry Low Nox Combustors were transferred from OS Summary for U4 combustion turbines to their individual control devices, CD6, CD8, CD11 and CD13.
8.The requirements for Water Injection were transferred from OS Summary for U4 combustion turbines to their individual control devices, CD7, CD9, CD12 and CD14
10.Methane and nitrous oxide emissions that were above the 0.05 pound per hour reporting thresholds at N.J.A.C 7:27-8 were added to all emission units.
11.It was clarified that Formaldehyde emissions are already included in the VOC emission limits.
12.Continuous emission monitoring system (CEMS), Summary Requirements were updated by adding language which states that Emission Measurement Section (EMS) approval is required for a change in units being modified.
13.N.J.A.C. 7:27-19 monitoring requirements were updated to clarify that in addition to using CEMS, combustion adjustment can be performed by periodic emission monitoring OR if not using a certified CEMS, monitoring shall be performed in accordance with the specific procedures for combustion adjustment monitoring specified in NJDEP Technical Manual 1005.
14.The stack testing requirement for VOC emissions from the turbine was removed as per the Department's "Testing and Monitoring Requirements for Existing Stationary Turbines" for natural gas. The facility has complied with this requirement.
15.Acid Rain Permit pursuant to 40 CFR 72 will be renewed.
16.MACT ZZZZ requirements were added to U40, the black Start Emergency generator.

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Reason for Application

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **FC**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	General Provisions: The permittee shall comply with all applicable provisions of N.J.A.C. 7:27-1. [N.J.A.C. 7:27- 1]	None.	None.	None.
2	Control and Prohibition of Open Burning: The permittee is prohibited from open burning of rubbish, garbage, trade waste, buildings, structures, leaves, other plant life and salvage. Open burning of infested plant life or dangerous material may only be performed with a permit from the Department. [N.J.A.C. 7:27- 2]	None.	None.	Obtain an approved permit: Prior to occurrence of event (prior to open burning). [N.J.A.C. 7:27- 2]
3	Prohibition of Air Pollution: The permittee shall not emit into the outdoor atmosphere substances in quantities that result in air pollution as defined at N.J.A.C. 7:27-5.1. [N.J.A.C. 7:27- 5]	None.	None.	None.
4	Prevention and Control of Air Pollution Control Emergencies: Any person responsible for the operation of a source of air contamination set forth in Table 1 of N.J.A.C. 7:27-12 is required to prepare a written Standby Plan, consistent with good industrial practice and safe operating procedures, and be prepared for reducing the emission of air contaminants during periods of an air pollution alert, warning, or emergency. Any person who operates a source not set forth in Table 1 of N.J.A.C. 7:27-12 is not required to prepare such a plan unless requested by the Department in writing. [N.J.A.C. 7:27-12]	None.	None.	Comply with the requirement: Upon occurrence of event. Upon proclamation by the Governor of an air pollution alert, warning, or emergency, the permittee shall put the Standby Plan into effect. In addition, the permittee shall ensure that all of the applicable emission reduction objectives of N.J.A.C. 7:27-12.4, Table I, II, and III are complied with whenever there is an air pollution alert, warning, or emergency. [N.J.A.C. 7:27-12]
5	Emission Offset Rules: The permittee shall comply with all applicable provisions of Emission Offset Rules. [N.J.A.C. 7:27-18]	None.	None.	None.
6	Emission Statements: The permittee shall comply with all the applicable provisions of N.J.A.C. 7:27-21. [N.J.A.C. 7:27-21]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Compliance Certification: The permittee shall submit an annual Compliance Certification for each applicable requirement, pursuant to N.J.A.C. 7:27-22.19(f). [N.J.A.C. 7:27-22]	None.	None.	Submit an Annual Compliance Certification: Annually to the Department and to EPA within 60 days after the end of each calendar year during which this permit was in effect. The Compliance Certification shall be certified pursuant to N.J.A.C. 7:27-1.39 by the responsible official and submitted electronically through the NJDEP online web portal. The certification should be printed for submission to EPA. The NJDEP online web portal can be accessed at: http://www.state.nj.us/dep/online/. The Compliance Certification forms and instructions for submitting to EPA are available by selecting Documents and Forms and then Periodic Compliance Certification. [N.J.A.C. 7:27-22]
8	Prevention of Air Pollution from Consumer Products and Architectural Coatings: The permittee shall comply with all applicable provisions of N.J.A.C. 7:27-24 and [N.J.A.C. 7:27-23]	None.	None.	None.
9	Any operation of equipment which causes off-property effects, including odors, or which might reasonably result in citizen's complaints shall be reported to the Department to the extent required by the Air Pollution Control Act, N.J.S.A. 26:2C-19(e). [N.J.S.A. 26: 2C-19(e)]	Other: Observation of plant operations. [N.J.S.A. 26: 2C-19(e)].	Other: Maintain a copy of all information submitted to the Department. [N.J.S.A. 26: 2C-19(e)].	Notify by phone: Upon occurrence of event. A person who causes a release of air contaminants in a quantity or concentration which poses a potential threat to public health, welfare or the environment or which might reasonably result in citizen complaints shall immediately notify the Department. Such notification shall be made by calling the Environmental Action Hotline at (877) 927-6337. [N.J.S.A. 26: 2C-19(e)]
10	Prevention of Significant Deterioration: The permittee shall comply with all applicable provisions of Prevention of Significant Deterioration (PSD). [40 CFR 52.21]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	The permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Asbestos, Subpart M. [40 CFR 61]	Other: Comply with 40 CFR 61.145 and 61.150 when conducting any renovation or demolition activities at the facility. [40 CFR 61].	Other: Comply with 40 CFR 61.153 when conducting any renovation or demolition activities at the facility. [40 CFR 61].	Comply with the requirement: Upon occurrence of event. The permittee shall comply with 40 CFR 61.153 when conducting any renovation or demolition activities at the facility. [40 CFR 61]
12	Protection of Stratospheric Ozone:1) If the permittee manufactures, transforms, destroys, imports, or exports a Class I or Class II substance, the permittee is subject to all the requirements as specified at 40 CFR 82, Subpart A; 2) If the permittee performs a service on motor "fleet" vehicles when this service involves an ozone depleting substance refrigerant (or regulated substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified at 40 CFR 82, Subpart B. 3) The permittee shall comply with the standards for labeling of products containing or manufactured with ozone depleting substances pursuant to 40 CFR 82, Subpart E. 4). The permittee shall comply with the standards for recycling and emission reductions of Class I and Class II refrigerants or a regulated substitute substance during the service, maintenance, repair, and disposal of appliances pursuant to 40 CFR 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B. 5) The permittee shall be allowed to switch from any ozone depleting substance to any alternative that is listed in the Significant New Alternative Program (SNAP) promulgated pursuant to 40 CFR 82, Subpart G. [40 CFR 82]	Other: Comply with 40 CFR 82 Subparts A, B, E, F, and G. [40 CFR 82].	Other: Comply with 40 CFR 82 Subparts A, B, E, F, and G. [40 CFR 82].	Comply with the requirement: Upon occurrence of event. The permittee shall comply with 40 CFR 82 Subparts A, B, E, F, and G. [40 CFR 82]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	Deviation Reports: The permittee shall submit to the Department a certified six-month Deviation Report relating to testing and monitoring required by the operating permit. [N.J.A.C. 7:27-22.19(d)3], [N.J.A.C.7:27-22.19(e)], and [N.J.A.C. 7:27-22.19(c)]	None.	Other: The permittee shall maintain deviation reports for a period of five years from the date each report is submitted to the Department. [N.J.A.C.7:27-22.19(a)] and [N.J.A.C. 7:27-22.19(e)].	Submit a report: As per the approved schedule. The six-month deviation reports for the period from January 1 through June 30 shall be submitted by July 30 of the same calendar year, and for the period from July 1 through December 31, shall be submitted by January 30 of the following calendar year. The annual compliance certification required by N.J.A.C.7:27-22.19(f) may also be considered as your six-month Deviation Report for the period from July 1 – December 31, if submitted by January 30 of the following calendar year. The reports shall be certified pursuant to N.J.A.C. 7:27-1.39 by the responsible official and submitted electronically through the NJDEP online web portal. The NJDEP online web portal can be accessed at: http://www.state.nj.us/dep/online/ . The Compliance Certification forms are available by selecting Documents and Forms and then Periodic Compliance Certification. [N.J.A.C. 7:27-22]
14	Used Oil Combustion: No person shall combust used oil except as authorized pursuant to N.J.A.C. 7:27-20. [N.J.A.C. 7:27-20.2]	None.	None.	Comply with the requirement: Prior to occurrence of event (prior to burning used oil) either register with the Department pursuant to N.J.A.C. 7:27-20.3 or obtain a permit issued by the Department pursuant to N.J.A.C. 7:27-8 or 7:27-22, whichever is applicable. [N.J.A.C. 7:27-20.2(d)]
15	Prevention of Accidental Releases: Facilities producing, processing, handling or storing a chemical, listed in the tables of 40 CFR Part 68.130, and present in a process in a quantity greater than the listed Threshold Quantity, shall comply with all applicable provisions of 40 CFR 68. [40 CFR 68]	Other: Comply with 40 CFR 68. [40 CFR 68].	Other: Comply with 40 CFR 68. [40 CFR 68].	Other (provide description): Other. Comply with 40 CFR 68 as described in the Applicable Requirement. [40 CFR 68]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	The Department and its authorized representatives shall have the right to enter and inspect any activity subject to N.J.A.C. 7:27-22, or portion thereof, pursuant to N.J.A.C. 7:27-1.31. [N.J.A.C. 7:27-22.16(g)9]	None.	None.	None.
17	The permittee shall pay fees to the Department pursuant to N.J.A.C. 7:27. [N.J.A.C. 7:27-22.16(g)10]	None.	None.	None.
18	Each permittee shall meet all requirements of the approved source emissions testing and monitoring protocol during the term of the operating permit. Whenever the permittee makes a replacement, modification, change or repair of a certified CEMS or COMS that may significantly affect the ability of the system to accurately measure or record data, the permittee must recertify the CEMS or COMS in accordance with Section V.B. and Appendix E of Technical Manual 1005. The permittee is responsible for any downtime associated with the replacement, modification, change or repair of the CEMS or COMS. [N.J.A.C. 7:27-22.18(j)]	None.	None.	Comply with the requirement: Upon occurrence of event. The permittee is responsible for contacting the Emission Measurement Section to determine the need for recertification and/or to initiate the recertification process. [N.J.A.C. 7:27-22.18(j)]
19	Each process monitor must be operated at all times when the associated process equipment is operating except during service outage time not to exceed 24 hours per calendar quarter. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee must keep a service log to document any outage. [N.J.A.C. 7:27-22.16(o)]	None.
20	Continuous recording for process monitors must be at a sufficient frequency and resolution to be able to document compliance or non-compliance in accordance with Technical Manual 1005 for CEMS (TM1005(B)(3). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	If an operating permit has expired, the conditions of the operating permit, including the requirements for stack testing, remain enforceable until the operating permit is reissued. [N.J.A.C. 7:27-22.30(j)] and [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS1 Insignificant Liquid Storage Tanks or Vessels**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery , manual logging of % Sulfur per delivery in a permanently bound log book or readily accessible computer memories. [N.J.A.C. 7:27-22.16(o)]	None.
2	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27- 9.2(b)]	None.	None.	None.
3	The vapor pressure of the liquid, excluding the vapor pressure of water, shall be less than 0.02 psia at the liquid's actual temperature or at 70 degrees F, whichever is higher. [N.J.A.C. 7:27-22.1]	None.	None.	None.
4	The tank's potential to emit each TXS and each HAP shall not exceed the de minimis reporting thresholds as specified in N.J.A.C. 7:27-22, Appendix. [N.J.A.C. 7:27-22.1]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS2 Commercial Fuel Burning Equipment < 1MMBtu/hr**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Smoke emissions from stationary internal combustion engines no greater than 20% opacity, exclusive of visible, condensed water vapor, for more than 10 consecutive seconds. Opacity <= 20 %. [N.J.A.C. 7:27-3.5]	Other: Periodic visual inspections.[N.J.A.C. 7:27- 3.5].	None.	None.
2	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery , manual logging of % Sulfur per delivery in a permanently bound log book or readily accessible computer memories. [N.J.A.C. 7:27-22.16(o)]	None.
3	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B [N.J.A.C. 7:27- 9.2(b)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS5 Surface/Parts cleaners (<6 sq.ft; capacity <100 gallons)**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Solvent must contain less than 5% by weight of any combination of methylene chloride, perchloroethylene, 1,1,1-trichloroethane, carbon tetrachloride and chloroform. [40 CFR 63.460(a)]	Other: Monitored by formulation data. At the time of filling, confirm by MSDS or bill of lading[40 CFR 63.460(a)].	Recordkeeping by invoices / bills of lading at the approved frequency (per filling, showing materials being delivered). [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS15 Distillate Fuel Oil Tanks (<0.02 psia vapor pressure)**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [N.J.A.C. 7:27- 9.2(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery , manual logging of % Sulfur per delivery in a permanently bound log book or readily accessible computer memories. [N.J.A.C. 7:27-22.16(o)]	None.
2	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B [N.J.A.C. 7:27- 9.2(a)]	None.	None.	None.
3	The operating temperature shall not be greater than 350 degrees F. [N.J.A.C. 7:27-22.1]	None.	None.	None.
4	The vapor pressure of the liquid, excluding the vapor pressure of water, shall be less than 0.02 psia at the liquid's actual temperature or at 70 degrees F, whichever is higher. [N.J.A.C. 7:27-22.1]	None.	None.	None.
5	The tank shall have no visible emissions, exclusive of water vapor, to the outdoor atmosphere. [N.J.A.C. 7:27-22.1]	None.	None.	None.
6	The tank shall not emit any air contaminants which may cause an odor detectable outside the property boundaries of the facility. [N.J.A.C. 7:27-22.1]	None.	None.	None.
7	The tank's potential to emit each TXS and each HAP shall not exceed the de minimis reporting thresholds as specified in N.J.A.C. 7:27-22, Appendix. [N.J.A.C. 7:27-22.1]	None.	None.	None.
8	The percentage by weight of all HAPs collectively in the raw material stored in the tank shall be less than 1.0 percent. [N.J.A.C. 7:27-22.1]	None.	None.	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	The owner or operator shall have 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) specifies the contents of the tank; (2) affirms that the tank meets the applicable requirements of Ref. #2 to #8 above and (3) attests that the tank is in compliance with all other applicable State or federal air pollution requirements. [N.J.A.C. 7:27-22.1]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **GR101 Advanced Gas Path and OpFlex Advantage Peak Operation (OS101 through OS104)**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	This Group (GR101) contains conditions for operating scenario OS101 for Module 1101, operating scenario OS102 for Module 1201, operating scenario OS103 for Module 2101, and operating scenario OS104 for Module 2201. The conditions of this group (GR101) are applicable to each of the operating scenarios OS101, OS102, OS103, and OS104 for Modules 1101, 1201, 2101 and 2202, respectively, each combusting natural gas and operating with OpFlex Peak Advantage software. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	The emission limits for all pollutants are as given in GR1 (U43 Unit1 & 2-Modules 1101, 1201, 2101, 2201), when combusting natural gas without duct firing (OS1 through OS4) and GR2 (U43 Unit1 & 2-Modules 1101, 1201, 2101, 2201), when combusting natural gas with duct firing (OS5 through OS8). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Hours of Operation <= 300 hr/yr per module, while operating OpFlex Peak Advantage software. [N.J.A.C. 7:27-22.16(a)]	Hours of Operation: Monitored by hour/time monitor continuously, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system continuously or data acquisition system (DAS)/electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.
4	The combustion turbines may only operate OpFlex Advantage Peak software when firing natural gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	VOC (Total): Commencing with the beginning of the first full calendar year after final permit approval (BOP130003) for GE Advanced Gas Path upgrades at Units No.1 and 2 (emission unit U43) and continuing for ten (10) calendar years thereafter, PSEG Fossil shall calculate and maintain a record of the actual annual VOC emissions in tons per year from Units No.1 and 2 (emission unit U43) in each calendar year period. N.J.A.C. 7:27-22.16(a), & [40 CFR 52.21(r)(6)(iii)]	VOC (Total): Monitored by calculations annually, based on one calendar year. Actual VOC emissions (tons per year)= [MMBtu of natural gas burned per year in Unit No. 1 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] + [MMBtu of natural gas burned per year in Unit No. 2 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] MMBtu heat inputs shall be determined using the method prescribed in 40 CFR 75 Appendix D. Lbs/MMBtu emission factor shall be computed based on the most recent stack test results per module for Unit No. 1 and Unit No. 2, respectively firing natural gas. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. PSEG Fossil shall calculate and maintain a record of the actual annual VOC emissions in tons per year from Unit No.1 and Unit No. 2 in each calendar year period. N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)(iii)]	Submit a report: As per the approved schedule as follows: If the future actual annual emissions of VOC, in tons per year, exceed the baseline actual emissions of 22.21 tons per year, by the applicable PSD de minimis level for that regulated NSR pollutant (i.e., 40 tons per year for ozone), and if such emissions differ from the preconstruction projections documented and maintained in the application for BOP130003, PSEG Fossil must submit a report as required under 40 CFR 52.21(r)(6)(v) to EPA Region 2 and to the applicable NJDEP Regional Enforcement Office within 60 days after the end of such year. N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	NOx (Total): Commencing with the beginning of the first full calendar year after final permit approval (BOP130003) for GE Advanced Gas Path upgrades at Units No.1 and 2 (emission unit U43) and continuing for ten (10) calendar years thereafter, PSEG Fossil shall calculate and maintain a record of the actual annual NOx (Total) emissions in tons per year from Units No.1 and 2 (emission unit U43) in each calendar year period. N.J.A.C. 7:27-22.16(a), & [40 CFR 52.21(r)(6)(iii)]	NOx (Total): Monitored by calculations annually, based on one calendar year. Actual NOx emissions (tons per year) = [MMBtu of natural gas burned per year in Unit No. 1 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] + [MMBtu of natural gas burned per year in Unit No. 2 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] MMBtu heat inputs shall be determined using the method prescribed in 40 CFR 75 Appendix D. Lbs/MMBtu emission factor shall be computed based on the most recent stack test results per module for Unit No. 1 and Unit No. 2, respectively firing natural gas Cumulative annual mass emissions derived from CEMs data may be used in lieu of the above described method, provided the Department reviews and approves the calculation procedure. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. PSEG Fossil shall calculate and maintain a record of the actual annual NOx emissions in tons per year from Unit No.1 and Unit No. 2 in each calendar year period. N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)(iii)]	Submit a report: As per the approved schedule as follows: If the future actual annual emissions of NOx in tons per year, exceed the baseline actual emissions of 130.52 tons per year, by the applicable PSD de minimis level for that regulated NSR pollutant (i.e., 40 tons per year for NOx), and if such emissions differ from the preconstruction projections documented and maintained in the application for BOP130003, PSEG Fossil must submit a report as required under 40 CFR 52.21(r)(6)(v) to EPA Region 2 and to the applicable NJDEP Regional Enforcement Office within 60 days after the end of such year. N.J.A.C. 7:27-22.16(o) &. [N.J.A.C. 7:27-22.16(o)]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	CO: Commencing with the beginning of the first full calendar year after final permit approval (BOP130003) for GE Advanced Gas Path upgrades at Units No.1 and 2 (emission unit U43) and continuing for ten (10) calendar years thereafter, PSEG Fossil shall calculate and maintain a record of the actual annual CO emissions in tons per year from Units No.1 and 2 (emission unit U43) in each calendar year period. N.J.A.C. 7:27-22.16(a), & [40 CFR 52.21(r)(6)(iii)]	CO: Monitored by calculations annually, based on one calendar year. Actual CO emissions (tons per year)= [MMBtu of natural gas burned per year in Unit No. 1 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] + [MMBtu of natural gas burned per year in Unit No. 2 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] MMBtu heat inputs shall be determined using the method prescribed in 40 CFR 75 Appendix D. Lbs/MMBtu emission factor shall be computed based on the most recent stack test results per module for Unit No. 1 and Unit No. 2, respectively firing natural gas Cumulative annual mass emissions derived from CEMs data may be used in lieu of the above described method, provided the Department reviews and approves the calculation procedure. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. PSEG Fossil shall calculate and maintain a record of the actual annual CO emissions in tons per year from Unit No.1 and Unit No. 2 in each calendar year period. N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)(iii)]	Submit a report: As per the approved schedule as follows: If the future actual annual emissions of CO in tons per year, exceed the baseline actual emissions of 35.35 tons per year, by the applicable PSD de minimis level for that regulated NSR pollutant (i.e., 100 tons per year for CO), and if such emissions differ from the preconstruction projections documented and maintained in the application for BOP130003, PSEG Fossil must submit a report as required under 40 CFR 52.21(r)(6)(v) to EPA Region 2 and to the applicable NJDEP Regional Enforcement Office within 60 days after the end of such year. N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	SO2: Commencing with the beginning of the first full calendar year after final permit approval (BOP130003) for GE Advanced Gas Path upgrades at Units No.1 and 2 (emission unit U43) and continuing for ten (10) calendar years thereafter, PSEG Fossil shall calculate and maintain a record of the actual annual SO2 emissions in tons per year from Units No.1 and 2 (emission unit U43) in each calendar year period. N.J.A.C. 7:27-22.16(a), & [40 CFR 52.21(r)(6)(iii)]	SO2: Monitored by calculations annually, based on one calendar year. Actual SO2 emissions (tons per year)= [MMBtu of natural gas burned per year in Unit No. 1 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] + [MMBtu of natural gas burned per year in Unit No. 2 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] MMBtu heat inputs shall be determined using the method prescribed in 40 CFR 75 Appendix D. Lbs/MMBtu emission factor shall be computed based on the most recent stack test results per module for Unit No. 1 and Unit No. 2, respectively firing natural gas. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. PSEG Fossil shall calculate and maintain a record of the actual annual SO2 emissions in tons per year from Unit No.1 and Unit No. 2 in each calendar year period. N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)(iii)]	Submit a report: As per the approved schedule as follows: If the future actual annual emissions of SO2, in tons per year, exceed the baseline actual emissions of 11.66 tons per year, by the applicable PSD de minimis level for that regulated NSR pollutant (i.e., 40 tons per year for SO2), and if such emissions differ from the preconstruction projections documented and maintained in the application for BOP130003, PSEG Fossil must submit a report as required under 40 CFR 52.21(r)(6)(v) to EPA Region 2 and to the applicable Regional Enforcement Office of NJDEP within 60 days after the end of such year. N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)]
9	TSP: Commencing with the beginning of the first full calendar year after final permit approval (BOP130002) at Unit No. 2 (emission unit U1, Modules 2101 and 2201) and continuing for ten (10) calendar years thereafter, PSEG Fossil shall calculate and maintain a record of the actual annual TSP(PM) emissions in tons per year from Units No.1 and 2 (emission unit U43) in each calendar year period. N.J.A.C. 7:27-22.16(a), & [40 CFR 52.21(r)(6)(iii)]	TSP: Monitored by calculations annually, based on one calendar year Actual TSP emissions (tons per year)= [MMBtu of natural gas burned per year in Unit No. 1 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] + [MMBtu of natural gas burned per year in Unit No. 2 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] MMBtu heat inputs shall be determined using the method prescribed in 40 CFR 75 Appendix D. Lbs/MMBtu emission factor shall be computed based on the most recent stack test results per module for Unit No. 1 and Unit No. 2, respectively firing natural gas. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. PSEG Fossil shall calculate and maintain a record of the actual annual TSP(PM) emissions in tons per year from Unit No.1 and Unit No. 2 in each calendar year period. N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)(iii)]	Submit a report: As per the approved schedule as follows: If the future actual annual emissions of TSP (PM) in tons per year, exceed the baseline actual emissions of 10.28 tons per year, by the applicable PSD de minimis level for that regulated NSR pollutant (i.e., 25 tons per year for PM), and if such emissions differ from the preconstruction projections documented and maintained in the application for BOP130003, PSEG Fossil must submit a report as required under 40 CFR 52.21(r)(6)(v) to EPA Region 2 and to the applicable Regional Enforcement Office of NJDEP within 60 days after the end of such year. N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	PM-10 (Total): Commencing with the beginning of the first full calendar year after final permit approval (BOP130003) for GE Advanced Gas Path upgrades at Units No.1 and 2 (emission unit U43) and continuing for ten (10) calendar years thereafter, PSEG Fossil shall calculate and maintain a record of the actual annual PM10 (Total) emissions in tons per year from Units No.1 and 2 (emission unit U43) in each calendar year period. N.J.A.C. 7:27-22.16(a), & [40 CFR 52.21(r)(6)(iii)]	PM-10 (Total): Monitored by calculations annually, based on one calendar year. Actual PM10 (Total) emissions (tons per year)= [MMBtu of natural gas burned per year in Unit No. 1 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] + [MMBtu of natural gas burned per year in Unit No. 2 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] MMBtu heat inputs shall be determined using the method prescribed in 40 CFR 75 Appendix D. Lbs/MMBtu emission factor shall be computed based on the most recent stack test results per module for Unit No. 1 and Unit No. 2, respectively firing natural gas. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. PSEG Fossil shall calculate and maintain a record of the actual annual PM10 (Total) emissions in tons per year from Unit No.1 and Unit No. 2 in each calendar year period. N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)(iii)]	Submit a report: As per the approved schedule as follows: If the future actual annual emissions of PM10, in tons per year, exceed the baseline actual emissions of 27.88 tons per year, by the applicable PSD de minimis level for that regulated NSR pollutant (i.e., 15 tons per year for PM10), and if such emissions differ from the preconstruction projections documented and maintained in the application for BOP130003, PSEG Fossil must submit a report as required under 40 CFR 52.21(r)(6)(v) to EPA Region 2 and to the applicable Regional Enforcement Office of NJDEP within 60 days after the end of such year. N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)]
11	PM-2.5 (Total): Commencing with the beginning of the first full calendar year after final permit approval (BOP130003) for GE Advanced Gas Path upgrades at Units No.1 and 2 (emission unit U43) and continuing for ten (10) calendar years thereafter, PSEG Fossil shall calculate and maintain a record of the actual annual PM2.5 (Total) emissions in tons per year from Units No.1 and 2 (emission unit U43) in each calendar year period. N.J.A.C. 7:27-22.16(a), & [40 CFR 52.21(r)(6)(iii)]	PM-2.5 (Total): Monitored by calculations annually, based on one calendar year. Actual PM-2.5 (Total) emissions (tons per year)= [MMBtu of natural gas burned per year in Unit No. 1 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] + [MMBtu of natural gas burned per year in Unit No. 2 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] MMBtu heat inputs shall be determined using the method prescribed in 40 CFR 75 Appendix D. Lbs/MMBtu emission factor shall be computed based on the most recent PM10 stack test results per module for Unit No. 1 and Unit No. 2, respectively firing natural gas. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. PSEG Fossil shall calculate and maintain a record of the actual annual PM2.5 (Total) emissions in tons per year from Unit No.1 and Unit No. 2 in each calendar year period. N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)(iii)]	Submit a report: As per the approved schedule as follows: If the future actual annual emissions of PM2.5, in tons per year, exceed the baseline actual emissions of 27.88 tons per year, by the applicable PSD de minimis level for that regulated NSR pollutant (i.e., 10 tons per year for PM2.5) , and if such emissions differ from the preconstruction projections documented and maintained in the application for BOP130003, PSEG Fossil must submit a report as required under 40 CFR 52.21(r)(6)(v) to EPA Region 2 and to the applicable Regional Enforcement Office of NJDEP within 60 days after the end of such year. N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	CO2e: Commencing with the beginning of the first full calendar year after final permit approval (BOP130003) for GE Advanced Gas Path upgrades at Units No. 1 and 2 (emission unit U43) and continuing for ten (10) calendar years thereafter, PSEG Fossil shall calculate and maintain a record of the actual annual CO2e emissions in tons per year from Units No.1 and 2 (emission unit U43) in each calendar year period. N.J.A.C. 7:27-22.16(a), & [40 CFR 52.21(r)(6)(iii)]	Monitored by calculations annually, based on one calendar year. Actual CO2e emissions (tons per year-tpy)= CO2 (tpy)+CO2e from Methane(tpy)+CO2e from N2O (tpy) CO2 (tpy)= [MMBtu of natural gas burned per year in Unit No. 1 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] + [MMBtu of natural gas burned per year in Unit No. 2 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] CO2e from Methane (tpy) = [[MMBtu of natural gas burned per year Unit No. 1 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] + [MMBtu of natural gas burned per year in Unit No. 2 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs]]* GWP of Methane CO2e from N2O (tpy) = ([MMBtu of natural gas burned per year Unit No. 1 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] + [MMBtu of natural gas burned per year Unit No. 2 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs])* GWP of N2O MMBtu heat inputs shall be determined using the method prescribed in 40 CFR 75 Appendix D. Global Warming Potential (GWP) shall be from 40CFR98 Table A-1. Lbs/MMBtu emission factor (EF) for CO2 , CH4 and N2O shall be calculated from the default emission factors in 40 CFR 98 Tables C-1 and C-2 as follows: EF(Lbs/MMBtu) = EF from 40 CFR 98 (kg/MMBtu)/2.205 (lbs/kg). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system annually. PSEG Fossil shall calculate and maintain a record of the actual annual CO2e emissions in tons per year from Unit No.1 and Unit No. 2 in each calendar year period. N.J.A.C. 7:27-22.16(o) &. [N.J.A.C. 7:27-22.16(o)]	Submit a report: As per the approved schedule as follows: If the future actual annual emissions of CO2e, in tons per year, exceed the baseline actual emissions of 2,297,067 tons per year, by the applicable PSD de minimis level for that regulated NSR pollutant (i.e., 75,000 tons per year for CO2e), and if such emissions differ from the preconstruction projections documented and maintained in the application for BOP130003, PSEG Fossil must submit a report as required under 40 CFR 52.21(r)(6)(v) to EPA Region 2 and to the applicable Regional Enforcement Office of NJDEP within 60 days after the end of such year. [N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	Lead compounds: Commencing with the beginning of the first full calendar year after final permit approval (BOP130003) for GE Advanced Gas Path upgrades at Units No.1 and 2 (emission unit U43) and continuing for ten (10) calendar years thereafter, PSEG Fossil shall calculate and maintain a record of the actual annual lead emissions in tons per year from Units No.1 and 2 (emission unit U43) in each calendar year period. N.J.A.C. 7:27-22.16(a), & [40 CFR 52.21(r)(6)(iii)]	Lead compounds: Monitored by calculations annually, based on one calendar year. Actual Lead emissions (tons per year)= [MMBtu of natural gas burned per year in all Unit No. 1 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] + [MMBtu of natural gas burned per year in all Unit No. 2 two turbines per operating scenario * lbs/MMBtu emission factor * 1.0 ton/2000lbs] MMBtu heat inputs shall be determined using the methhod prescribed in 40 CFR 75 Appendix D. The emission factor shall be 0.0005 lb/MMscf per module for Unit No. 1 and Unit No. 2, respectively, firing natural gas. Actual higher heating value of the fuel per calendar year shall be used to convert the emission factor in units of lb/MMscf to lb/MMBtu. [N.J.A.C. 7:27-22.16(o)]	Lead compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. PSEG Fossil shall calculate and maintain a record of the actual annual Lead emissions in tons per year from Unit No.1 and Unit No. 2 in each calendar year period. N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)(iii)]	Submit a report: As per the approved schedule as follows: If the future actual annual emissions of Lead, in tons per year, exceed the baseline actual emissions of 0.0000791 tons per year, by the applicable PSD de minimis level for that regulated NSR pollutant (i.e., 0.6 tons per year for lead), and if such emissions differ from the preconstruction projections documented and maintained in the application for BOP130003, PSEG Fossil must submit a report as required under 40 CFR 52.21(r)(6)(v) to EPA Region 2 and to the applicable Regional Enforcement Office of NJDEP within 60 days after the end of such year. N.J.A.C. 7:27-22.16(o) &. [40 CFR 52.21(r)(6)]

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Subject Item: **GR102 RGGI**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owners and operators of each CO2 budget source and each CO2 budget unit at the source shall, as of the CO2 allowance transfer deadline, hold CO2 allowances in the sources's compliance account, available for compliance deductions under N.J.A.C. 7:27C-6.9, as follows: 1) In the case of an initial control period, the number of CO2 allowances held shall be no less than the amount equivalent to the total CO2 emissions for the initial control period from all CO2 budget units at the source; 2) In the case of a control period, the number of CO2 allowances held shall be no less than the total CO2 emissions for the control period from all CO2 budget units at the source, less the CO2 allowances deducted to meet the requirements of N.J.A.C 7:27C-1.4(g) with respect to the previous two interim control periods, as determined in accordance with N.J.A.C 7:27C-6 and 7:27C-8; 3) In the case of an interim control period, the number of CO2 allowances held shall be no less than the total CO2 emissions for the interim control period from all CO2 budget units at the source, multiplied by 0.50, as determined in accordance with NJAC 7:27C-6 and 7:27C-8. [N.J.A.C. 7:27C-1.4(f)]	Monitored by calculations at the approved frequency. The Department shall use the emission measurements recorded and reported in accordance with N.J.A.C. 7:27C-8 to determine the unit's compliance. Total tons for a control period shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with N.J.A.C. 7:27C-8. The Department will round total CO2 emissions to the nearest whole ton, so that any fraction of a ton equal to or greater than 0.50 tons is deemed to equal one ton and any fraction of a ton less than 0.50 tons is deemed to equal zero tons. [N.J.A.C. 7:27C- 1.4(d)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Maintain records of all CO2 emissions from each CO2 budget unit. [N.J.A.C. 7:27C- 8]	Submit a report: On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). The CO2 authorized account representative shall submit quarterly reports to the Bureau of Energy and Sustainability, for each calendar quarter beginning with: i. For a unit that commences commercial operation before December 17, 2018, the calendar quarter beginning January 1, 2020; or ii. For a unit commencing commercial operation on or after December 17, 2018, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under N.J.A.C. 7:27C-8.1(d). If the calendar quarter so determined is the third or fourth quarter of 2019, reporting shall commence in the quarter beginning January 1, 2020. Quarterly reports shall be submitted in the manner specified in Subpart H of 40 CFR 75 and 40 CFR 75.64. Quarterly reports shall be submitted for each CO2 budget unit (or group of units using a common stack), and shall include all of the data and information required in Subpart G of 40 CFR 75, except for opacity, heat input, NOx and SO2 provisions. The CO2 authorized account representative shall submit, to the Bureau of Energy and Sustainability, a compliance certification in support of each quarterly report, pursuant to N.J.A.C. 7:27C-8.5(c)3. [N.J.A.C. 7:27C-8.5(c)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	CO2 Allowance Tracking System (COATS): CO2 allowances shall be held in, deducted from, or transferred among COATS accounts in accordance with N.J.A.C 7:27C-5, 6, and 7. [N.J.A.C 7:27C-1.4(i)] A CO2 allowance shall not be deducted, in order to comply with N.J.A.C. 7:27-1.4(f), for a control period that ends prior to the year for which the CO2 allowance was allocated. [N.J.A.C 7:27C-1.4(j)] A CO2 offset allowance shall not be deducted, in order to comply with N.J.A.C. 7:27-1.4(f), beyond the applicable percent limitations at N.J.A.C. 7:27C6.9(a)3. [N.J.A.C. 7:27C- 1.4(k)]	Other: The Permittee shall review any transactions recorded in its COATS account for accuracy.[N.J.A.C. 7:27-22.16(o)].	None.	Submit a report: As per the approved schedule Submit compliance certification reports pursuant to N.J.A.C 7:27C-4.1(a) and CO2 allowance transfer requests, as necessary, pursuant to N.J.A.C 7:27C-7.1(a), to the Bureau of Energy and Sustainability If information in COATS account is found to be inaccurate, notify the Bureau of Energy and Sustainability. [N.J.A.C. 7:27-22.16(o)]
3	CO2: The owners and operators of a CO2 budget source that has excess emissions in any control period or in the initial control period, or has excess interim emissions in any interim control period, shall: 1. Forfeit the CO2 allowances required for deduction under N.J.A.C. 7:27C-6.9(e); 2. Not use any CO2 offset allowances to cover any part of such excess emissions; and 3. Pay any fine, penalty, or assessment or comply with any other remedy imposed under N.J.A.C. 7:27C-6.9(f). [N.J.A.C. 7:27C- 1.4(n)]	Other: The Permittee shall review any transactions recorded in its COATS account for accuracy.[N.J.A.C. 7:27-22.16(o)].	None.	Submit notification: Upon occurrence of event. If information in COATS account is found to be inaccurate, notify the Bureau of Energy and Sustainability. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	CO2: Account certificate of representation and supporting documents. [N.J.A.C. 7:27C-1.4(o)1]	None.	CO2: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owners and operators of the CO2 budget source and each CO2 budget unit at the source shall keep on site at the source the account certificate of representation for the CO2 authorized account representative for the CO2 budget source and each CO2 budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with N.J.A.C. 7:27C-2.4. These documents shall be retained on site at the source until such documents are superseded by a newly submitted account certificate of representation changing the CO2 authorized account representative. [N.J.A.C. 7:27C- 1.4(o)1]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	CO2: Copies of Documents & Reports [N.J.A.C. 7:27C- 1.4(o)]	None.	CO2: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event The owners and operators of the CO2 budget source and each CO2 budget unit at the source shall keep on site at the source each of the following documents for a period of 10 years from the date the document is created. The Department may at any time prior to the end of the 10-year period extend the 10-year period in writing, if it determines that retention of the documents beyond the 10-year period is necessary to determine compliance with the requirements of N.J.A.C. 7:27C: - All emissions monitoring information, in accordance with N.J.A.C. 7:27C-8 and 40 CFR 75.57; - Copies of all reports, compliance certifications, and other submissions, and all records made or required under the CO2 Budget Trading Program; and - Copies of all documents used to complete an application for a new or modified operating permit that incorporates the requirements of the CO2 Budget Trading Program and any other submission under the CO2 Budget Trading Program or to demonstrate compliance with the requirements of the CO2 Budget Trading Program. [N.J.A.C 7:27C-1.4(o)2, [N.J.A.C 7:27C-1.4(o)3 and. [N.J.A.C. 7:27C-1.4(o)4]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	CO2: Compliance Certification Report: [N.J.A.C. 7:27C-1.4(p)] and [N.J.A.C. 7:27C- 4.1]	None.	None.	Submit a report: As per the approved schedule. For each control period, including the initial control period, in which a CO2 budget source is subject to the CO2 requirements of N.J.A.C 7:27C-1.4, the CO2 authorized account representative shall submit, to the Bureau of Energy and Sustainability, by March 1 following each relevant three-calendar-year control period, the compliance certification report that includes the following elements listed in N.J.A.C. 7:27C-4.1(b): 1. Identification of the CO2 budget source and each CO2 budget unit at the source; 2. At the CO2 authorized account representative's option, the serial numbers of the CO2 allowances that are to be deducted from the CO2 budget source's compliance account under N.J.A.C. 7:27C-6.9 for the control period, including the serial numbers of any CO2 offset allowances that are to be deducted subject to the limitations of N.J.A.C. 7:27C-6.9(a)3; and 3. The compliance certification: In the compliance certification report, the CO2 authorized account representative shall certify whether the CO2 budget source and each CO2 budget unit at the source for which the compliance certification is submitted was operated, during the calendar years covered by the report, in compliance with the requirements of the CO2 Budget Trading Program, based on reasonable inquiry of those persons with primary responsibility for operating the CO2 budget source and the CO2 budget units at the source in compliance with the CO2 Budget Trading Program. [N.J.A.C. 7:27C-4.1(b)] and. [N.J.A.C. 7:27C- 4.1]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	CO2: The owner or operator of each CO2 budget unit shall install all monitoring systems necessary to monitor CO2 mass emissions in accordance with 40 CFR Part 75, except for equation G-1 of Appendix G, which shall not be used to determine CO2 emissions. Compliance with this paragraph may require systems to monitor CO2 concentration, stack gas flow rate, O2 concentration, heat input, and fuel flow rate [N.J.A.C. 7:27C- 8.1(c)1]	Other: The owner or operator of a CO2 budget unit shall meet the monitoring system certification and other requirements of N.J.A.C. 7:27C-8.1(c) and shall quality-assure the data from the monitoring systems in accordance with the schedule prescribed in N.J.A.C. 7:27C-8.1(d)(1) for a CO2 budget unit that commenced commercial operation before December 17, 2018, N.J.A.C. 7:27C-8.1(d)(2) for a CO2 budget unit that commenced commercial operation on or after December 17, 2018 or N.J.A.C. 7:27C-8.1(d)(3) for a CO2 budget unit for which construction of a new stack or flue installation is completed after the applicable deadlines at N.J.A.C. 7:27C-8.1(d)(1) and (2). [N.J.A.C 7:27C-8.1(c)2], [N.J.A.C 7:27C-8.1(c)3] and [N.J.A.C 7:27C-8.1(d)] The owner or operator shall ensure, for each continuous emissions monitoring system (including the automated data acquisition and handling system) the successful completion of all of the initial certification testing required under 40 CFR 75.20 by the applicable deadlines listed above. In addition, whenever the owner or operator installs a monitoring system in order to meet the requirements of N.J.A.C. 7:27C-8 in a location where no such monitoring system was previously installed, initial certification in accordance with 40 CFR 75.20 is required.[N.J.A.C. 7:27C- 8.2(d)].	CO2: Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. The owner or operator of a CO2 budget unit shall record the data from the monitoring systems in accordance with the schedule prescribed in N.J.A.C. 7:27C-8.1(d)(1) for a CO2 budget unit that commenced commercial operation before December 17, 2018, N.J.A.C. 7:27C-8.1(d)(2) for a CO2 budget unit that commenced commercial operation on or after December 17, 2018 or N.J.A.C. 7:27C-8.1(d)(3) for a CO2 budget unit for which construction of a new stack or flue installation is completed after the applicable deadlines at N.J.A.C. 7:27C-8.1(d)(1) and (2). [N.J.A.C 7:27C-8.1(c)3] and. [N.J.A.C. 7:27C-8.1(d)]	Submit a report: As per the approved schedule. The owner or operator of a CO2 budget unit shall report the data from the monitoring systems in accordance with the schedule prescribed in N.J.A.C. 7:27C-8.1(d)(1) for a CO2 budget unit that commenced commercial operation before December 17, 2018, N.J.A.C. 7:27C-8.1(d)(2) for a CO2 budget unit that commenced commercial operation on or after December 17, 2018 or N.J.A.C. 7:27C-8.1(d)(3) for a CO2 budget unit for which construction of a new stack or flue installation is completed after the applicable deadlines at N.J.A.C. 7:27C-8.1(d)(1) and (2). [N.J.A.C 7:27C-8.1(c)3] and. [N.J.A.C. 7:27C- 8.1(d)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	CO2: The owner or operator of a CO2 budget unit that commenced commercial operation before December 17, 2018 and did not certify all monitoring systems required under N.J.A.C. 7:27C8.1(c) by June 11, 2019; or a CO2 budget unit that commenced commercial operation on or after December 17, 2018 and did not certify all monitoring systems required under N.J.A.C. 7:27C8.1(c) by June 11, 2019 or the earlier of 90 unit operating days or 180 calendar days after the date on which the unit commenced commercial operation; or a CO2 budget unit for which construction of a new stack or flue installation is completed after the above deadline and did not certify all monitoring systems required under N.J.A.C. 7:27C8.1(c) by the earlier of 90 unit operating days or 180 calendar days after the date on which emissions first exited the new stack or flue and entered the atmosphere; shall, for each such monitoring system, determine, record and report, the necessary data as specified. [N.J.A.C. 7:27C- 8.1(e)]	Other: The owner or operator shall, for each monitoring system, determine maximum (or, as appropriate, minimum) potential values for CO2 concentration, CO2 emissions rate, stack gas moisture content, fuel flow rate, heat input, and any other parameter required to determine CO2 mass emissions in accordance with 40 CFR 75.31(b)(2) or (c)(3) and section 2.4 of Appendix D of 40 CFR Part 75, as applicable.[N.J.A.C. 7:27C-8.1(e)].	CO2: Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. The owner or operator shall, for each monitoring system, record maximum (or, as appropriate, minimum) potential values for CO2 concentration, CO2 emissions rate, stack gas moisture content, fuel flow rate, heat input, and any other parameter required to determine CO2 mass emissions in accordance with 40 CFR 75.31(b)(2) or (c)(3) and section 2.4 of Appendix D of 40 CFR Part 75, as applicable. [N.J.A.C. 7:27C- 8.1(e)]	Submit a report: As per the approved schedule. The owner or operator shall, for each monitoring system, report maximum (or, as appropriate, minimum) potential values for CO2 concentration, CO2 emissions rate, stack gas moisture content, fuel flow rate, heat input, and any other parameter required to determine CO2 mass emissions in accordance with 40 CFR 75.31(b)(2) or (c)(3) and section 2.4 of Appendix D of 40 CFR Part 75, as applicable. [N.J.A.C. 7:27C-8.1(e)]
9	No owner or operator of a CO2 budget unit shall use any alternative monitoring system, alternative reference method, or any other alternative for the required continuous emissions monitoring system without having obtained prior written approval in accordance with N.J.A.C. 7:27C-8.6. [N.J.A.C. 7:27C-8.1(j)1]	None.	None.	Obtain approval: Upon occurrence of event. The CO2 authorized account representative of a CO2 budget unit may submit a petition to the Administrator under 40 CFR 75.66, and to the Department requesting approval to apply an alternative to any requirement of 40 CFR Part 75 or to a requirement concerning any additional CEMS required under the common stack provisions of 40 CFR 75.72 or a CO2 concentration CEMS used under 40 CFR 75.71(a)(2). [N.J.A.C. 7:27C-8.6]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	CO2: The owner or operator of a CO2 budget unit shall comply with the initial certification and recertification procedures set forth at N.J.A.C. 7:27C-8.2(d) through (r) for a continuous emissions monitoring system and an excepted monitoring system under Appendix D of 40 CFR Part 75, except as provided in N.J.A.C. 7:27C-8.2(a). The owner or operator of a CO2 budget unit that qualifies to use the low mass emissions excepted monitoring methodology in 40 CFR 75.19 or that qualifies to use an alternative monitoring system under Subpart E of 40 CFR Part 75 shall comply with the initial certification and recertification procedures set forth at N.J.A.C. 7:27C-8.2(q) or (r), respectively. [N.J.A.C. 7:27C- 8.2(c)]	None.	None.	Submit notification: Upon occurrence of event. The CO2 authorized account representative shall submit to the Department, EPA Region 2 office and the Administrator a written notice of the dates of certification in accordance with N.J.A.C. 7:27C-8.4. [N.J.A.C. 7:27C-8.2(h)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	CO2: . The owner or operator shall recertify a monitoring system in accordance in 40 CFR 75.20(b) whenever the owner or operator makes the replacement, modification, or changes described in N.J.A.C. 7:27C-8.2(f). [N.J.A.C. 7:27C-8.2(f)] A provisionally certified monitor may be used under the CO2 Budget Trading Program for a period not to exceed 120 days after the Department receives the complete certification application for the monitoring system, or component thereof, under N.J.A.C.7:27C-8.2(h). [N.J.A.C. 7:27C-8.2(j)] Whenever any monitoring system fails to meet the quality assurance and quality control requirements or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable procedures in Subpart D or Appendix C, of 40 CFR Part 75. [N.J.A.C. 7:27C- 8.3(a)]	Other: The owner or operator of a CO2 budget unit shall submit a monitoring plan in the manner prescribed in 40 CFR 75.62, either electronically or hardcopy. If electronic, no later than 21 days prior to the initial certification tests; at the time of each certification or recertification application submission; and (prior to or concurrent with) the submittal of the electronic quarterly report for a reporting quarter where an update of the electronic monitoring plan information is required. If hardcopy, no later than 21 days prior to the initial certification test; with any certification or recertification application, if a hardcopy monitoring plan change is associated with the certification or recertification event; and within 30 days of any other event with which a hardcopy monitoring plan change is associated, pursuant to 40 CFR 75.53(b). Electronic submittal of all monitoring plan information, including hardcopy portions, is permissible provided that a paper copy of the hardcopy portions can be furnished upon request.[N.J.A.C. 7:27C- 8.5(b)].	None.	Submit documentation of compliance: As per the approved schedule. The CO2 authorized account representative shall submit a certification or recertification application to the Department for each monitoring system within 45 days after completing all CO2 monitoring system initial certification or recertification tests required under N.J.A.C. 7:27C-8.2 including the information required under 40 CFR 75.53(g) and (h) and 75.63. . [N.J.A.C. 7:27C- 8.2(e)]
12	The CO2 authorized account representative of a CO2 budget unit that co-fires eligible biomass as a compliance mechanism under N.J.A.C. 7:27C shall report the information as provided in N.J.A.C. 7:27C-8.7 to the Department for each calendar quarter. [N.J.A.C. 7:27C- 8.7(a)]	None.	None.	Submit a report: Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27C-8.7]

New Jersey Department of Environmental Protection
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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	Net electric output and net thermal output. "An Output Monitoring Plan is only required for a CO2 budget unit that does not participate in a wholesale electricity market administered by PJM." [N.J.A.C. 7:27C-8.8(a)]	Other: The output monitoring plan shall include: - a diagram of the electrical and/or steam system, - a description of each output monitoring system, - a detailed description of all quality assurance and quality control activities, and - documentation supporting any output value(s) to be used as a missing data value should there be periods of invalid output data. [N.J.A.C. 7:27C-8.8(g)] Ongoing quality assurance and quality control (QA/QC) activities shall be performed in order to maintain the output system in accordance with N.J.A.C. 7:27C-8.8(i).[N.J.A.C. 7:27C- 8.8].	Other: The owner or operator of a CO2 budget source shall retain data used to monitor, determine, or calculate net electrical output and net thermal output for 10 years.[N.J.A.C. 7:27C-8.8(j)].	Submit a report: Annually. The CO2 authorized account representative shall submit annual output reports electronically to the Department, pursuant to N.J.A.C. 7:27C-8.8(b) through (j), by the March 1 following the immediately preceding calendar year. These reports shall also be submitted, upon Department request, in hardcopy. The annual output report shall include unit level megawatt-hours and all useful steam output; and shall include a certification from the CO2 authorized account representative pursuant to N.J.A.C. 7:27C-8.8(k). [N.J.A.C. 7:27C-8.8(a)] and. [N.J.A.C. 7:27C- 8.8(k)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **GR103 NJAC 7:27F PACT Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	CO2 <= 1,700 lb/MW-hr. From June 1, 2024 thru May 31, 2027, any existing electrical generating unit (EGU) with a nameplate capacity equal to or greater than 25 MWe shall emit no more than 1,700 pounds of CO2 per MWh gross energy output. Compliance is demonstrated when the CO2 emission rate, determined using procedures in 40 CFR 60.5540(a)(1) through (7), for the initial and each subsequent 12-operating-month rolling average compliance period, is less than or equal to the applicable CO2 emission standard (above). [N.J.A.C. 7:27F-2.5(d)1]	CO2: Monitored by calculations each month during operation, based on a 12-operating-month rolling average. The owner or operator shall use the compliance demonstration procedures at 40 CFR 60.5540 that pertain to EGUs with an output -based emission limit for CO2 by using the procedures in 40 CFR 60.5540(a)(1) through (7) to calculate the CO2 mass emissions. The hourly CO2 mass emissions must be calculated from the fuel use, according to 60.5535(c)(1) through (3) and the generating load must be measured in accordance with 60.5535(d). The calculations shall only be performed for "valid operating hours", as defined in 40 CFR 60.5540(a)(1). [N.J.A.C. 7:27F-2.6(c)]	CO2: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The owner or operator must comply with the recordkeeping requirements at 40 CFR 60.5560 that pertain to EGUs with an output -based emission limit for CO2 by maintaining records of the information used to demonstrate compliance as specified in 40 CFR 60.7(b) and (f) and 40 CFR 60.5560, in a form suitable and readily available for expeditious review. [N.J.A.C. 7:27F-2.6(d)]	None.
2	CO2 <= 1,300 lb/MW-hr. From June 1, 2027 thru May 31, 2035, any existing electrical generating unit (EGU) with a nameplate capacity equal to or greater than 25 MWe shall emit no more than 1,300 pounds of CO2 per MWh gross energy output. Compliance is demonstrated when the CO2 emission rate, determined using procedures in 40 CFR 60.5540(a)(1) through (7), for the initial and each subsequent 12-operating-month rolling average compliance period, is less than or equal to the applicable CO2 emission standard (above). [N.J.A.C. 7:27F-2.5(d)2]	CO2: Monitored by calculations each month during operation, based on a 12-operating-month rolling average. The owner or operator shall use the compliance demonstration procedures at 40 CFR 60.5540 that pertain to EGUs with an output -based emission limit for CO2 by using the procedures in 40 CFR 60.5540(a)(1) through (7) to calculate the CO2 mass emissions. The hourly CO2 mass emissions must be calculated from the fuel use, according to 60.5535(c)(1) through (3) and the generating load must be measured in accordance with 60.5535(d). The calculations shall only be performed for "valid operating hours", as defined in 40 CFR 60.5540(a)(1). [N.J.A.C. 7:27F-2.6(c)]	CO2: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The owner or operator must comply with the recordkeeping requirements at 40 CFR 60.5560 that pertain to EGUs with an output -based emission limit for CO2 by maintaining records of the information used to demonstrate compliance as specified in 40 CFR 60.7(b) and (f) and 40 CFR 60.5560, in a form suitable and readily available for expeditious review. [N.J.A.C. 7:27F-2.6(d)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	CO2 <= 1,000 lb/MW-hr. On and after June 1, 2035, any existing electrical generating unit (EGU) with a nameplate capacity equal to or greater than 25 MWe shall emit no more than 1,000 pounds of CO2 per MWh gross energy output. Compliance is demonstrated when the CO2 emission rate, determined using procedures in 40 CFR 60.5540(a)(1) through (7), for the initial and each subsequent 12-operating-month rolling average compliance period, is less than or equal to the applicable CO2 emission standard (above). [N.J.A.C. 7:27F-2.5(d)3]	CO2: Monitored by calculations each month during operation, based on a 12-operating-month rolling average. The owner or operator shall use the compliance demonstration procedures at 40 CFR 60.5540 that pertain to EGUs with an output -based emission limit for CO2 by using the procedures in 40 CFR 60.5540(a)(1) through (7) to calculate the CO2 mass emissions. The hourly CO2 mass emissions must be calculated from the fuel use, according to 60.5535(c)(1) through (3) and the generating load must be measured in accordance with 60.5535(d). The calculations shall only be performed for "valid operating hours", as defined in 40 CFR 60.5540(a)(1). [N.J.A.C. 7:27F-2.6(c)]	CO2: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The owner or operator must comply with the recordkeeping requirements at 40 CFR 60.5560 that pertain to EGUs with an output -based emission limit for CO2 by maintaining records of the information used to demonstrate compliance as specified in 40 CFR 60.7(b) and (f) and 40 CFR 60.5560, in a form suitable and readily available for expeditious review. [N.J.A.C. 7:27F-2.6(d)]	None.
4	CO2 Mass Emissions: The owner or operator shall use the compliance demonstration procedures at 40 CFR 60.5540 that pertain to EGUs with an output -based emission limit for CO2. Calculations of the hourly CO2 (tons/h) and EGU operating times must be done in accordance with 40 CFR 60.5535(c)(1) through (3). Pursuant to 40 CFR 60.5535(c), the owner or operator must implement the applicable procedures in appendix D to 40 CFR 75 to determine hourly EGU heat input rates (MMBtu/h), based on hourly measurements of fuel flow rate and periodic determinations of the gross calorific value (GCV) of each fuel combusted. For each measured hourly heat input rate, use equation G-4 in appendix G to 40 CFR 75 to calculate the hourly CO2 mass emission rate (tons/h). [N.J.A.C. 7:27F-2.6(c)]	Monitored by fuel flow/firing rate instrument continuously, based on a 1 hour block average. [N.J.A.C. 7:27F-2.6(c)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The owner or operator must comply with the recordkeeping requirements at 40 CFR 60.5560 that pertain to EGUs with an output - based emission limit for CO2. The hourly CO2 (tons/h) and EGU (or stack) operating times used to calculate CO2 mass emissions are required to be recorded under 40 CFR 75.57(e). These data must be used to calculate the hourly CO2 mass emissions. [N.J.A.C. 7:27F-2.6(d)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	Electrical Output: The owner or operator shall use the compliance demonstration procedures at 40 CFR 60.5540 that pertain to EGUs with an output - based emission limit for CO2. Pursuant to 40 CFR 60.5535 (d), the owner or operator must install, calibrate, maintain, and operate a sufficient number of watt meters to continuously measure and record the hourly gross electric output. These measurements must be performed using 0.2 class electricity metering instrumentation and calibration procedures as specified under ANSI Standards No. C12.20. [N.J.A.C. 7:27F-2.6(c)]	Other: Monitored by watt meter continuously (See Applicable Requirement). Consistent with 40 CFR 60.5535(e) and 40 CFR 60.5520, if two or more affected EGUs serve a common electric generator, the owner or operator must apportion the combined hourly gross or net energy output to the individual affected EGUs according to the fraction of the total steam load contributed by each EGU. Alternatively, if the EGUs are identical, the owner or operator may apportion the combined hourly gross or net electric load to the individual EGUs according to the fraction of the total heat input contributed by each EGU[N.J.A.C. 7:27F-2.6(c)].	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The owner or operator must comply with the recordkeeping requirements at 40 CFR 60.5560 that pertain to EGUs with an output -based emission limit for CO2 by maintaining records of the information used to demonstrate compliance as specified in 40 CFR 60.7(b) and (f) and 40 CFR 60.5560, in a form suitable and readily available for expeditious review. [N.J.A.C. 7:27F-2.6(d)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Emergency Use of Fuel Oil During Natural Gas Curtailment: If a fossil fuel-fired electric generating unit, subject to 7:27F-2, temporarily combusts fuel oil or other liquid fuel in place of natural gas, pursuant to a natural gas curtailment period (as defined at N.J.A.C. 7:27F-2.1), the CO2 emissions from that EGU during the period of curtailment shall not be included in the 12-operating-month rolling average used to determine compliance with the emission limits of this subchapter, so long as: 1. The EGU's permit authorizes fuel switching pursuant to N.J.A.C. 7:27-19; 2. The owner or operator is not practicably able to obtain a sufficient supply of natural gas; 3. The owner or operator's inability to obtain natural gas is due to circumstances beyond the control of the owner or operator, such as a natural gas curtailment; 4. The EGU 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 5. The owner or operator keeps records of curtailment periods and incorporates such records into the reports submitted to the Department as required by N.J.A.C. 7:27-22. [N.J.A.C. 7:27F-2.3(c)]	Other: Monitor the date and time of any natural gas curtailment during which the EGU combusted fuel oil or other liquid fuel in place of natural gas.[N.J.A.C. 7:27F-2.3(c)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. For each period of natural gas curtailment, during which the EGU combusted fuel oil or other liquid fuel in place of natural gas, the permittee shall maintain a record that includes the following information: i. Information sufficient to identify each EGU for which the owner or operator claims an exemption under this section, including a brief description of the source (for example, "dry-bottom coal-fired boiler serving an electric generating unit"), its location, its permit number, any other identifying numbers, and any other information necessary to distinguish it from other equipment also owned or operated by the owner or operator of the electric generating unit; ii. A statement that the owner or operator is not practicably able to obtain a sufficient supply of natural gas; iii. The date and time at which the owner or operator first became practicably unable to obtain natural gas; and iv. A description of the circumstances causing the owner's or operator's inability to obtain natural gas. [N.J.A.C. 7:27F-2.3(c)5]	None.

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Facility Specific Requirements

Emission Unit: **U4 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)**

Subject Item: **CD6 Dry Low NOx Combustors on Unit No. 7, CD8 Dry Low Nox Combustors on Unit No. 8, CD11 Dry Low NOx Combustors on Unit No. 5, CD13 Dry Low NOx Combustors on Unit No. 6**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Dry Low NOx will be used during natural gas firing [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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Facility Specific Requirements

Emission Unit: **U4 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)**

Subject Item: **CD7 Water Injection on Unit No. 7, CD9 Water Injection on Unit No. 8, CD12 Water Injection on Unit No. 5, CD14 Water Injection on Unit No. 6**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Water-to-Fuel Ratio >= 0.7 vol/vol. [N.J.A.C. 7:27-22.16(e)]	Water-to-Fuel Ratio: Monitored by water-to-fuel monitoring device continuously. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(e)]	Water-to-Fuel Ratio: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.
2	The permittee shall operate water injection during all periods that the turbine is firing ULSD except start-up, shutdown, fuel transfer, or operating mode transfer periods. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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Facility Specific Requirements

Emission Unit: **U4 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)**
Operating Scenario: **OS Summary**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR 60 Subpart A 40 CFR 60 Subpart GG 40 CFR 72 - Acid rain 40 CFR 97 - CSAPR and [40 CFR 52.21]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	STACK TESTING SUMMARY: The permittee shall conduct a stack test no later than every five years (see General Provisions) from last stack test for U4 turbines (E6, E7, E8, or E9) using an approved protocol to demonstrate compliance with NOx and CO emissions for natural gas firing as specified in the compliance plan for OS1, OS2, OS3, OS4, OS9, OS10, OS11, and OS12. Stack testing shall be conducted for NOx, CO, VOC, TSP, and PM-10 emissions as specified in the compliance plan for OS5, OS6, OS7 and OS8, within 180 calendar days after a turbine (E6, E7, E8, or E9) reaches 200 operating hours on ULSD with 0.0015% sulfur by weight or less in a given calendar year for the first time during the 5 year permit term. Each turbine shall be tested a maximum of once per term when firing oil. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]	Other: Monitoring as required under the applicable operating scenario(s). The permittee may propose to use CEMS data to satisfy the stack testing requirements, for NOx and CO with Emission Measurement Section (EMS) approval. In order for EMS to approve using CEMS data at the time of the stack test, the CEMS must be certified and be in compliance with all daily, quarterly and annual quality assurance requirements. The CEMS shall monitor and record emissions in units identical to those required by the applicable stack testing conditions of this permit. CEMS data, if allowed by this permit, shall be taken at the same worst case conditions as described in applicable requirement.[N.J.A.C. 7:27-22.16(o)].	Other: recordkeeping as required under the applicable operating scenario(s).[N.J.A.C. 7:27-22.16(o)].	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 no later than 12 months prior to the completion of the five year period since the last stack test for natural gas burning.The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: http://www.epa.gov/ttnchie1/ert. The stack test protocol for stack emission testing when a turbine combusts ULSD shall be submitted within 30 calendar days after a turbine reaches 200 operating hours on ULSD in a given calendar year. Within 30 days of protocol approval or no less than 60 days prior to the intended test date, whichever is later, the permittee must contact EMS at 609-530-4041 to schedule a mutually acceptable test date. A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. Test results shall report lbs/hour, lbs/MM Btu (HHV) and ppmvd @ 15% O2 except for TSP and PM-10. [N.J.A.C. 7:27-22.18(e)] and [N.J.A.C. 7:27-22.18(h)]. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	STACK TESTING SCHEDULE FOR EXPIRED PERMIT The permittee shall conduct a stack test no later than 42 months after the date of expiration of the operating permit using an approved protocol to demonstrate compliance with NOx and CO emissions for natural gas firing as specified in the compliance plan for OS1, OS2, OS3, OS4, OS9, OS10, OS11, and OS12. Stack testing shall be conducted for NOx, CO, VOC, TSP, and PM-10 emissions as specified in the compliance plan for OS5, OS6, OS7 and OS8, within 180 calendar days after a turbine (E6, E7, E8, or E9) reaches 200 operating hours on ULSD in a given calendar year for the first time during the 5 year permit term. Each turbine shall be tested a maximum of once per term when firing oil. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. The permittee may propose in the stack test protocol, to use CEMS data to satisfy the stack testing requirements for NOx and/or CO with EMS approval. In order for EMS to approve using CEMS data at the time of the stack test, the CEMS must be certified and be in compliance with all daily, quarterly and annual quality assurance requirements. The CEMS shall monitor and record emissions in units identical to those required by the applicable stack testing conditions of this permit. CEMS data, if allowed by this permit, shall be taken at the same worst case conditions as described above. [N.J.A.C. 7:27-22.16(a)]	Other: Monitoring as required under the applicable operating scenario(s). [NOTE TO PERMIT WRITER: always include this line item, in addition to the above Ref.# line item.] [N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. If an operating permit has expired, the permittee shall submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 no later than 30 months after the date of expiration of the operating permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: https://www.epa.gov/chief. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date. A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and [N.J.A.C. 7:27-22.18(h)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	CEMS/COMS REQUIREMENTS SUMMARY The Permittee shall operate CEMS according to the approved certification and in compliance with daily, quarterly, and annual quality assurance requirements. The CEMS shall include continuous monitoring of all necessary parameters (e.g. oxygen, moisture, temperature, flow rate) to allow the required corrections to be applied to demonstrate compliance with the emission limits. The Permittee shall request approval from the Department's Emission Measurement Section (EMS) to allow continued use of the existing CEMS when a change to the units of measurement is made to a permit limit. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain readily accessible records of the Permittee's written request to EMS, and the response from EMS . [N.J.A.C. 7:27-22.16(o)].	Comply with the requirement: Upon occurrence of event. Submit a written request to the EMS within 30 days from the date of the approved operating permit to determine whether a full CEMS recertification is required, whether the change can follow the procedures for data recording and storage equipment upgrades found in the Department's Technical Manual 1005 Section IV.B.3(f), or if continued use of the existing CEMS is allowed. [N.J.A.C. 7:27-22]
5	The owner or operator shall develop a QA/QC plan for all CEMS/COMS required by this permit prepared in accordance with the NJDEP Technical Manual 1005 posted on the BoSS webpage at https://dep.nj.gov/boss/ . [N.J.A.C. 7:27-22.16(a)]	Other: The QA/QC coordinator shall be responsible for reviewing the QA/QC plan on an annual basis.[N.J.A.C. 7:27-22.16(o)].	Other: Maintain readily accessible records of the QA/QC plan including QA date and quarterly reports.[N.J.A.C. 7:27-22.16(o)].	None.
6	Particulate Emissions <= 120 lb/hr (for Unit # 5 and # 6 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
7	Particulate Emissions <= 115.04 lb/hr (for Unit # 7 and # 8 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
8	VOC (Total) <= 50 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	Carbon monoxide <= 250 ppm @ 15%O2. [N.J.A.C. 7:27-16.9]	Carbon monoxide: Monitored by continuous emission monitoring system continuously See CEMS REQUIREMENTS SUMMARY at U4 OS Summary [N.J.A.C. 7:27-16.23(a)(1) &. [N.J.A.C. 7:27-22.16(o)]	Carbon monoxide: Recordkeeping by data acquisition system (DAS) / electronic data storage each quarter hour during operation See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
10	The owner or operator of each stationary combustion turbine (Units 5, 6, 7, and 8) that has a maximum gross heat input rate of 25 million BTU per hour or more and associated duct burner (if a duct burner is installed) shall ensure that the adjustment of the combustion process is carried out according to the manufacturer's recommended procedures and maintenance schedules as set forth at N.J.A.C. 7:27-19.16(g). [N.J.A.C 7:27-22.16(a)], [N.J.A.C.7:27-16.9(f)] and [N.J.A.C. 7:27-19.5(e)]	Other: Monitored by continuous emission monitoring (CEMS) or by periodic emission monitoring upon performing combustion adjustment. If not using a certified CEMS, monitoring shall be performed in accordance with the specific procedures for combustion adjustment monitoring specified in NJDEP Technical Manual 1005.[N.J.A.C. 7:27-19.16(g)].	Recordkeeping by data acquisition system (DAS) / electronic data storage upon performing combustion adjustment or by manual logging of parameter or storing data in a computer data system. The permittee shall record the following information for each adjustment in a log book or computer data system: 1. The date and times the adjustment began and ended; 2. The name, title, and affiliation of the person who performed the procedure and adjustment; 3. The type of procedure and maintenance performed; 4. The concentration of NOx, CO, and O2 measured before and after the adjustment was made; and 5. The type and amount of fuel use over the 12 months prior to the adjustment. The records shall be kept for a minimum of 5 years and be readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(h)]	None.
11	NOx (Total) <= 1.6 lb/MW-hr. NOx RACT emission limit applies during all periods of ULSD combustion. [N.J.A.C. 7:27-19.5(g), Table 7]. [N.J.A.C. 7:27-19.5(g)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-19.15(a)1]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	NOx (Total) <= 1 lb/MW-hr. NOx RACT emission limit applies during during all periods of natural gas combustion as well as during operation on high electric demand days, regardless of fuel combusted, unless combusting gaseous fuel is not possible due to gas curtailment. [N.J.A.C. 7:27-19.5(g)(2), Table 7] "High electric demand day"or "HEDD" means the day following a day in which the next day forecast load is estimated to have a peak value of 52,000 megawatts or higher as predicted by the PJM Interconnection 0815 update to its Mid Atlantic Region Hour Ending Integrated Forecast Load, available from PJM Interconnection at http://oasis.pjm.com/doc/projload.txt. [N.J.A.C. 7:27-19.5(g)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on ozone season (May 1 to September 30). See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-19]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage at the approved frequency. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
13	CO <= 156.5 tons/yr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by calculations annually, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(e)]	CO: Recordkeeping by manual logging of parameter annually once per calendar year. [N.J.A.C. 7:27-22.16(e)]	None.
14	NOx (Total) <= 360.8 tons/yr. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by calculations annually, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by manual logging of parameter annually once per calendar year. [N.J.A.C. 7:27-22.16(e)]	None.
15	SO2 < 5.1 tons/yr . [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations annually, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(e)]	SO2: Recordkeeping by manual logging of parameter annually once per calendar year. [N.J.A.C. 7:27-22.16(e)]	None.
16	TSP <= 41.3 tons/yr. [N.J.A.C. 7:27-22.16(e)]	TSP: Monitored by calculations annually, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(e)]	TSP: Recordkeeping by manual logging of parameter annually once per calendar year. [N.J.A.C. 7:27-22.16(e)]	None.
17	PM-10 (Total) <= 63.1 tons/yr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations annually, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(e)]	PM-10 (Total): Recordkeeping by manual logging of parameter annually once per calendar year. [N.J.A.C. 7:27-22.16(e)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	PM-2.5 (Total) <= 63.1 tons/yr. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations annually, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually once per calendar year. [N.J.A.C. 7:27-22.16(o)]	None.
19	VOC (Total) <= 10.9 tons/yr. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Monitored by calculations annually, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Recordkeeping by manual logging of parameter annually once per calendar year. [N.J.A.C. 7:27-22.16(e)]	None.
20	Dry Low NOx will be used during natural gas firing [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
21	The permittee shall submit an Excess Emission Monitoring Performance Report to the Department for review and approval [N.J.A.C. 7:27-22.16(e)]	None.	None.	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal to the Department for review and approval. [N.J.A.C. 7:27- 8.13(d)4]
22	The combined annual heat input limit for all units (Nos. 5,6,7 and 8) based on the preconstruction permit is 9,210,000 MMBtu (HHV)/any consecutive 365 days. Total annual heat input during any consecutive 365-day period shall be calculated by adding the total heat input for a given day to the total heat input during the preceding 364 day period. Daily MMBtu fuel use shall be calculated using the following formula: (MMBtu (HHV)/day = [(x Btu/scf) x (scf of natural gas consumed by Unit Nos. 5,6,7 and 8 at peak load per day)(1. 875) + (y Btu/gal) x (gallons oil consumed by Unit Nos. 5,6,7 and 8 per day)(2.117)]/1,000,000. x = heating value of natural gas, y = heating value of oil, as determined using the method prescribed in 40 CFR 75 Appendix D. where oil is: ULSD [N.J.A.C. 7:27-22.16(a)]	Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Annual Emission Statement: Annually. [N.J.A.C. 7:27-22.16(e)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
23	Linden Unit 5, 6, 7 and 8 are authorized to be equipped with Inlet Air Fogging system to introduce atomized demineralized water to cool and humidify the gas turbine inlet air. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
24	The total NOx emissions for Linden Units 7, and 8 , when Inlet Air Fogging Systems are used during the restricted period (May 1 to September 30), shall not exceed 63.7 tons/year. Compliance shall be demonstrated by continuous emission monitoring. [N.J.A.C. 7:27-22.16(e)]	Other: Cumulative mass emission derived from integrated continuous emission monitor data shall be used to demonstrate compliance with this emission limit.[N.J.A.C. 7:27-22.16(e)].	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.
25	The Inlet Air Fogging systems shall be only used on Linden Unit 5, 6, 7, and 8 during the restricted period between May 1 and September 30 of each calendar year, inclusive. [N.J.A.C. 7:27-22.16(e)]	Monitored by hour/time monitor upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Other: Record date, start time, and end time each time the inlet air fogging system is brought on-line and off-line.[N.J.A.C. 7:27-22.16(e)].	None.
26	The total natural gas and ULSD usage for Linden Unit 7 and 8, when Inlet Air Fogging Systems are used during each restricted period (May 1 to September 30), shall not exceed 2,140,000 MMBtu and 200,000 MMBtu, respectively. Heating value of natural gas and ULSD shall be determined using the method prescribed in 40 CFR 75 Appendix D. The permittee shall monitor fuel usage through a continuous fuel monitor to demonstrate compliance. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by fuel flow/firing rate instrument continuously.[N.J.A.C. 7:27-22.16(a)].	Recordkeeping by data acquisition system (DAS) / electronic data storage at no required frequency. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
27	The combined annual heat input limit for Unit Nos. 5,6,7 and 8 for natural gas use during periods of peak load, based on the preconstruction permit, is 192,000 MMBtu (HHV)/any consecutive 365 days. Total annual heat input during any consecutive 365-day period shall be calculated by adding the total heat input for a given day to the total heat input during the preceding 364 day period. Heating value of natural gas shall be determined using the method prescribed in 40 CFR 75 Appendix D. [N.J.A.C. 7:27-22.16(a)]	Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.
28	Maximum Gross Heat Input <= 1,150.4 MMBTU/hr (HHV) for each turbine 7 & 8. [N.J.A.C. 7:27-22.16(e)]	None.	Other: Keep records showing maximum heat input rate for the turbine[N.J.A.C. 7:27-22.16(o)].	None.
29	Maximum Gross Heat Input <= 1,200 MMBTU/hr (HHV) for each turbine 5 & 6. [N.J.A.C. 7:27-22.16(e)]	None.	Other: Keep records showing maximum heat input rate for the turbine[N.J.A.C. 7:27-22.16(o)].	None.
30	Fuel limited to natural gas and/or ultra low sulfur distillate oil (ULSD) with a sulfur content of 0.0015% by weight or less. [N.J.A.C. 7:27-22.16(o)]	Other: Monitored by fuel delivery records per delivery.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by invoices / bills of lading per delivery. [N.J.A.C. 7:27-22.16(a)]	None.
31	PJM Black Start Testing: Unit 7 and Unit 8 (Equipment ID E8 and E9, Emission Unit U4) are designated black start units for PJM as of April 1, 2015. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
32	During an actual blackout emergency requiring black start service, operation of the combustion turbines Unit 7 and Unit 8 (Equipment ID E8 and E9, Emission Unit U4) will be as directed by PJM or the transmission operator. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously, based on an instantaneous determination. Monitor the duration of each Black Start Emergency Operation. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Record the duration of each Black Start Emergency Operation to document compliance with this Applicable Requirement. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
33	Acetaldehyde <= 0.184 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from Natural Gas (MMBTU/yr) for all four turbines and Natural Gas Emission Factor (lb/MMBtu) Emission factors used are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
34	Acrolein <= 0.0295 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from Natural Gas (MMBTU/yr) for all four turbines and Natural Gas Emission Factor (lb/MMBtu) Emission factors used are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(e)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
35	Arsenic compounds <= 0.0239 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu). Emission factors used are from AP-42 5th Edition, , Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Arsenic compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
36	Benzene <= 0.12 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) and ULSD emission factor (lb/MMBtu), and Maximum Annual Heat Input from ULSD (MMBTU/yr) ; and Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) and Natural Gas Emission Factor (lb/MMBtu) for all four turbines. Emission factors used are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas Fired Turbines AND/OR Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
37	Beryllium Emissions <= 0.000674 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu). Emission factors used are from AP-42 5th Edition, , Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Beryllium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
38	Butadiene (1,3-) <= 0.0348 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) and ULSD emission factor (lb/MMBtu), and Maximum Annual Heat Input from ULSD (MMBTU/yr) ; and Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) and Natural Gas Emission Factor (lb/MMBtu) for all four turbines. Emission factors used are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas Fired Turbines AND/OR Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. Unless indicated as from EPRI. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter annually. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
39	Cadmium compounds <= 0.0104 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu). Emission factors used are from AP-42 5th Edition, , Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Cadmium compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
40	Chromium Emissions <= 0.0239 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu). Emission factors used are from AP-42 5th Edition, , Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Chromium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Chromium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
41	Dioxins/Furans (Total) <= 0.00000115 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) for all four turbines and Natural Gas Emission Factor (lb/MMBtu). Emission factor used is from from EPRI. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
42	Ethylbenzene <= 0.147 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from Natural Gas (MMBTU/yr) for all four turbines and Natural Gas Emission Factor (lb/MMBtu) Emission factors used are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
43	Formaldehyde <= 3.27 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) and ULSD emission factor (lb/MMBtu), and Maximum Annual Heat Input from ULSD (MMBTU/yr) ; and Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) and Natural Gas Emission Factor (lb/MMBtu) for all four turbines. Emission factors used are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas Fired Turbines AND/OR Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
44	Methane <= 10.2 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from Natural Gas (MMBTU/yr) for all four turbines and Natural Gas Emission Factor (lb/MMBtu) Emission factors used are from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
45	Manganese compounds <= 0.224 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu). Emission factors used are from California Air Toxics Emission Factor (CATEF, CARB 1996). [N.J.A.C. 7:27-22.16(a)]	Manganese compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Manganese compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
46	Mercury Emissions <= 0.00261 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu). Emission factors used are from AP-42 5th Edition, , Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
47	1-Methylnapthalene <= 0.00829 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) and ULSD emission factor (lb/MMBtu), and Maximum Annual Heat Input from ULSD (MMBTU/yr) ; and Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) and Natural Gas Emission Factor (lb/MMBtu) for all four turbines. Emission factors used are from EPRI. [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
48	Naphthalene <= 0.0761 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) and ULSD emission factor (lb/MMBtu), and Maximum Annual Heat Input from ULSD (MMBTU/yr) ; and Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) and Natural Gas Emission Factor (lb/MMBtu) for all four turbines. Emission factors used are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas Fired Turbines AND/OR Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
49	Nickel Emissions <= 0.01 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu). Emission factors used are from AP-42 5th Edition, , Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
50	Nitrous oxide <= 1 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from Natural Gas (MMBTU/yr) for all four turbines and Natural Gas Emission Factor (lb/MMBtu) Emission factors used are from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Nitrous oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nitrous oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
51	Pb <= 0.0305 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu). Emission factors used are from AP-42 5th Edition, , Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
52	Polynuclear aromatic hydrocarbons (PAHs) <= 0.087 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) and ULSD emission factor (lb/MMBtu), and Maximum Annual Heat Input from ULSD (MMBTU/yr) ; and Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) and Natural Gas Emission Factor (lb/MMBtu) for all four turbines. Emission factors used are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas Fired Turbines AND/OR Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. [N.J.A.C. 7:27-22.16(a)] MOST STRINGENT.	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAH's): Recordkeeping by manual logging of parameter annually. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
53	Polycyclic organic matter <= 0.087 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) and ULSD emission factor (lb/MMBtu), and Maximum Annual Heat Input from ULSD (MMBTU/yr) ; and Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) and Natural Gas Emission Factor (lb/MMBtu) for all four turbines. Emission factors used are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas Fired Turbines AND/OR Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter annually. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
54	Propylene oxide <= 0.134 tons/yr. Maximum emission rate for 4 combustion turbines. This emission rate is based on CT Maximum Annual Heat Input from Natural Gas (MMBTU/yr) for all four turbines and Natural Gas Emission Factor (lb/MMBtu) Emission factors used are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
55	All requests, reports, applications, submittals, and other communications to the Administrator pursuant to Part 60 shall be submitted in duplicate to the Regional Office of US Environmental Protection Agency. Submit information to: Region II, Director, Air and Waste Management Division, US Environmental Protection Agency, 21st Floor, 290 Broadway, New York, NY 10007. [40 CFR 60.4(a)]	None.	None.	Submit a report: As per the approved schedule to EPA Region II as required by 40 CFR 60. [40 CFR 60.4(a)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
56	Copies of all information submitted to EPA pursuant to 40 CFR Part 60, must also be submitted to the appropriate Regional Enforcement Office of NJDEP. [40 CFR 60.4(b)]	None.	None.	Submit a report: As per the approved schedule to the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60. [40 CFR 60.4(b)]
57	The owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, of the date of construction or reconstruction of an affected facility as defined under 40 CFR Part 60 Subpart A. Notification shall be postmarked no later than 30 days after such date. [40 CFR 60.7(a)(1)]	None.	None.	Submit notification: Upon occurrence of event to EPA Region II and the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60.7 [40 CFR 60.7(a)(1)]
58	The owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in section 60.14(e). The notification shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of facility before and after the change and the expected completion date of the change. Notification shall be postmarked within 60 days or as soon as practicable before any change is commenced. The Administrator may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]	None.	None.	Submit notification: Upon occurrence of event to EPA Region II and the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60.7 [40 CFR 60.7(a)(4)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
59	The owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility, any malfunction of air pollution control equipment or any periods during which continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]	None.	Recordkeeping by manual logging of parameter upon occurrence of event. The records should be kept in a permanent form suitable for inspections. [40 CFR 60.7(b)]	None.
60	Each owner or operator required to install a continuous monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form (see section 60.7(d)) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. [40 CFR 60.7(c)]	None.	Other: Written reports of excess emissions shall include the following information: (1) The magnitude of excess emissions computed in accordance with section 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period and excess emissions. The process operating time during the reporting period. (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted. (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments. (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR 60.7(c)].	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Semi-annually beginning on the 30th day of the 6th month following initial performance tests. The report shall be postmarked by the 30th day following the end of each six-month period. The report shall be submitted to the EPA Region II Administrator and the appropriate Regional Enforcement Office of NJDEP and be in the format specified at 40 CFR Part 60.7(c) and 40 CFR Part 60.7(d). [40 CFR 60.7(c)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
61	The owner or operator shall maintain a file, suitable for inspection, of all monitoring measurements as indicated in Recordkeeping Requirement column. [40 CFR 60.7(f)]	None.	Other: The file shall include all measurements (including continuous monitoring system, monitoring device, and performance testing measurements), all continuous monitoring system performance evaluations, all continuous monitoring system or monitoring device calibration checks, all adjustments/maintenance performed on these systems or devices, and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. [40 CFR 60.7(f)].	None.
62	At all times, including periods of start-up, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operation and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]	None.	None.	None.
63	No owner or operator subject to NSPS standards in Part 60, shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
64	The owner or operator shall perform zero and span adjustments daily for continuous emission monitors and continuous opacity monitors following procedures outlined in 40 CFR Part 60.13(d)1 & 2. [40 CFR 60.13(d)]	None.	Other: Maintain records in accordance with 40 CFR 60.7(f). [40 CFR 60.13(d)].	None.
65	Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all continuous monitoring systems measuring emissions except opacity shall be in continuous operation. They shall complete a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15-minute period. [40 CFR 60.13(e)(2)]	Other: See Applicable Requirement. [40 CFR 60.13(e)(2)].	Other: See Applicable Requirement. [40 CFR 60.13(e)(2)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
66	The owner or operator shall reduce all continuous monitoring systems (other than opacity) data to 1-hour averages which shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. For owners and operators complying with the requirements in 40 CFR 60.7(f)(1) or (2), data averages must include any data recorded during periods of monitor breakdown or malfunction. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O2 or ng of pollutant per J of heat input). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g. rounded to the nearest 1 percent opacity). [40 CFR 60.13(h)]	None.	Other: See Applicable Requirement. [40 CFR 60.13(h)].	None.
67	Changes in time periods for submittal of information and postmark deadlines set forth in this subpart, may be made only upon approval by the Administrator and shall follow procedures outlined in 40 CFR Part 60.19. [40 CFR 60.19]	None.	None.	None.
68	NOx (Total) <= 109 ppmvd @ 15% O2. The permittee shall not cause to be discharged into the atmosphere any gases which contain oxides of nitrogen in excess of emissions derived from 40 CFR 60.332(a)(1).[40 CFR 60.332(a)(1)] and. [40 CFR 60.332(b)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. [40 CFR 60.334(b)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [40 CFR 60.332(a)(1)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
69	Sulfur Content in Fuel <= 0.8 % by weight. The permittee shall not burn any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw). [40 CFR 60.333(b)]	Sulfur Content in Fuel: Monitored by other method (provide description) at no required frequency. For gaseous fuel that is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u): Monitored by current, valid purchase contract, tariff sheet or transportation contract for gaseous fuel specifying that the maximum total Sulfur content of the fuel is 20.0 grains/100 scf or less. [40 CFR 60.334(h)(3)(i)] and. [40 CFR 60.335]	Sulfur Content in Fuel: Recordkeeping by other recordkeeping method (provide description) at no required frequency. Maintain current, valid tariff sheet for the gaseous fuel specifying that the maximum sulfur content of the fuel is 20.0 grains/100 scf or less. [40 CFR 60.334(h)(3)(i)]	None.
70	Sulfur Content in Fuel <= 0.8 % by weight. The permittee shall not burn any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw). [40 CFR 60.333(b)]	Sulfur Content in Fuel: Monitored by other method (provide description) at no required frequency. For fuel oil: Pursuant to 40 CFR 60.334(i)(1), the Permittee shall monitor the sulfur content of fuel oil using one of the total sulfur sampling options and associated sampling frequency described in 40 CFR 60.334(i)(1). Test methods and procedures shall be consistent with the requirements of 40 CFR Part 60.335. A minimum of three fuel samples shall be collected during the performance test in accordance with 40 CFR 60.335(b)(10). [40 CFR 60.335]	Sulfur Content in Fuel: Recordkeeping by certified lab analysis results at the approved frequency. The permittee shall keep a record of each analysis of fuel sulfur content. [40 CFR 60.334(j)(2)]	None.
71	The permittee of a turbine that uses steam or water injection shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine. [40 CFR 60.334(a)]	Monitored by parametric monitoring system continuously. During the performance test required under 40 CFR 60.8, the ratio of water or steam to fuel shall be continuously monitored to establish acceptable values and ranges. [40 CFR 60.334(g)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously or manual logging of parameter. [40 CFR 60.334(a)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
72	The Permittee shall monitor the total sulfur content of the fuel being fired in the turbine if the fuel fired in the turbine does not meet the definition of natural gas as provided in 40 CFR 60.331(u). The owner or operator shall use the methods specified in 40 CFR 60.335(b)10. The analyses may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency. [40 CFR 60.334(h)(1)]	Monitored by grab sampling at the approved frequency. Sulfur content values shall be determined on each occasion that fuel is transferred to the storage tank from any other source. If a custom fuel monitoring schedule has previously been approved, the owner or operator may continue monitoring on this schedule without submitting a special petition to the Administrator. [40 CFR 60.334(i)]	Recordkeeping by certified lab analysis results at the approved frequency. The owner or operator shall record the results of each analysis for fuel sulfur content. [40 CFR 60.334(i)]	None.
73	The permittee shall submit reports of excess emissions and monitor downtime for Nitrogen oxides in accordance with 40 CFR 63.334(j). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined in 40 CFR 60.334(j)(1). Any unit operating hour in which no water or steam is injected shall also be considered an excess emissions. [40 CFR 60.334(j)(1)]	None.	Recordkeeping by manual logging of parameter upon occurrence of event. [40 CFR 60.334(j)(1)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every quarter beginning on the 30th of the 3rd month following initial performance tests. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load. Pursuant to 40 CFR 60.334(j)5, all reports shall be postmarked by the 30th day following the end of each calendar quarter. [40 CFR 60.334(j)(1)]
74	For Turbine Combusting Fuel Oil (ULSD): The permittee shall switch to daily sampling, flow proportional sampling, or sampling flow unit's storage tank in accordance with 40 CFR 60.334(j)(2)(ii), if the sulfur content of the delivery exceed 0.8 weight percent. The permittee may resume using as delivered sampling option when all the fuel from the delivery has been burned. [40 CFR 60.334(j)(2)(ii)]	None.	Recordkeeping by manual logging of parameter upon occurrence of event. [40 CFR 60.334(j)(1)]	None.
75	Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit. [40 CFR 72]	Other: Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit.[40 CFR 72].	Other: Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit.[40 CFR 72].	Other (provide description): Other Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit. [40 CFR 72]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
76	The permittee shall comply with all applicable requirements of Cross-State Air Pollution Rule (CSAPR) for the CSAPR NOx Annual Trading Program, CSAPR NOx Ozone Season Trading Program, and CSAPR SO2 Trading Program applicable to this affected unit [40 CFR 97]	Other: As per applicable requirement.[40 CFR 97].	Other: As per applicable requirement.[40 CFR 97].	Other (provide description): Other. As per applicable requirement. [40 CFR 97]

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Emission Unit: **U4 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)**

Operating Scenario: **OS1 Unit No. 5 firing natural gas (base load & below), OS2 Unit No. 6 firing natural gas (base load & below), OS3 Unit No. 7 firing natural gas (base load & below), OS4 Unit No. 8 firing natural gas (base load & below)**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate emission limit from the combustion of fuel based on rated heat input of source. Particulate Emissions <= 120 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
2	Opacity <= 10 % , exclusive of visible condensed water vapor, for a period of more than 10 seconds. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
3	TSP <= 7 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	PM-10 (Total) <= 11 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 11 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 2 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	CO <= 36 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. See Stack Testing Summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). See Stack Testing Summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. [N.J.A.C. 7:27-22.16(o)]
8	CO <= 15 ppmdv @ 15% O2. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
9	SO2 <= 1 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	NOx (Total) <= 48 lb/hr. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. See Stack Testing Summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). See Stack Testing Summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Submit a stack test report: Within 60 days of stack testing. [N.J.A.C. 7:27-22.16(e)]
11	NOx (Total) <= 12 ppmdv @ 15% O2. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(e)]	None.
12	1-Methylnaphthalene <= 0.00216 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially . [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
13	Acetaldehyde <= 0.048 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
14	Acrolein <= 0.00768 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
15	Arsenic Emissions <= 0.0000606 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	Benzene <= 0.0144 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
17	Butadiene (1,3-) <= 0.000516 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
18	Dioxins/Furans (Total) <= 3.0E-7 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
19	Ethylbenzene <= 0.0384 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
20	Formaldehyde <= 0.852 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
21	Pb <= 0.000622 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
22	Methane <= 2.65 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
23	Naphthalene <= 0.00156 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
24	Propylene oxide <= 0.0348 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
25	Polycyclic organic matter <= 0.00264 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
26	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00264 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
27	Nitrous oxide <= 0.26 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Nitrous oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nitrous oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Emission Unit: **U4 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)**

Operating Scenario: **OS5 Unit No. 5 firing ultra low sulfur distillate oil (ULSD), OS6 Unit No. 6 firing ultra low sulfur distillate oil (ULSD), OS7 Unit No. 7 firing ultra low sulfur distillate oil (ULSD), OS8 Unit No. 8 firing ultra low sulfur distillate oil (ULSD)**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Smoke emissions from stationary turbine engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. Visual observations should be conducted by a certified smoke reader once every 100 hours or less of oil firing operation. Monitoring and recordkeeping may occur at a lesser frequency if circumstances prohibit conducting a visual determination (e.g., nighttime operation, weather conditions, unplanned dispatching, etc.) within the 100 hour timeframe. However, in no case shall the interval between visual determinations exceed 125 hours of oil firing operation. If the visual observation occurs at a lesser frequency than every 100 hours of oil firing operation, the reason for monitoring at the lesser frequency shall also be recorded. Opacity <= 20 %. [N.J.A.C. 7:27- 3.5]	Other: Periodic Visual Observations. Once every 100 hours or less of oil firing operation. Visual observations shall be conducted by a certified observer once every 100 hours or less of oil firing operation. Installation and operation of a continuous opacity monitor on a given turbine would be required only if distillate oil operation exceeds 500 hours in a calendar year. If a monitor is required, submittal of a monitoring protocol, pursuant to N.J.A.C. 7:27-22.18(a), to the Bureau of Technical Services would be required within 90 days of exceeding the 500 hour threshold. Installation and operation of the monitor would be required within 180 days of exceeding the 500 hour threshold. Refer to N.J.A.C. 7:27-22.18 and 19 for other applicable requirements.[N.J.A.C. 7:27-3.5].	Other: Manual Logging of Visual Observations (Permanently Bound). Once every 100 hours of oil firing operation.[N.J.A.C. 7:27- 3.5].	None.
2	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery , manual logging of % Sulfur per delivery in a permanently bound log book or readily accessible computer memories. [N.J.A.C. 7:27-22.16(o)]	None.
3	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B [N.J.A.C. 7:27- 9.2(b)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	TSP <= 18 lb/hr. [N.J.A.C. 7:27-22.16(e)]	TSP: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]
5	PM-10 (Total) <= 27 lb/hr. [N.J.A.C. 7:27-22.16(e)]	PM-10 (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results at the approved frequency. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]
6	PM-2.5 (Total) <= 27 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	VOC (Total) <= 5.5 lb/hr. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results at the approved frequency. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]
8	CO <= 83 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results at the approved frequency. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]
9	CO <= 30 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(e)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
10	NOx (Total) <= 191 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	NOx (Total) <= 42 ppmdv @ 15% O2. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage at the approved frequency. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
12	SO2 <= 1.89 lb/hr for Units 5 and 6 (E6 and E7) of Emission Unit U4 when firing ULSD with a sulfur content of 0.0015% by weight or less. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	SO2 <= 1.81 lb/hr for Units 7 and 8 (E8 and E9) of Emission Unit U4 when firing ULSD with a sulfur content of 0.0015% by weight or less. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	Arsenic Emissions <= 0.0132 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
15	Benzene <= 0.066 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
16	Beryllium Emissions <= 0.000372 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Beryllium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	Butadiene (1,3-) <= 0.0192 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
18	Cadmium Emissions <= 0.00576 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
19	Chromium Emissions <= 0.0132 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Chromium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Chromium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
20	Formaldehyde <= 0.336 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
21	Pb <= 0.0168 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
22	Manganese compounds <= 0.124 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from California Air Toxics Emission Factor (CATEF, CARB1996). [N.J.A.C. 7:27-22.16(a)]	Manganese compounds: Monitored by calculations once initially . [N.J.A.C. 7:27-22.16(o)]	Manganese compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
23	Mercury Emissions <= 0.00144 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
24	Methane <= 7.94 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
25	Naphthalene <= 0.042 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
26	Nickel Emissions <= 0.00552 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
27	Nitrous oxide <= 1.59 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Nitrous oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nitrous oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
28	Polycyclic organic matter <= 0.048 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
29	Polynuclear aromatic hydrocarbons (PAHs) <= 0.048 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Emission Unit: **U4 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)**

Operating Scenario: **OS9 Unit No. 5 firing natural gas at peak load, OS10 Unit No. 6 firing natural gas at peak load, OS11 Unit No. 7 firing natural gas at peak load, OS12 Unit No. 8 firing natural gas at peak load**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of visible condensed water vapor, for a period of more than 10 seconds. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	TSP <= 7 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
3	PM-10 (Total) <= 11 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	VOC (Total) <= 2 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.
5	CO <= 63 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(e)]	CO: Recordkeeping by stack test results prior to permit expiration date. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(e)]
6	CO <= 25 ppmdv @ 15% O2. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(e)]	CO: Recordkeeping by strip chart or data acquisition (DAS) system continuously. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(e)]	None.
7	SO2 <= 1 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	NOx (Total) <= 108 lb/hr. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing summary at U4 OS Summary. [N.J.A.C. 7:27-22.16(e)]
9	NOx (Total) <= 30 ppmdv @ 15% O2. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by strip chart or data acquisition (DAS) system continuously. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	1-Methylnaphthalene <= 0.00216 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
11	Acetaldehyde <= 0.048 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
12	Acrolein <= 0.00768 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
13	Arsenic Emissions <= 0.0000606 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
14	Benzene <= 0.0144 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
15	Beryllium Emissions <= 0.000083 tons/yr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Beryllium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	Butadiene (1,3-) <= 0.000516 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
17	Dioxins/Furans (Total) <= 3.0E-7 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
18	Ethylbenzene <= 0.0384 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
19	Formaldehyde <= 0.852 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
20	Methane <= 2.65 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
21	Pb <= 0.000622 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
22	Naphthalene <= 0.00156 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
23	Nitrous oxide <= 0.26 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Nitrous oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nitrous oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
24	Propylene oxide <= 0.0348 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
25	Polycyclic organic matter <= 0.00264 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
26	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00264 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Emission Unit: **U4 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)**

Operating Scenario: **OS13 Unit No. 5 Start-up on Natural Gas, OS14 Unit No. 6 Start-up on Natural Gas, OS15 Unit No. 7 Start-upon Natural Gas, OS16 Unit No. 8 Start-up on Natural Gas**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Startup commences with initiation of the combustion of fuel in a combustion turbine and concludes when the unit reaches a steady state operating load of 80% of design capacity, or higher. Start-up duration shall not exceed 30 minutes. [N.J.AC.7:27-22.16(e) and [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system continuously. [N.J.A.C. 7:27-22.16(o)]	None.
2	Particulate Emissions <= 120 lb/hr (for Unit # 5 and # 6 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
3	Particulate Emissions <= 115.04 lb/hr (for Unit # 7 and # 8 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
4	Carbon monoxide <= 250 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	Carbon monoxide: Monitored by continuous emission monitoring system continuously, based on one calendar day. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-16.23(a)]	Carbon monoxide: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
5	Nitrogen oxides (NOx) <= 1 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	Nitrogen oxides (NOx): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-19.15(a)]	Nitrogen oxides (NOx): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
6	VOC (Total) <= 50 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during startup on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	TSP <= 7 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the TSP emission limits during startup on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
8	PM-10 (Total) <= 11 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 emission limits during startup on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
9	PM-2.5 (Total) <= 11 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 (Total) emission limits during startup on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
10	SO2 <= 1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	1-Methylnaphthalene <= 0.00216 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially . [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
12	Acetaldehyde <= 0.048 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
13	Acrolein <= 0.00768 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
14	Arsenic Emissions <= 0.0000606 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	Benzene <= 0.0144 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
16	Butadiene (1,3-) <= 0.000516 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
17	Dioxins/Furans (Total) <= 3.0E-7 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
18	Ethylbenzene <= 0.0384 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
19	Formaldehyde <= 0.852 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
20	Pb <= 0.000622 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
21	Methane <= 2.65 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	Naphthalene <= 0.00156 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
23	Propylene oxide <= 0.0348 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
24	Polycyclic organic matter <= 0.00264 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
25	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00264 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
26	Nitrous oxide <= 0.26 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Nitrous oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nitrous oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Emission Unit: **U4 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)**

Operating Scenario: **OS17 Unit No. 5 Start-up on ULSD, OS18 Unit No. 6 Start-up on ULSD, OS19 Unit No. 7 Start-up on ULSD, OS20 Unit No. 8 Start-up on ULSD**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Startup commences with initiation of the combustion of fuel in a combustion turbine and concludes when the unit reaches a steady state operating load of 80% of design capacity, or higher. Start-up duration shall not exceed 30 minutes. [N.J.AC.7:27-22.16(e) and [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system continuously. [N.J.A.C. 7:27-22.16(o)]	None.
2	Particulate Emissions <= 120 lb/hr (for Unit # 5 and # 6 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
3	Particulate Emissions <= 115.04 lb/hr (for Unit # 7 and # 8 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
4	Carbon monoxide <= 250 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	Carbon monoxide: Monitored by continuous emission monitoring system continuously, based on one calendar day. [N.J.A.C. 7:27-16.23(a)]	Carbon monoxide: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
5	Nitrogen oxides (NOx) <= 1.6 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	Nitrogen oxides (NOx): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. [N.J.A.C. 7:27-19.15(a)]	Nitrogen oxides (NOx): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
6	VOC (Total) <= 50 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during startup on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	TSP <= 18 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the TSP emission limits during startup on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.
8	PM-10 (Total) <= 27 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 emission limits during startup on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.
9	PM-2.5 (Total) <= 27 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 (Total) emission limits during startup on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.
10	SO2 <= 1.89 lb/hr for Units 5 and 6 (Equipment ID E6 and E7). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	SO2 <= 1.81 lb/hr for Units 7 and 8 (Equipment ID E8 and E9). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	Arsenic Emissions <= 0.0132 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
13	Benzene <= 0.066 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
14	Beryllium Emissions <= 0.000372 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Beryllium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	Butadiene (1,3-) <= 0.0192 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
16	Cadmium Emissions <= 0.00576 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
17	Chromium Emissions <= 0.0132 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Chromium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Chromium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
18	Formaldehyde <= 0.336 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
19	Pb <= 0.0168 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
20	Manganese compounds <= 0.124 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from California Air Toxics Emission Factor (CATEF, CARB1996). [N.J.A.C. 7:27-22.16(a)]	Manganese compounds: Monitored by calculations once initially . [N.J.A.C. 7:27-22.16(o)]	Manganese compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	Mercury Emissions <= 0.00144 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
22	Methane <= 7.94 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
23	Naphthalene <= 0.042 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
24	Nickel Emissions <= 0.00552 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
25	Nitrous oxide <= 1.59 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Nitrous oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nitrous oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
26	Polycyclic organic matter <= 0.048 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
27	Polynuclear aromatic hydrocarbons (PAHs) <= 0.048 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Emission Unit: **U4 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)**

Operating Scenario: **OS21 Unit No. 5 Shutdown on Natural Gas, OS22 Unit No. 6 Shutdown on Natural Gas, OS23 Unit No. 7 Shutdown on Natural Gas, OS24 Unit No. 8 Shutdown on Natural Gas**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Shutdown commences with initiation of lowering turbine power output with the intent to cease generation of electrical power output and concludes with the cessation of the combustion turbine operation. Shut-down duration shall not exceed 30 minutes. [N.J.A.C7:27-22.16(e) and [N.J.A.C. 7:27-22.16(a)]	Other: Hour/time monitor. Per occurrence.[N.J.A.C. 7:27-22.16(a)].	Other: Recordkeeping by manual Logging of Parameter in a permanently bound log book or Data Aquisition System (DAS) / elecronic data storage upon occurance of event.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 120 lb/hr (for Unit # 5 and # 6 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
3	Particulate Emissions <= 115.04 lb/hr (for Unit # 7 and # 8 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
4	Carbon monoxide <= 250 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	Carbon monoxide: Monitored by continuous emission monitoring system continuously, based on one calendar day. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-16.23(a)]	Carbon monoxide: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
5	Nitrogen oxides (NOx) <= 1 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	Nitrogen oxides (NOx): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-19.15(a)]	Nitrogen oxides (NOx): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
6	VOC (Total) <= 50 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during shutdown on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	TSP <= 7 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the TSP emission limits during shutdown on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
8	PM-10 (Total) <= 11 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 emission limits during shutdown on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
9	PM-2.5 (Total) <= 11 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 (Total) emission limits during shutdown on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
10	SO2 <= 1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	1-Methylnaphthalene <= 0.00216 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially . [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
12	Acetaldehyde <= 0.048 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
13	Acrolein <= 0.00768 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
14	Arsenic Emissions <= 0.0000606 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	Benzene <= 0.0144 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
16	Butadiene (1,3-) <= 0.000516 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
17	Dioxins/Furans (Total) <= 3.0E-7 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
18	Ethylbenzene <= 0.0384 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
19	Formaldehyde <= 0.852 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
20	Pb <= 0.000622 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
21	Methane <= 2.65 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	Naphthalene <= 0.00156 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
23	Propylene oxide <= 0.0348 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
24	Polycyclic organic matter <= 0.00264 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
25	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00264 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
26	Nitrous oxide <= 0.26 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Nitrous oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nitrous oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Emission Unit: **U4 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)**

Operating Scenario: **OS25 Unit No. 5 Shutdown on ULSD, OS26 Unit No. 6 Shutdown on ULSD, OS27 Unit No. 7 Shutdown on ULSD, OS28 Unit No. 8 Shutdown on ULSD**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Shutdown Period <= 30 minutes. Shutdown commences with initiation of lowering turbine output with the intent to cease generation of electrical power output and concludes with the cessation of combustion turbine operation. Shutdown duration shall not exceed 30 minutes. [N.J.AC.7:27-22.16(e) and. [N.J.A.C. 7:27-22.16(a)]	Shutdown Period: Monitored by hour/time monitor upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Shutdown Period: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	None.
2	Particulate Emissions <= 120 lb/hr (for Unit # 5 and # 6 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
3	Particulate Emissions <= 115.04 lb/hr (for Unit # 7 and # 8 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
4	Carbon monoxide <= 250 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	Carbon monoxide: Monitored by continuous emission monitoring system continuously, based on one calendar day. [N.J.A.C. 7:27-16.23(a)]	Carbon monoxide: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
5	Nitrogen oxides (NOx) <= 1.6 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	Nitrogen oxides (NOx): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. [N.J.A.C. 7:27-19.15(a)]	Nitrogen oxides (NOx): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
6	VOC (Total) <= 50 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during startup on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	TSP <= 18 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the TSP emission limits during startup on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.
8	PM-10 (Total) <= 27 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 emission limits during startup on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.
9	PM-2.5 (Total) <= 27 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 (Total) emission limits during startup on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.
10	SO2 <= 1.89 lb/hr for Units 5 and 6 (Equipment ID E6 and E7). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	SO2 <= 1.81 lb/hr for Units 7 and 8 (Equipment ID E8 and E9). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	Arsenic Emissions <= 0.0132 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
13	Benzene <= 0.066 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
14	Beryllium Emissions <= 0.000372 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Beryllium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	Butadiene (1,3-) <= 0.0192 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
16	Cadmium Emissions <= 0.00576 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
17	Chromium Emissions <= 0.0132 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Chromium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Chromium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
18	Formaldehyde <= 0.336 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
19	Pb <= 0.0168 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
20	Manganese compounds <= 0.124 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from California Air Toxics Emission Factor (CATEF, CARB1996). [N.J.A.C. 7:27-22.16(a)]	Manganese compounds: Monitored by calculations once initially . [N.J.A.C. 7:27-22.16(o)]	Manganese compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	Mercury Emissions <= 0.00144 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
22	Methane <= 7.94 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
23	Naphthalene <= 0.042 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
24	Nickel Emissions <= 0.00552 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
25	Nitrous oxide <= 1.59 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Nitrous oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nitrous oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
26	Polycyclic organic matter <= 0.048 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
27	Polynuclear aromatic hydrocarbons (PAHs) <= 0.048 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U4 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)**
Operating Scenario: **OS29 Unit No. 5 Fuel Transfer, OS30 Unit No. 6 Fuel Transfer, OS31 Unit No. 7 Fuel Transfer, OS32 Unit No. 8 Fuel Transfer**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Fuel transfer period commences when the fuel is switched from natural gas to distillate oil and vice versa. The duration shall not exceed 30 minutes. [N.J.A.C. 7:27-22.16(a)]	Other: Hour/time monitor. Per occurrence.[N.J.A.C. 7:27-22.16(a)].	Other: Recordkeeping by manual Logging of Parameter in a permanently bound log book or Data Aquisition System (DAS) / elecronic data storage upon occurance of event.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 120 lb/hr (for Unit # 5 and # 6 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
3	Particulate Emissions <= 115.04 lb/hr (for Unit # 7 and # 8 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
4	Carbon monoxide <= 250 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	Carbon monoxide: Monitored by continuous emission monitoring system continuously, based on one calendar day. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-16.23(a)]	Carbon monoxide: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
5	Nitrogen oxides (NOx) <= 1.6 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	Nitrogen oxides (NOx): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-19.15(a)]	Nitrogen oxides (NOx): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
6	VOC (Total) <= 50 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during fuel transfer[N.J.A.C. 7:27-22.16(o)].	None.
7	TSP <= 18 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the TSP emission limits during fuel transfer[N.J.A.C. 7:27-22.16(o)].	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	PM-10 (Total) <= 27 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 emission limits during fuel transfer[N.J.A.C. 7:27-22.16(o)].	None.
9	PM-2.5 (Total) <= 27 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 (Total) emission limits during fuel transfer[N.J.A.C. 7:27-22.16(o)].	None.
10	SO2 <= 1.89 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U4 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)**
Operating Scenario: **OS33 Unit No. 5 Mode Transfer, OS34 Unit No. 6 Mode Transfer, OS35 Unit No. 7 Mode Transfer, OS36 Unit No. 8 Mode Transfer**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Operating mode transfer is the process of changing from premix burning to diffusion burning or from diffusion burning to premix burning. The duration shall not exceed 30 minutes. [N.J.A.C. 7:27-22.16(a)]	Other: Hour/time monitor. Per occurrence.[N.J.A.C. 7:27-22.16(a)].	Other: Recordkeeping by manual Logging of Parameter in a permanently bound log book or Data Aquisition System (DAS) / elecronic data storage upon occurance of event.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 120 lb/hr (for Unit # 5 and # 6 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
3	Particulate Emissions <= 115.04 lb/hr (for Unit # 7 and # 8 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
4	Carbon monoxide <= 250 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	Carbon monoxide: Monitored by continuous emission monitoring system continuously, based on one calendar day. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-16.23(a)]	Carbon monoxide: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
5	Nitrogen oxides (NOx) <= 1 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	Nitrogen oxides (NOx): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-19.15(a)]	Nitrogen oxides (NOx): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
6	VOC (Total) <= 50 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during mode transfer[N.J.A.C. 7:27-22.16(o)].	None.
7	TSP <= 18 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the TSP emission limits during mode transfer[N.J.A.C. 7:27-22.16(o)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	PM-10 (Total) <= 27 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 emission limits during mode transfer[N.J.A.C. 7:27-22.16(o)].	None.
9	PM-2.5 (Total) <= 27 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 (Total) emission limits during mode transfer[N.J.A.C. 7:27-22.16(o)].	None.
10	SO2 <= 1.89 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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Facility Specific Requirements

Emission Unit: **U4 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)**

Operating Scenario: **OS37 Unit No. 5 Mechanical Testing, OS38 Unit No. 6 Mechanical Testing, OS39 Unit No.7 Mechanical Testing, OS40 Unit No. 8 Mechanical Testing**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Mechanical safety testing is defined as the period of time following mechanical servicing or repair when mechanical safety tests are conducted, not to exceed 12 hours per year per turbine. [N.J.A.C. 7:27-22.16(a)]	Other: Hour/time monitor. Per occurrence.[N.J.A.C. 7:27-22.16(a)].	Other: Recordkeeping by manual Logging of Parameter in a permanently bound log book or Data Aquisition System (DAS) / elecronic data storage upon occurance of event.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 120 lb/hr (for Unit # 5 and # 6 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
3	Particulate Emissions <= 115.04 lb/hr (for Unit # 7 and # 8 each). [N.J.A.C. 7:27- 4.2]	None.	None.	None.
4	Carbon monoxide <= 250 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	Carbon monoxide: Monitored by continuous emission monitoring system continuously, based on one calendar day. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-16.23(a)]	Carbon monoxide: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
5	Nitrogen oxides (NOx) <= 1 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	Nitrogen oxides (NOx): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. [N.J.A.C. 7:27-19.15(a)]	Nitrogen oxides (NOx): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U4 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
6	VOC (Total) <= 50 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during mechanical safety testing[N.J.A.C. 7:27-22.16(o)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	TSP <= 7 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the TSP emission limits during mechanical safety testing[N.J.A.C. 7:27-22.16(o)].	None.
8	PM-10 (Total) <= 11 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 emission limits during mechanical safety testing[N.J.A.C. 7:27-22.16(o)].	None.
9	PM-2.5 (Total) <= 11 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 (Total) emission limits during mechanical safety testing[N.J.A.C. 7:27-22.16(o)].	None.
10	SO2 <= 1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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Emission Unit: **U8 Emergency Diesel Fire Pump No. 2**
Operating Scenario: **OS Summary**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: MACT ZZZZ [40 CFR 63.ZZZZ]	None.	None.	None.
2	NOx (Total) <= 0.3 tons/yr Annual emission limit based on 100 hours/year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	CO <= 0.1 tons/yr. Annual emission limit based on 100 hours/year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	VOC (Total) <= 0.02 tons/yr. Annual emission limit based on 100 hours/year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	TSP <= 0.02 tons/yr Annual emission limit based on 100 hours/year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-10 (Total) <= 0.02 tons/yr. Annual emission limit based on 100 hours/year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	PM-2.5 (Total) <= 0.02 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	This emergency generator shall not be used: 1. For normal testing and maintenance on days when the Department forecasts air quality anywhere in New Jersey to be "unhealthy for sensitive groups," "unhealthy," or "very unhealthy" as defined in the EPA's Air Quality Index at http://airnow.gov/, as supplemented or amended and incorporated herein by reference, 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 https://dep.nj.gov/boss/air-quality-forecast-fc ; and 2. As a source of energy or power after the primary energy or power source has become operable again after emergency or after power disruption resulted from construction, repair, or maintenance activity. Operation of the emergency generator during construction, repair, or maintenance activity shall be limited to no more than 30 days of operation per calendar year. If the primary energy or power source is under the control of the owner or operator of the emergency generator, the owner or operator shall make a reasonable, timely effort to repair the primary energy or power source. [N.J.A.C. 7:27-19.2(d)]	None.	None.	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	Each emergency generator shall be located at the facility and produce mechanical or thermal energy, or electrical power exclusively for use at the facility. This emergency generator shall be operated only: 1. During the performance of normal testing and maintenance procedures, including other fire protection equipment, as recommended in writing by the fire pump or fire protection system manufacturer and/or as required in writing by a Federal or State law or regulation, 2. When there is power outage or the primary source of mechanical or thermal energy fails because of an emergency, or 3. When there is a voltage reduction issued by PJM and posted on the PJM internet website (www.pjm.com) under the "emergency procedures" menu, or 4. To provide power to pump water for fire suppression or protection, or in case of flood, even if there is no power outage and primary source of mechanical energy has not failed. [N.J.A.C. 7:27-22.16(a)] and [N.J.A.C. 7:27-19.1]	Monitored by hour/time monitor continuously In addition, the owner or operator shall monitor, once per month, the total operating time from the generator's hour meter; hours of operation for emergency use; hours of operation for testing and maintenance; and the total fuel usage calculated by the following: Fuel Usage (Gallons per month) = (Hours of operation per month) x (Maximum emergency generator fuel usage rate in gallons per hour). Hours of operation for emergency use (per month) = (The monthly total operating time from the generator's hour meter) - (The monthly total operating time for testing or maintenance) . [N.J.A.C. 7:27-22.16(o)]	Other: Record the following information: 1. Once per month, the total operating time from the generator's hour meter, the fuel usage (gallons per month. Document if the emergency use was due to internal or external loss of primary source of energy, or due to a fire or flood. If internal loss at the facility, document the emergency that occurred, the damages to the primary source of energy and the amount of time needed for repairs. 2. For each time the emergency generator is specifically operated for testing or maintenance: i. The reason for its operation; ii. The date(s) of operation and the start up and shut down time; iii. The total operating time for testing or maintenance based on the generator's hour meter; and iv. The name of the operator; and 3. If a voltage reduction is the reason for the use of the emergency generator, a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction. The owner or operator of shall maintain the above records for at least 5 years after the record was made and shall make the records readily available to the Department or the EPA upon request.[N.J.A.C. 7:27-19.11].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	Hours of Operation <= 100 hr/yr for testing and maintenance. The limit on the allowable hours for testing and maintenance in accordance with the documentation from manufacturer, the vendor, or the insurance company associated with the engine. [N.J.A.C. 7:27-22.16(a)]	Hours of Operation: Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall maintain on site and record the following information: For each time the emergency generator is specifically operated for testing or maintenance: i. The reason for its operation; ii. The date(s) of operation and the start up and shut down time; iii. The total operating time for testing or maintenance based on the generator's hour meter; and iv. The name of the operator. . [N.J.A.C. 7:27-19.11]	None.
11	The owner or operator of an emergency or black start SI RICE <= 500 HP constructed or reconstructed before June 12, 2006 shall change oil and filter every 500 hours of operation or within one year + 30 days of the previous change, whichever comes first, as prescribed in Table 2c, item 6a to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6602]	Other: The owner or operator shall change oil and filter every 500 hours of operation or within one year + 30 days of the previous change, whichever comes first. The owner or operator has an option of utilizing an oil analysis program, at the same frequency specified for changing the oil, in order to extend the specified oil change requirement, per 40 CFR 63.6625(j). The owner or operator must develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with Table 6 item 9 to Subpart ZZZZ of 40 CFR 63.[40 CFR 63.6640(a)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator must keep records of the oil and filter change. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)(2)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	The owner or operator of an emergency or black start SI RICE <= 500 HP constructed or reconstructed before June 12, 2006 shall inspect spark plugs every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first; Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary, as prescribed in Table 2c, item 6b and 6c to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6602]	Other: The owner or operator shall inspect spark plugs every 1,000 hours of operation or within1 year + 30 days of the previous inspection, whichever comes first; Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first. The owner or operator must develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with Table 6 item 9 to Subpart ZZZZ of 40 CFR 63.[40 CFR 63.6640(a)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator must keep records of the maintenance procedures and air cleaner, belt and hoses replacements events. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)(2)]	None.
13	The engine must be in compliance with all applicable emission limitations and operating limitations in Subpart ZZZZ of 40 CFR 63 at all times. [40 CFR 63.6605(a)]	None.	None.	None.
14	At all times the owner or operator must operate and maintain a RICE, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.6605(b)]	None.	None.	None.
15	The owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]	Other: Monitored according to the manufacturer's emission-related operation and maintenance instructions; or the maintenance plan developed by the owner or operator which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with Table 6 item 9 to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6640(a)].	Other: The owner or operator must keep records of the maintenance procedures and replacements events. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	The owner or operator may operate an emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 63.6640(f)(2i)]	Monitored by hour/time monitor continuously. The owner or operator of an emergency stationary internal combustion engine must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]	Recordkeeping by manual logging of parameter or storing data in a computer data system annually. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR 63.6655(f)(1)]	None.
17	The owner or operator shall comply with the General Provisions as shown in Table 8 to Subpart ZZZZ of 40 CFR 63 that apply to an existing emergency or black start SI RICE <= 500 HP constructed or reconstructed before June 12, 2006 and located at a major source of HAP. [40 CFR 63.6665]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U8 Emergency Diesel Fire Pump No. 2**
Operating Scenario: **OS1 Emergency Diesel Fire Pump No. 2**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %. Smoke emissions from stationary internal combustion engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
2	Particulate Emissions <= 1.26 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery , manual logging of % Sulfur per delivery in a permanently bound log book or readily accessible computer memories. [N.J.A.C. 7:27-22.16(o)]	None.
4	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B [N.J.A.C. 7:27- 9.2(b)]	None.	None.	None.
5	NOx (Total) <= 3.92 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	CO <= 0.17 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.
7	VOC (Total) <= 0.14 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	TSP <= 0.05 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	PM-10 (Total) <= 0.05 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	PM-2.5 (Total) <= 0.05 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	Emergency fire pump fuel limited to Ultra Low Sulfur Distillate (ULSD) oil with a sulfur content of 0.0015% by weight [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.
12	Maximum Gross Heat Input <= 2.1 MMBTU/hr (HHV) higher heating value (HHV) of the fuel. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U40 EDG**
Operating Scenario: **OS Summary**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR 60 Subpart A 40 CFR 60 Subpart IIII and [40 CFR 63.ZZZZ]	None.	None.	None.
2	Opacity <= 20 % , exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
3	Particulate Emissions <= 7.93 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
5	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27- 9.2(b)]	None.	None.	None.
6	Generator fuel limited to # 2 fuel oil or diesel fuel. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Each emergency generator shall be located at the facility and produce mechanical or thermal energy, or electrical power exclusively for use at the facility. This emergency generator shall be operated only: 1. During the performance of normal testing and maintenance procedures, as recommended in writing by the manufacturer and/or as required in writing by a Federal or State law or regulation, 2. When there is power outage or the primary source of mechanical or thermal energy fails because of an emergency, or when the power disruption resulted from construction, repair, or maintenance activity (CRM) at the facility. Operation of the emergency generator under construction, repair, or maintenance activity is limited to 30 days in any calendar year; or 3. When there is a voltage reduction issued by PJM and posted on the PJM internet website (www.pjm.com) under the "emergency procedures" menu. [N.J.A.C. 7:27-19.1]	Monitored by hour/time monitor continuously In addition, the owner or operator shall monitor, once per month, the total operating time from the generator's hour meter; hours of operation for emergency use; hours of operation for testing and maintenance; hours of operation during power disruption resulted from construction, repair and maintenance activity (CRM) at the facility; and the total fuel usage calculated by the following: Fuel Usage (Gallons per month) = (Hours of operation per month) x (Maximum emergency generator fuel usage rate in gallons per hour). Hours of operation for emergency use (per month) = (The monthly total operating time from the generator's hour meter) - (The monthly total operating time for testing and maintenance) – (The monthly total operating time due to power disruption resulted from construction, repair, or maintenance activity not counting operation during the performance of normal testing and maintenance procedures). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency Record the following information: 1. Once per month, the total operating time from the generator's hour meter, the fuel usage (gallons per month), and the monthly hours of operation for emergency use and during power disruption from CRM. Document if the emergency use was due to internal or external loss of primary source of energy, or due to a fire or flood. If internal loss at the facility, document the emergency and/or CRM that occurred, the damages to the primary source of energy and the amount of time needed for repairs. 2. For each time the emergency generator is specifically operated for testing or maintenance: i. The reason for its operation; ii. The date(s) of operation and the start up and shut down time; iii. The total operating time for testing or maintenance based on the generator's hour meter; and iv. The name of the operator; and 3. If a voltage reduction is the reason for the use of the emergency generator, a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction. The owner or operator of shall maintain the above records for at least 5 years after the record was made and shall make the records readily available to the Department or the EPA. [N.J.A.C. 7:27-22.16(o)] and . [N.J.A.C. 7:27-22.16(o)] and . [N.J.A.C. 7:27-19.11]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	This emergency generator shall not be used: 1. For normal testing and maintenance on days when the Department forecasts air quality anywhere in New Jersey to be "unhealthy for sensitive groups," "unhealthy," or "very unhealthy" as defined in the EPA's Air Quality Index at http://airnow.gov/, as supplemented or amended and incorporated herein by reference, 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 https://dep.nj.gov/boss/air-quality-forecast-fc and 2. As a source of energy or power after the primary energy or power source has become operable again after emergency or after power disruption resulted from construction, repair, or maintenance activity. Operation of the emergency generator during construction, repair, or maintenance activity shall be limited to no more than 30 days of operation per calendar year. If the primary energy or power source is under the control of the owner or operator of the emergency generator, the owner or operator shall make a reasonable, timely effort to repair the primary energy or power source. [N.J.A.C. 7:27-19.2(d)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	Hours of Operation <= 100 hr/yr for testing and maintenance and for black start operation. The limit is on the allowable hours for testing and maintenance in accordance with the documentation from manufacturer, the vendor, or the insurance company associated with the engine. [N.J.A.C. 7:27-22.16(a)]	Hours of Operation: Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall maintain on site and record the following information: For each time the emergency generator is specifically operated for testing or maintenance: i. The reason for its operation; ii. The date(s) of operation and the start up and shut down time; iii. The total operating time for testing or maintenance based on the generator's hour meter; and iv. The name of the operator. [N.J.A.C. 7:27-19.11]	None.
10	VOC (Total) <= 0.0356 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	NOx (Total) <= 1.76 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	CO <= 0.0971 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	TSP <= 0.0081 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	PM-10 (Total) <= 0.0081 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	PM-2.5 (Total) <= 0.0081 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	Benzene <= 0.00075 tons/yr. Maximum emission rate for the generator. This emission rate is based on generator Maximum Annual Heat Input from ULSD (MMBTU/yr) and ULSD emission factor (lb/MMBtu). Emission factors used are from AP-42 Chapter 3.3, Table 3.3-2. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
17	The owner or operator shall keep records of engine manufacturer data for the life of the equipment showing the rated Maximum Gross Heat Input, Maximum Rated Power Output, Model Year and Displacement. [N.J.A.C. 7:27-22.16(a)]	None.	Other: The owner or operator shall keep records of engine manufacturer data for the life of the equipment showing the rated Maximum Gross Heat Input, Maximum Rated Power Output, Model Year and Displacement. [N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	The Emergency Generator may be operated at other locations (within the State of New Jersey) only in the event of an emergency, as defined at N.J.A.C. 7:27-19.1. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event 1. For each time the emergency generator is operated at a location other than the facility for which it is originally permitted in the event of an emergency, the Permittee of the emergency generator shall record the following: i) Document the location (name of facility with address) where the emergency generator is operated; ii) Document the emergency that occurred and describe whether the emergency was due to internal or external loss of primary source of energy at the location; iii) If emergency is due to internal loss at the location, document the damages to the primary source of energy and the amount of time needed for repairs; iv) Document the date(s) of operation and the start up and shut down time on each date; v) Document the total operating time at the location based on the generator's hour meter and the total amount of fuel and fuel type used for the duration of the emergency; vi)The name and contact information of the operator of the emergency generator at the location. 2. If a voltage reduction is the reason for the use of the emergency generator, a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction. The Permittee of the emergency generator shall have the above records on site within 30 days of the occurrence of the emergency event, maintain the record for a period of no less than 5 years after the record was made, and shall make the records readily available to the Department or the EPA upon request. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	Emissions of all other contaminants, are below the respective reporting thresholds per N.J.A.C. 7:27-22 Appendix Tables A & B and as per N.J.A.C. 7:27-17.9. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
20	All requests, reports, applications, submittals, and other communications to the Administrator pursuant to Part 60 shall be submitted in duplicate to the Regional Office of US Environmental Protection Agency. Submit information to: Director, Division of Enforcement & Compliance Assistance, US EPA, Region 2, 290 Broadway, New York, NY 10007-1866 (NSPS Subpart A). [40 CFR 60.4(a)]	None.	None.	Submit a report: As per the approved schedule to EPA Region 2 as required by 40 CFR 60. [40 CFR 60.4(a)]
21	Copies of all information submitted to EPA pursuant to 40 CFR Part 60, must also be submitted to the appropriate Regional Enforcement Office of NJDEP (NSPS Subpart A). [40 CFR 60.4(b)]	None.	None.	Submit a report: As per the approved schedule to the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60. [40 CFR 60.4(b)]
22	No owner or operator subject to NSPS standards in Part 60, shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere (NSPS Subpart A). [40 CFR 60.12]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
23	The owner or operator shall notify the Administrator of the proposed replacement of components (NSPS Subpart A). [40 CFR 60.15]	None.	None.	Submit notification: At a common schedule agreed upon by the operator and the Administrator. The notification shall include information listed under 40 CFR Part 60.15(d). The notification shall be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced. [40 CFR 60.15(d)]
24	Changes in time periods for submittal of information and postmark deadlines set forth in this subpart, may be made only upon approval by the Administrator and shall follow procedures outlined in 40 CFR Part 60.19 (NSPS Subpart A). [40 CFR 60.19]	None.	None.	None.
25	Owners and operators of stationary CI internal combustion engines must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 60.4205 over the entire life of the engine. [40 CFR 60.4206]	None.	Other: The owner or operator shall keep the manufacturer's emission-related written instructions over the entire life of the engine. [40 CFR 60.4206].	None.
26	Beginning October 1, 2010, the CI internal combustion engines with a displacement of less than 30 liters per cylinder subject to NSPS IIII (manufactured after April 1, 2006 or modified or reconstructed after July 11, 2005) that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) that contains the following per gallon standards: 15 ppm (0.0015 percent) maximum sulfur content and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR 60.4207(b)]	Monitored by review of fuel delivery records once per bulk fuel shipment. For each diesel delivery received, the owner or operator shall review written documentation of the delivery to ensure the maximum allowable fuel oil sulfur content and either a minimum cetane index or a maximum aromatic content is not being exceeded. Such written documentation can include, but is not limited to: bill of lading, delivery invoice, certificate of analysis. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by invoices / bills of lading / certificate of analysis once per bulk fuel shipment. The owner or operator shall keep records of fuel showing oil sulfur content and either a minimum cetane index or a maximum aromatic content for each delivery received. All records must be maintained for a minimum of 2 years following the date of such records per 40 CFR 60.7(f). [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
27	The owner or operator that must comply with the emission standards specified in NSPS IIII must operate and maintain the stationary CI internal combustion engine and control device, except as permitted under 40 CFR 60.4211(g), according to the manufacturer's emission-related written instructions. In addition, owners and operators may only change emission-related settings that are permitted by the manufacturer. The owner or operator must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as applicable (NSPS Subpart IIII). [40 CFR 60.4211(a)]	None.	Other: The owner or operator shall keep the manufacturer's emission-related written instructions. [40 CFR 60.4211].	None.
28	Emergency generators may be operated for the purpose of maintenance checks and readiness testing limited to 100 hours per year, provided that those tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year (NSPS Subpart IIII). [40 CFR 60.4211(f)]	Monitored by hour/time monitor continuously. The owner or operator of an emergency stationary internal combustion engine that does not meet the standards applicable to non-emergency engines must install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator must record the time of operation of the emergency engine and the reason the engine was in operation during that time. Starting with the model year 2011, 2012, or 2013, depending on the maximum engine power as provided in Table 5 in NSPS IIII, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter if the emergency engine does not meet the standards in 40 CFR 60.4204, applicable to non-emergency engines, in the applicable model year. The emergency engine must comply with the labeling requirements in 40 CFR 60.4210(f). [40 CFR 60.4214(b)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
29	The owner or operator of a 2011 model year and later emergency generator with the maximum engine power > 3,000 HP (> 2,237 kW) and a displacement of < 10 liters per cylinder must comply with the certification emissions standards in 40 CFR 89.112 and smoke standards in 40 CFR 89.113 for the same model year and same maximum engine power as follows: NMHC + NOx <= 6.4 g/kW-hr, CO <= 3.5 g/kW-hr, PM <= 0.2 g/kW-hr, weighted average emissions as defined in 40 CFR 89.404. (NSPS Subpart IIII). [40 CFR 60.4205(b)]	None.	Other: The owner or operator of a 2007 model year or later engine must keep manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power. [40 CFR 60.4211].	None.
30	The owner or operator of a 2007 model year and later stationary CI internal combustion engine complying with the emission standards specified in 40 CFR 60.4205(b), must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b), for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications (NSPS Subpart IIII). [40 CFR 60.4211(c)]	None.	Other: The owner or operator must keep documentation from the manufacturer, for the life of the equipment, that the engine is certified to meet the emission standards as applicable, for the same model year and maximum engine power. If the engine and control device is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or emission-related settings are changed in a way that is not permitted by the manufacturer, the owner or operator must demonstrate compliance as prescribed at 40 CFR 60.4211(g)(1), (2) or (3) depending on the maximum engine power. [40 CFR 60.4211(c)].	None.
31	A new or reconstructed stationary RICE located at an area HAP source must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60 subpart IIII, for compression ignition engines or 40 CFR 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR 63. (MACT ZZZZ) [40 CFR 63.6590(c)]	Other: Comply with all applicable provisions at NSPS IIII. [40 CFR 63].	Other: Comply with all applicable provisions at NSPS IIII. [40 CFR 63].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
32	At all times the owner or operator must operate and maintain a RICE, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.6605(b)]	None.	None.	None.
33	Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. [40 CFR 63.6640(f)(2i)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U40 EDG**
Operating Scenario: **OS1 Emergency CI Engine 560<=kW<=2237(750<=HP<=3000), 2007 model year or later**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 35.3 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	CO <= 1.94 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.
3	VOC (Total) <= 0.71 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	TSP <= 0.16 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 0.16 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 0.16 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Benzene <= 0.015 lb/hr. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
8	Methane <= 0.13 lb/hr. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
9	Maximum Gross Heat Input <= 19.3 MMBTU/hr (HHV) higher heating value (HHV) of the fuel. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records showing maximum heat input rate for the Generator[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers**

Subject Item: **CD15 Water Injection Unit 1 Module 1101, CD19 Water Injection Unit 1 Module 1201, CD23 Water Injection Unit 2 Module 2101, CD27 Water Injection Unit 2 Module 2201**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Water-to-Fuel Ratio >= 0.9 lb of water per pound of fuel oil. [N.J.A.C. 7:27-22.16(a)]	Water-to-Fuel Ratio: Monitored by water-to-fuel monitoring device continuously, based on no averaging period. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(e)]	Water-to-Fuel Ratio: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.
2	The permittee shall operate the Water Injection System during all periods that the gas turbine is firing ULSD, except during start-up, shutdown, mechanical safety testing, or fuel transfer periods, and periods when natural gas is fired. [N.J.A.C. 7:27-22.16(e)]	Monitored by other method (provide description) upon occurrence of event, based on an instantaneous determination. The permittee shall monitor the time-periods when the Water Injection System is operating corresponding to when ULSD is fired, except during start-up, shutdown, mechanical safety testing, or fuel transfer periods. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter upon occurrence of event. The permittee shall record the date and time when Water Injection System is operating. [N.J.A.C. 7:27-22.16(e)]	None.

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Facility Specific Requirements

Emission Unit: U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers

Subject Item: CD16 Selective Catalytic Reduction Unit 1 Module 1101, CD20 Selective Catalytic Reduction Unit 1 Module 1201, CD24 Selective Catalytic Reduction Unit 2 Module 2101, CD28 Selective Catalytic Reduction Unit 2 Module 2201

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Ammonia Flow Rate to SCR >= 15 gal/hr. The permittee shall use a 25% (v/v) minimum concentration of aqueous ammonia in the SCR unit for reducing NOx emissions at the stack. The permittee shall not be considered in violation for any deviation from this requirement if corresponding NOx emissions from the gas turbine are in compliance with applicable emission limits as defined in this permit. [N.J.A.C. 7:27-22.16(e)]	Ammonia Flow Rate to SCR: Monitored by material feed/flow monitoring continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(e)]	Ammonia Flow Rate to SCR: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.
2	The SCR(s) shall be maintained and replaced in accordance with the recommendations of the manufacturer, and as necessary based on NOx emission levels indicated through stack testing. [N.J.A.C. 7:27-22.16(e)]	Monitored by documentation of construction once initially, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by manual logging of parameter once initially. The permittee shall maintain catalyst as-built configuration and manufacturer's documentation on-site. [N.J.A.C. 7:27-22.16(e)]	None.
3	The SCR shall be operated at all times that the turbine is operating, except during start-up, shutdown, mechanical safety testing or fuel transfer periods. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	The Selective Catalytic Reduction system shall be used to destroy Nitrogen Oxides (NOx) resulting from combustion of natural gas in the turbine, at the recommended manufacturer's operating flue gas flowrate range, as shall be determined during normal on-site operations, such that NOx (Total) emissions as established in this permit, are met. [N.J.A.C. 7:27-22.16(e)]	Monitored by documentation of construction once initially, based on an instantaneous determination. The permittee shall provide manufacturer's documentation describing the performance of the SCR system to control NOx at minimum and maximum turbine operating loads, and at maximum flue gas capacity. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by manual logging of parameter once initially. The permittee shall maintain SCR system manufacturer's documentation, specifications and operation and maintenance manual on-site. [N.J.A.C. 7:27-22.16(e)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	Temperature >= 550 degrees F upstream of SCR, except during startups/shutdowns, mechanical safety testing or fuel transfer periods. [N.J.A.C. 7:27-22.16(a)]	Temperature: Monitored by temperature instrument continuously, based on a 1 hour block average. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Temperature: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.
6	Ammonia <= 10 ppmvd. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	The catalyst array(s) shall be maintained and replaced in accordance with the recommendations and schedules of the manufacturer, based on usage rate. [N.J.A.C. 7:27-22.16(e)]	Monitored by documentation of construction once initially, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. The permittee shall keep catalyst arrays maintenance or replacement records on-site. [N.J.A.C. 7:27-22.16(e)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers

Subject Item: CD17 Oxidation Catalyst Unit 1 Module 1101, CD21 Oxidation Catalyst Unit 1 Module 1201, CD25 Oxidation Catalyst Unit 2 Module 2101, CD29 Oxidation Catalyst Unit 2 Module 2201

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The catalyst array(s) shall be maintained and replaced in accordance with the recommendations and schedules of the manufacturer, based on usage rate. [N.J.A.C. 7:27-22.16(e)]	Monitored by documentation of construction once initially, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by manual logging of parameter once initially. The permittee shall keep catalyst arrays maintenance or replacement records on-site. [N.J.A.C. 7:27-22.16(e)]	None.
2	Design VOC Control Efficiency >= 35 % The Catalytic Oxidizer (CD17, CD21, CD25 and CD29) shall be used to destroy volatile organic compounds (VOC) resulting from the combustion of natural gas in the turbine at the recommended manufacturer's operating flue gas flowrate range, as shall be determined during normal on-site operations. [N.J.A.C. 7:27-22.16(e)]	Design VOC Control Efficiency: Monitored by documentation of construction once initially, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(e)]	Design VOC Control Efficiency: Recordkeeping by manual logging of parameter once initially. The permittee shall keep CO catalyst manufacturer documentation and specifications on-site. [N.J.A.C. 7:27-22.16(e)]	None.
3	Destruction and Removal Efficiency >= 70 % for CO. The Catalytic Oxidizer (CD17, CD21, CD25 and CD29) shall be used to destroy carbon monoxide (CO) resulting from the combustion of natural gas in the turbine at the recommended manufacturer's operating flue gas flowrate range, as shall be determined during normal on-site operations. The minimum CO destruction efficiency shall correspond to 70%, such that CO emissions limits, as established in this permit, are met. [N.J.A.C. 7:27-22.16(a)]	Destruction and Removal Efficiency: Monitored by documentation of construction once initially, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(e)]	Destruction and Removal Efficiency: Recordkeeping by manual logging of parameter at the approved frequency. The permittee shall maintain Catalytic Oxidizer system manufacturer's documentation, specifications, and operation & maintenance manual (O&M) on-site. [N.J.A.C. 7:27-22.16(e)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	Temperature at Entrance of Catalyst >= 550 degrees F and Temperature at Exit of Catalyst <= 800 degrees F except during startup/shutdown, mechanical safety testing or fuel transfer periods. [N.J.A.C. 7:27-22.16(a)]	Other: Temperature at Entrance of Catalyst: Monitored by temperature instrument continuously, based on 1-hour block average. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers**

Subject Item: **CD18 Dry Low Nox Unit 1 Module 1101, CD22 Dry Low Nox Unit 1 Module 1201, CD26 Dry Low Nox Unit 2 Module 2101, CD30 Dry Low Nox Unit 2 Module 2201**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Dry Low NOx combustor shall be used and operated all times that the combustion tubines are combusting natural gas, except during start-up, shutdown, mechanical safety testing, and fuel transfer periods. [N.J.A.C. 7:27-22.16(e)]	Monitored by documentation of construction once initially, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by manual logging of parameter once initially. All records of use shall be maintained on-site. [N.J.A.C. 7:27-22.16(e)]	None.
2	The permittee shall install, operate and maintain Dry Low NOx Burners on the gas turbine as per manufacturer's requirements. [N.J.A.C. 7:27-22.16(e)]	Monitored by documentation of construction once initially, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by manual logging of parameter once initially. The permittee shall maintain Dry Low NOx Burner manufacturer's specifications and operation and maintenance manual on-site. [N.J.A.C. 7:27-22.16(e)]	None.

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Facility Specific Requirements

Emission Unit: **U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers**
Operating Scenario: **OS Summary**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR 52.21 40 CFR 60 Subpart A 40 CFR 60 Subpart GG 40 CFR 72 - Acid rain and [40 CFR 97.CSAPR]	None.	None.	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	STACK TESTING SUMMARY. The permittee shall conduct a stack test no later than every five years (see General Provisions) from the last stack test using an approved protocol to demonstrate compliance with NOx and CO emissions for natural gas firing as specified in the compliance plan for OS1 thru OS12. Stack testing shall be conducted for NOx, CO, VOC, TSP, and PM10 emissions as specified in the compliance plan for GR4 and GR5 within 180 calendar days after a turbine (E24, E25, E26 or E27) reaches 300 operating hours on ultra low sulfur distillate oil (ULSD)) in a given calendar year for the first time during the 5 year permit term. Each turbine shall be tested a maximum of once per term when firing oil. Stack emission testing shall be conducted on the turbine operating in the following mode: (1) turbine combusting natural gas at maximum load without duct burner; (2) turbine combusting natural gas at maximum load with duct burner; (3) turbine combusting natural gas at minimum load without duct burner; (4) turbine combusting oil at maximum load without duct burner; and (5) turbine combusting oil at minimum load without duct burner. The heat input (MMBtu/hr, HHV) shall be determined for each stack test. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]	Other: Monitoring as required under the applicable operating scenario(s). The permittee may propose to use CEMS data to satisfy the stack testing requirements, for NOx and CO with EMS approval. In order for EMS to approve using CEMS data at the time of the stack test, the CEMS must be certified and be in compliance with all daily, quarterly and annual quality assurance requirements. The CEMS shall monitor and record emissions in units identical to those required by the applicable stack testing conditions of this permit. CEMS data, if allowed by this permit, shall be taken at the same worst case conditions as described in applicable requirement.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by stack test results at the approved frequency. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule.Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625. The stack test protocol for stack emission testing for natural gas burning shall be submitted at least 30 months prior to the expiration of the approved operating permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: http://www.epa.gov/ttnchie1/ert. The stack test protocol for stack emission testing when a turbine combusts ULSD oil shall be submitted within 30 calendar days after a turbine reaches 300 operating hours on ULSD oil in a given calendar year. Within 30 days of protocol approval, the permittee must contact EMS at 609-530-4041 to schedule a mutually acceptable test date. A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. Test results shall report lbs/hour, lbs/MM Btu (HHV) and ppmvd @ 15% O2 except for SO2, TSP and PM-10. [N.J.A.C. 7:27-22.18(e)] and [N.J.A.C. 7:27-22.18(h)]. [N.J.A.C. 7:27-22.16(o)]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	STACK TESTING SCHEDULE FOR EXPIRED PERMIT The permittee shall conduct a stack test no later than 42 months after the date of expiration of the operating permit using an approved protocol to demonstrate compliance with NOx and CO emissions for natural gas firing as specified in the compliance plan for OS1 thru OS12. Stack testing shall be conducted for NOx, CO, VOC, TSP, and PM10 emissions as specified in the compliance plan for GR4 and GR5 within 180 calendar days after a turbine (E24, E25, E26 or E27) reaches 300 operating hours on ultra low sulfur distillate oil (ULSD)) in a given calendar year for the first time during the 5 year permit term. Each turbine shall be tested a maximum of once per term when firing oil. Stack emission testing shall be conducted on the turbine operating in the following mode: (1) turbine combusting natural gas at maximum load without duct burner; (2) turbine combusting natural gas at maximum load with duct burner; (3) turbine combusting natural gas at minimum load without duct burner; (4) turbine combusting oil at maximum load without duct burner; and (5) turbine combusting oil at minimum load without duct burner. The heat input (MMBtu/hr, HHV) shall be determined for each stack test. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]	Other: Monitoring as required under the applicable operating scenario(s). The permittee may propose, in the stack test protocol, to use CEMS data to satisfy the stack testing requirements, for NOx and/or CO, with EMS approval. In order for EMS to approve using CEMS data at the time of the stack test, the CEMS must be certified and be in compliance with all daily, quarterly and annual quality assurance requirements. The CEMS shall monitor and record emissions in units identical to those required by the applicable stack testing conditions of this permit. CEMS data, if allowed by this permit, shall be taken at the same worst case conditions as described above.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. If an operating permit has expired, the permittee shall submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 no later than 30 months after the date of expiration of the operating permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: https://www.epa.gov/chief. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date. A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and [N.J.A.C. 7:27-22.18(h)]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	CEMS/COMS REQUIREMENTS SUMMARY. The Permittee shall operate CEMS according to the approved certification and in compliance with daily, quarterly, and annual quality assurance requirements. The CEMS shall include continuous monitoring of all necessary parameters (e.g. oxygen, moisture, temperature, flow rate) to allow the required corrections to be applied to demonstrate compliance with the emission limits. The Permittee shall request approval from the Department's Emission Measurement Section (EMS) to allow continued use of the existing CEMS when a change to the units of measurement is made to a permit limit. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain readily accessible records of the Permittee's written request to EMS, and the response from EMS . [N.J.A.C. 7:27-22.16(o)].	Comply with the requirement: Upon occurrence of event. Submit a written request to the EMS within 30 days from the date of the approved operating permit to determine whether a full CEMS recertification is required, whether the change can follow the procedures for data recording and storage equipment upgrades found in the Department's Technical Manual 1005 Section IV.B.3(f), or if continued use of the existing CEMS is allowed. [N.J.A.C. 7:27-22]
5	The owner or operator shall develop a QA/QC plan for all CEMS/COMS required by this permit prepared in accordance with the NJDEP Technical Manual 1005 posted on the BoSS webpage at https://dep.nj.gov/boss/ [N.J.A.C. 7:27-22.16(a)]	Other: The QA/QC coordinator shall be responsible for reviewing the QA/QC plan on an annual basis.[N.J.A.C. 7:27-22.16(o)].	Other: Maintain readily accessible records of the QA/QC plan including QA date and quarterly reports.[N.J.A.C. 7:27-22.16(o)].	Submit a report: Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). All quarterly and annual QA data shall be included in quarterly EEMPR reports and kept on file at the facility. The QA data must be made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]. [N.J.A.C. 7:27-22.16(o)]
6	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(b)]	VOC (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs (when firing fuel oil only). See U43 OS Summary for stack test details. [N.J.A.C. 7:27-16.9(b)]	VOC (Total): Recordkeeping by stack test results at the approved frequency. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-16.9(b)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-16.9(b)]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	The owner or operator of each stationary combustion turbine (1101, 1201, 2101 and 2201) that has a maximum gross heat input rate of 25 million BTU per hour or more and associated duct burner (if a duct burner is installed) shall ensure that the adjustment of the combustion process is carried out according to the manufacturer's recommended procedures and maintenance schedules as set forth at N.J.A.C. 7:27-19.16(g). [N.J.A.C 7:27-22.16(a)], [N.J.A.C.7:27-16.9(f)] and [N.J.A.C. 7:27-19.5(e)]	Other: Monitored by continuous emission monitoring (CEMS) or by periodic emission monitoring upon performing combustion adjustment. If not using a certified CEMS, monitoring shall be performed in accordance with the specific procedures for combustion adjustment monitoring specified in NJDEP Technical Manual 1005.[N.J.A.C. 7:27-19.16(g)].	Recordkeeping by data acquisition system (DAS) / electronic data storage upon performing combustion adjustment or by manual logging of parameter or storing data in a computer data system. The permittee shall record the following information for each adjustment in a log book or computer data system: 1. The date and times the adjustment began and ended; 2. The name, title, and affiliation of the person who performed the procedure and adjustment; 3. The type of procedure and maintenance performed; 4. The concentration of NOx, CO, and O2 measured before and after the adjustment was made; and 5. The type and amount of fuel use over the 12 months prior to the adjustment. The records shall be kept for a minimum of 5 years and be readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(h)]	None.
8	The Permittee of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)]	Other: Monitor and maintain the operating parameter settings that are established after the combustion process is adjusted in order to operate consistent with the annual adjustment.[N.J.A.C. 7:27-22.16(o)].	Other: : The owner or operator shall record the operating parameter settings that are established after the combustion process is adjusted.[N.J.A.C. 7:27-22.16(o)].	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	An exceedance of an emission limit that occurs during an adjustment of the combustion process under N.J.A.C. 7:27-19.16(g) is not a violation of this subchapter if it occurs as a result of the adjustment. After the combustion adjustment has been completed, the maximum emission rate of any contaminant shall not exceed the maximum allowable emission rate applicable under this subchapter or under an operating permit issued pursuant to N.J.A.C. 7:27-22 or an applicable certificate issued pursuant to N.J.A.C. 7:27-8. [N.J.A.C. 7:27-19.16(f)]	None.	None.	None.
10	NOx (Total) <= 0.75 lb/MW-hr. NOx RACT emission limit applies during during all periods of natural gas combustion as well as during operation on high electric demand days, regardless of fuel combusted, unless combusting gaseous fuel is not possible due to gas curtailment. [N.J.A.C. 7:27-19.5(g)(2), Table 7] Note: This emission limit applies on and after May 1, 2015. "High electric demand day"or "HEDD" means the day following a day in which the next day forecast load is estimated to have a peak value of 52,000 megawatts or higher as predicted by the PJM Interconnection 0815 update to its Mid Atlantic Region Hour Ending Integrated Forecast Load, available from PJM Interconnection at http://oasis.pjm.com/doc/projload.txt. [N.J.A.C. 7:27-19.5(g)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-19.15(a)1]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Obtain approval: Within 60 days from the date of the approved permit , BOP100001, from EMS at PO Box 437, Trenton, NJ 08625 to use existing CEMS for measuring NOx emissions in lb./MW-hr. [N.J.A.C. 7:27-22.16(o)]
11	NOx (Total) <= 1.2 lb/MW-hr. NOx RACT emission limit applies during all periods of ULSD combustion. [N.J.A.C. 7:27-19.5(g)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-19.15(a)1]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(o)]	Obtain approval: Within 60 days from the date of the approved permit , BOP100001, from EMS at PO Box 437, Trenton, NJ 08625 to use existing CEMS for measuring NOx emissions in lb./MW-hr. [N.J.A.C. 7:27-22.16(o)]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	The permittee shall install, certify, operate and maintain all approved continuous emission monitoring equipment. [N.J.A.C. 7:27-22.16(e)]	Monitored by documentation of construction once initially, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by manual logging of parameter once initially. The permittee shall maintain documentation and certification records of continuous emission monitoring equipment on-site for at least five (5) years and readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	Install equipment: As per the approved schedule. The permittee shall install continuous emissions monitoring equipment prior to initial operation. [N.J.A.C. 7:27-22.16(e)]
13	The permittee shall submit an Excess Emission Monitoring Performance Report to the Department for review and approval [N.J.A.C. 7:27-22.16(e)]	None.	None.	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal to the Department for review and approval. [N.J.A.C. 7:27-22.16(e)]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	No more than three of the four modules 1101, 1201, 2101 and 2201 shall operate simultaneously on ultra low sulfur distillate oil (ULSD) except during an emergency as defined under N.J.A.C. 7:27-22.1 [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(a)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (a) The owner or operator shall maintain on site and record in a logbook or computer data system, the following information: 1.Once per month, the total operating time on ULSD from all the modules' hour meter; 2. For each time all the four modules are specifically operated at the same time on ULSD for emergency: i.The reason for their emergency operation; ii. The date(s) of emergency operation and the start up and shut down time; iii. The total operating time for emergency based on each modules's hour meter; and iv. The name of the operator; and 3. If a voltage reduction is the reason for the use of the emergency operation, a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction. (b) The owner or operator shall maintain the records required under (a) above for a period of no less than five years after the record was made and shall make the records readily available to the Department or the EPA upon request. [N.J.A.C. 7:27-22.16(o)]	None.
15	Fuel limited to natural gas and/or ultra low sulfur distillate oil (ULSD) with a sulfur content of 0.0015% by weight or less . [N.J.A.C. 7:27-22.16(o)]	Other: Monitored by fuel delivery records per delivery.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by invoices / bills of lading per delivery. [N.J.A.C. 7:27-22.16(a)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	Fuel Oil Usage: <= 1.54 E12 Btu/any period of 365 consecutive days for all four turbines (E24, E25, E26 and E27) combined. The annual heat input for each turbine during any consecutive 365-day period shall be calculated by adding the heat input for a given day to the total heat input during the preceding 364 day period. [N.J.A.C. 7:27-22.16(a)]	Fuel Oil Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). The permittee shall install and operate a running oil and gas use-totalizing meters on each turbine to monitor the consumption of oil and natural gas, per turbine, in any calendar year. The running oil and gas meters shall be installed, operated and calibrated according to manufacturer's recommendations. Heat input shall be determined by the method prescribed in 40 CFR part 75 Appendix D. [N.J.A.C. 7:27-22.16(e)]	Fuel Oil Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Compliance shall be determined based on 365 consecutive day period computed with daily sums. [N.J.A.C. 7:27-22.16(e)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	The combined annual heat input limit for Unit Nos. 1 and 2 based on the preconstruction permit is 6.844E13 Btu (HHV)/any consecutive 365 days, corresponding to a maximum of 85% annual utilization rate. Total annual heat input during any consecutive 365-day period shall be calculated by adding the total heat input for a given day to the total heat input during the preceding 364 day period. Daily MMBtu fuel use shall be calculated using the following formula: (MMBtu (HHV)/day = [(X Btu/scf) x (scf of natural gas consumed by Unit Nos. 1 and 2 without duct firing per day) + (Y Btu/gal) x (gallons of ULSD consumed by Unit Nos. 1 and 2 per day) x (1.30) + (Z Btu/scf) x (scf of Natural gas consumed by unit Nos. 1 and 2 with associated duct burners per day) x (1.19). X & Z = heating value of natural gas, Y = heating value of ULSD with X, Y and Z determined using the method prescribed in 40 CFR 75 Appendix D. The procedure will begin with the first day following the issuance of the operating permit. This accounting will not include fuel consumption for the days prior to the operating permit approval. [N.J.A.C. 7:27-22.16(a)]	Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). The permittee shall install and operate a running oil and gas use-totalizing meters on each turbine to monitor the consumption of oil and natural gas, per turbine, in any calendar year. The running oil and gas meters shall be installed, operated and calibrated according to manufacturer's recommendations. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. All operating records, including annual fuel usage of natural gas and ULSD, with and without duct firing, shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
18	Maximum Gross Heat Input <= 2,650 Million British Thermal Units per hour (MMBTU/hr) per module. [N.J.A.C. 7:27-22.16(a)]	Monitored by fuel flow/firing rate instrument continuously, based on a 3 hour rolling average based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system continuously. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	PM-2.5 (Total) <= 506.7 tons/yr. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations annually, based on a 12 calendar month period. Total annual PM-2.5 (total) emissions during any consecutive 12-month period shall be calculated by adding the total PM-2.5(total) emissions for a given month to the total PM-2.5 (total) emissions during the preceding 11month period. Monthly PM-2.5 (total) emission shall be calculated using the following formula PM-2.5(total)/month = {[Emission rate from the most recent stack test (lb/MMBtu) x Monthly heat input from 4 turbines and associated duct burners when burning natural gas (MMBtu/month)] + [Emission rate from the most recent stack test (lb/MMBtu) x Monthly heat input from 4 turbines and associated duct burners when burning ULSD (MMBtu/month)] + [3.35 lb/hr x monthly hours of operation of two cooling towers]} / 2000 lb/ton. The most recent PM-10 stack test result may be used to represent the PM-2.5 emission rate. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter annually. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	PM-10 (Total) <= 506.7 tons/yr [N.J.A.C. 7:27-22.16(a)] and. [40 CFR 52.21]	PM-10 (Total): Monitored by calculations annually, based on a 12 calendar month period Total annual PM-10 (total) emissions during any consecutive 12-month period shall be calculated by adding the total PM-10 (total) emissions for a given month to the total PM-10 (total) emissions during the preceding 11month period. Monthly PM-10 (total) emission shall be calculated using the following formula PM-10 (total)/month = {[Emission rate from the most recent stack test (lb./MMBtu) x Monthly heat input from 4 turbines and associated duct burners when burning natural gas (MMBtu/month)] + [Emission rate from the most recent stack test (lb./MMBtu) x Monthly heat input from 4 turbines and associated duct burners when burning ULSD (MMBtu/month)] + [3.35 lb./hr x monthly hours of operation of two cooling towers]} / 2000 lb./ton. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter annually. All records shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	TSP <= 288 tons/yr [N.J.A.C. 7:27-22.16(a)] and. [40 CFR 52.21]	TSP: Monitored by calculations annually, based on a 12 calendar month period Total annual TSP emissions during any consecutive 12-month period shall be calculated by adding the total TSP emissions for a given month to the total TSP emissions during the preceding 11month period. Monthly TSP emission shall be calculated using the following formula TSP/month = {[Emission rate from the most recent stack test (lb/MMBtu) x Monthly heat input from 4 turbines and associated duct burners when burning natural gas (MMBtu/month)] + [Emission rate from the most recent stack test (lb/MMBtu) x Monthly heat input from 4 turbines and associated duct burners when burning ULSD (MMBtu/month)] + [3.35 lb/hr x monthly hours of operation of two cooling towers]}/ 2000 lb/ton. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter annually. All records shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
22	VOC (Total) <= 94.5 tons/yr [N.J.A.C. 7:27-22.16(e)], and. [N.J.A.C. 7:27-18.3(b)]	VOC (Total): Monitored by calculations annually, based on a 12 calendar month period. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Recordkeeping by manual logging of parameter annually. All records shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
23	NOx (Total) <= 260 tons/yr [N.J.A.C. 7:27-22.16(e)], [N.J.A.C. 7:27-18.3(b)], and. [40 CFR 52.21]	NOx (Total): Monitored by calculations annually, based on a 12 calendar month period. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by manual logging of parameter annually. All records shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
24	CO <= 165.6 tons/yr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by calculations annually, based on a 12 calendar month period. [N.J.A.C. 7:27-22.16(e)]	CO: Recordkeeping by manual logging of parameter annually. All records shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
25	SO2 <= 32.1 tons/yr. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations annually, based on a 12 calendar month period. [N.J.A.C. 7:27-22.16(e)]	SO2: Recordkeeping by manual logging of parameter annually. All records shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
26	Ammonia <= 467 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine. Emission factors for combustion turbines sed are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas turbines -Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
27	Methane <= 78.3 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and duct burners, and natural gas emission factor (lb/MMBtu) from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations annually, based on a 12 calendar month period. [N.J.A.C. 7:27-22.16(e)]	Methane: Recordkeeping by manual logging of parameter annually. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
28	Sulfuric Acid <= 9.3 tons/yr. [N.J.A.C. 7:27-22.16(e)] [40 CFR 52.21]	Monitored by calculations annually, based on a 12 calendar month period. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by manual logging of parameter annually. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
29	Acetaldehyde <= 1.37 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine. Emission factors for combustion turbines sed are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas turbines -Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
30	Acrolein <= 0.219 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine. Emission factors for combustion turbines sed are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas turbines -Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(e)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
31	Arsenic compounds <= 0.0118 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine, plus CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu) for combustion turbine, plus Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. Natural gas emission factors for combustion turbines are from EPRI ULSD Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(e)]	Arsenic compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(e)]	Arsenic compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
32	Benzene <= 0.469 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine, plus CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu) for combustion turbine, plus Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. Emission factors for combustion turbines sed are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas turbines -Fired Turbines. Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
33	Beryllium Emissions <= 0.000333 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu) for combustion turbine, plus Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. ULSD Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
34	Butadiene (1,3-) <= 0.0271 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu) for combustion turbine, plus Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. ULSD Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(e)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter annually. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
35	Cadmium compounds <= 0.0125 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu) for combustion turbine, plus Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. ULSD Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Cadmium compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
36	Chromium Emissions <= 0.0194 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine, plus CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu) for combustion turbine, plus Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. Emission factors for combustion turbines sed are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas turbines -Fired Turbines. Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Chromium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Chromium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
37	Dioxins/Furans (Total) <= 0.00000855 tons/yr. Maximum emission rate for 4 combustion turbines (CT) . This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine. Emission factors for combustion turbines are from EPRI. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
38	Ethylbenzene <= 1.1 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine, Emission factors for combustion turbines sed are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas turbines -Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	None.	None.
39	Formaldehyde <= 25.1 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine, plus CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu) for combustion turbine, plus Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. Emission factors for combustion turbines sed are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas turbines -Fired Turbines. Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
40	Hexane (n-) <= 14.1 tons/yr. Maximum emission rate for 4 duct burners. This emission rate is based on Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Hexane (n-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Hexane (n-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
41	Pb <= 0.0325 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine, plus CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu) for combustion turbine, plus Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. Natural gas emission factors for combustion turbines are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas turbines -Fired Turbines. ULSD Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
42	Manganese compounds <= 0.353 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine, plus CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu) for combustion turbine, plus Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. Emission factors for combustion turbines are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas turbines -Fired Turbines. Emission factors used are from California Air Toxic Emission factor (CATEF, CARB 1996) for oil fired turbines. Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Manganese compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Manganese compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
43	Mercury Emissions <= 0.0174 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine, plus CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu) for combustion turbine, plus Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. Natural gas emission factors for combustion turbines are from EPRI. Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by manual logging of parameter annually. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
44	Nitrous oxide <= 8.3 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and duct burners, and natural gas emission factor (lb/MMBtu) from 40 CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Nitrous oxide: Monitored by formulation data once initially. [N.J.A.C. 7:27-22.16(0)]	Nitrous oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
45	2-Methylnapthalene <= 0.00618 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine, plus CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu) for combustion turbine, plus Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. CT Emission factors used are from EPRI Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
46	Naphthalene <= 0.0763 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine, plus CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu) for combustion turbine, plus Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. Natural gas Emission factors for combustion turbines are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas turbines -Fired Turbines. ULSD Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
47	Nickel Emissions <= 0.0709 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine, plus CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu) for combustion turbine, plus Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. Natural gas Emission factors for combustion turbines are from EPRI ULSD Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
48	Polynuclear aromatic hydrocarbons (PAHs) <= 0.111 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine, plus CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu) for combustion turbine, plus Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. Natural gas Emission factors for combustion turbines are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas turbines -Fired Turbines. Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAH's): Recordkeeping by manual logging of parameter annually. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
49	Polycyclic organic matter <= 0.111 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine, plus CT Maximum Annual Heat Input from ULSD (MMBTU/yr) for all four turbines and ULSD emission factor (lb/MMBtu) for combustion turbine, plus Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four duct burners and natural gas emission factor (lb/MMBtu) for duct burner. Natural gas Emission factors for combustion turbines are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas turbines -Fired Turbines. Emission factors used are from AP-42 5th Edition, Table 3.1-4 and 3.1-5 (Dated 4/2000) - Oil-Fired Turbines. Emission factors for duct burners are from AP-42 5th Edition, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
50	Propylene oxide <= 0.992 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine. Emission factors for combustion turbines sed are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas turbines -Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
51	Toluene <= 4.45 tons/yr. Maximum emission rate for 4 combustion turbines (CT) and 4 duct burners. This emission rate is based on CT Maximum Annual Heat Input from natural gas (MMBTU/yr) for all four turbines and natural gas emission factor (lb/MMBtu) for combustion turbine. Emission factors for combustion turbines sed are from AP-42 5th Edition, Table 3.1-3 (Dated 4/2000) - Natural Gas turbines -Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Toluene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Toluene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
52	All requests, reports, applications, submittals, and other communications required by 40 CFR 60 shall be submitted in duplicate to the EPA Region II Administrator. [40 CFR 60.4(a)]	None.	None.	Other (provide description): As per the approved schedule , submit reports to EPA Region II as required by 40 CFR 60. Submit Information to: Director, Air and Waste Management Division, US Environmental Protection Agency, Region II, 290 Broadway, New York, NY 10007-1866. [40 CFR 60.4(a)]
53	Submit a copy of all requests, reports, applications, submittals, and other communication required by 40 CFR 60 to the applicable Enforcement Office of NJDEP. [40 CFR 60.4(b)]	None.	None.	Other (provide description): As per the approved schedule , submit reports to applicable NJDEP Regional Office as required by 40 CFR 60. [40 CFR 60.4(b)]
54	The owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Administrator a written notification of the actual date of initial startup of the facility, postmarked within 15 days after such date. [40 CFR 60.7(a)(3)]	None.	None.	Submit a report: As per the approved schedule. The permittee shall notify the Department within fifteen (15) days from the actual date of initial startup. [N.J.A.C. 7:27- 8]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
55	A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in section 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]	None.	None.	Comply with the requirement: Upon occurrence of event submit notification to EPA Region II and the applicable NJDEP Regional Office per 40 CFR 60.7. [40 CFR 60.7(a)(4)]
56	Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]	None.	Other: Manual logging of Parameter (Permanently Bound). Upon occurrence of event.[40 CFR 60.7(b)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
57	Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form (see section 60.7(d)) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). [40 CFR 60.7(c)]	Other: Perform monitoring in accordance with 40 CFR 60.13.[40 CFR 60.7(c)].	Other: Written reports of excess emissions shall include the following information: (1) The magnitude of excess emissions computed in accordance with section 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period and excess emissions. The process operating time during the reporting period. (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted. (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments. (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.[40 CFR 60.7(c)].	Other (provide description): As per the approved schedule submit report by the 30th day following the end of each calendar quarter. The reports shall be submitted to the EPA Region 2 Administrator, the applicable NJDEP Regional Office and Chief, Bureau of Technical Services, NJDEP, P.O. Box - 411, Trenton, NJ 08625-0411. [40 CFR 60.7(c)]
58	Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices ; and all other information required by this part recorded in a permanent form suitable for inspection. [40 CFR 60.7(f)]	None.	Other: See Applicable Requirement[40 CFR 60.7(f)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
59	The owner or operator shall conduct performance tests and data reduced in accordance with the test methods and procedures contained in each applicable subpart, unless otherwise apecified and approved by the Department. [40 CFR 60.8(b)]	None.	None.	None.
60	Performance tests shall be conducted under conditions the Administrator specifies to the plant operator based on representative performance of the facility. Operations during periods of startup, shutdown and malfunction shall not constitute representative conditions for the purpose of the performance test nor shall emissions in excess of the level of the applicable emission limit be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]	None.	None.	None.
61	The owner or operator shall provide the Administrator at least 30 days prior notice of any performance test and shall provide adequate performance testing facilites as specified in 40 CFR Part 60.8(e).[40 CFR 60.8(d)].	None.	None.	Submit a report: As per the approved schedule. Written notification shall be submitted to the applicable NJDEP Regional Office at least 30-days prior to any performance test. The permittee shall provide adequate performance testing facilities as specified in 40 CFR Part 60.8(e). [N.J.A.C. 7:27- 8]
62	Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method.[40 CFR 60.8(f)].	None.	None.	None.
63	Compliance with NSPS standards specified in this permit, other than opacity, shall be determined only by performance tests established by 40CFR60.8, unless otherwise specified in NSPS.[40 CFR 60.11(a)].	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
64	At all times, including periods of start-up, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operation and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]	None.	None.	None.
65	No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]	None.	None.	None.
66	All continuous emission monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests specified under 40 CFR Part 60.8. The owner or operator shall follow manufacturer's written recommendations for installation, operation and calibration of the device.[40 CFR 60.13(b)].	Monitored by other method (provide description) upon occurrence of event, based on an other averaging period (describe) During any performance test required under 40 CFR Part 60.8 or within 30 days thereafter, the owner or operator shall conduct a performance evaluation of the continuous emission monitoring system in accordance with applicable performance specification in Appendix B of 40 CFR Part 60. [40 CFR 60.13(c)]	None.	Submit a report: Within 60 days of completion of the performance test, furnish the Administrator two or, upon request, more copies of the results of the performance evaluation. [40 CFR 60.13(c)(2)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
67	The owner or operator shall perform calibrations and span adjustments for continuous emisson monitors and continuous opacity monitors following procedures outlined in 40 CFR Part 60.13(d)1 &2.[40 CFR 60.13(d)].	None.	None.	None.
68	Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all continuous monitoring systems measuring emissions except opacity shall be in continuous operation. They shall complete a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15-minute period.[40 CFR 60.13(e)(2)].	None.	None.	None.
69	All continuous monitoring systems or monitoring devices shall be installed such that representative process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring system contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used. [40 CFR 60.13(f)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
70	The owner or operator shall reduce all continuous monitoring systems (other than opacity) data to 1-hour averages which shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns,repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All exceedances shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit. [40 CFR 60.13(h)]	None.	Other: See Applicable Requirement.[40 CFR 60.13(h)].	None.
71	Changes in time periods for submittal of information and postmark deadlines set forth in this subpart, may be made only upon approval by the Administrator and shall follow procedures outlined in 40 CFR Part 60.19. [40 CFR 60.19]	None.	None.	None.
72	NOx (Total) <= 109 ppmvd @ 15% O2. The permittee shall not cause to be discharged into the atmosphere any gases which contain oxides of nitrogen in excess of emissions derived from 40 CFR 60.332(a)(1) [40 CFR 60.332(a)(1)] and. [40 CFR 60.332(b)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. [40 CFR 60.334(b)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [40 CFR 60.332(a)(1)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
73	Sulfur Content in Fuel <= 0.8 % by weight. The permittee shall not burn any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw). [40 CFR 60.333(b)]	Other: For gaseous fuel that is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u): Monitored by current, valid purchase contract, tariff sheet or transportation contract for gaseous fuel specifying that the maximum total Sulfur content of the fuel is 20.0 grains/100 scf or less. [40 CFR 60.334 (h)(3)(i)] and[40 CFR 60.335].	Sulfur Content in Fuel: Recordkeeping by other recordkeeping method (provide description) at no required frequency. Maintain current, valid tariff sheet for the gaseous fuel specifying that the maximum sulfur content of the fuel is 20.0 grains/100 scf or less. [40 CFR 60.334(h)(3)(i)]	None.
74	Sulfur Content in Fuel <= 0.8 % by weight. The permittee shall not burn any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw). [40 CFR 60.333(b)]	Other: For fuel oil: Pursuant to 40 CFR 60.334(i)(1), the Permittee shall monitor the sulfur content of fuel oil using one of the total sulfur sampling options and associated sampling frequency described in 40 CFR 60.334(i)(1). Test methods and procedures shall be consistent with the requirements of 40 CFR Part 60.335. A minimum of three fuel samples shall be collected during the performance test in accordance with 40 CFR 60.335(b)(10).[40 CFR 60.334(i)(1)].	Sulfur Content in Fuel: Recordkeeping by certified lab analysis results at the approved frequency. The permittee shall keep a record of each analysis of fuel sulfur content. [40 CFR 60.334(j)(2)]	None.
75	The permittee of a turbine that uses steam or water injection shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine. [40 CFR 60.334(a)]	Monitored by parametric monitoring system continuously to ensure the ratio of water or steam to fuel is maintained within the established acceptable values and ranges. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously or manual logging of parameter. [40 CFR 60.334(a)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
76	The permmitee shall monitor the total sulfur content of the fuel being fired in the turbine if the fuel fired in the turbine does not meet the definition of natural gas as provided in 40 CFR 60.331(u). The owner or operator shall use the methods specified in 40 CFR 60.335(b)10. The analyses may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency. [40 CFR 60.334(h)(1)]	Monitored by grab sampling at the approved frequency. Sulfur content values shall be determined on each occasion that fuel is transferred to the storage tank from any other source. If a custom fuel monitoring schedule has previously been approved, the owner or operator may continue monitoring on this schedule without submitting a special petition to the Administrator. [40 CFR 60.334(i)]	Recordkeeping by certified lab analysis results at the approved frequency. The owner or operator shall record the results of each analysis for fuel sulfur content. [40 CFR 60.334(i)]	None.
77	The permittee shall submit reports of excess emissions and monitor downtime for Nitrogen oxides in accordance with 40 CFR 63.334(j). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined in 40 CFR 60.334(j)(1). Any unit operating hour in which no water or steam is injected shall also be considered an excess emissions. [40 CFR 60.334(j)(1)]	None.	Recordkeeping by manual logging of parameter upon occurrence of event. [40 CFR 60.334(j)(1)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every quarter beginning on the 30th of the 3rd month following initial performance tests. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load. Pursuant to 40 CFR 60.334(j)5, all reports shall be postmarked by the 30th day following the end of each calendar quarter. [40 CFR 60.334(j)(1)]
78	For Turbine Combusting ultra low sulfur distillate oil (ULSD): The permittee shall switch to daily sampling, flow proportional sampling, or sampling flow unit's storage tank in accordance with 40 CFR 60.334(j)(2)(ii), if the sulfur content of the delivery exceed 0.8 weight percent. The permittee may resume using as delivered sampling option when all the fuel from the delivery has been burned. [40 CFR 60.334(j)(2)(ii)]	None.	Recordkeeping by manual logging of parameter upon occurrence of event. [40 CFR 60.334(j)(1)]	None.
79	Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit. [40 CFR 72]	Other: Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit.[40 CFR 72].	Other: Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit.[40 CFR 72].	Other (provide description): Other Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit. [40 CFR 72]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
80	The permittee shall comply with applicable requirements of Cross-State Air Pollution Rule (CSAPR) for the CSAPR NOx Annual Trading Program, CSAPR NOx Ozone Season Trading Program, and CSAPR SO2 Trading Program applicable to this affected unit [40 CFR 97]	Other: As per the applicable requirement[40 CFR 97].	Other: As per the applicable requirement[40 CFR 97].	Other (provide description): Other. As per the applicable requirement. [40 CFR 97]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers**

Operating Scenario: **OS1 Unit No. 1 Module 1101 Natural Gas Firing without Duct Firing, OS2 Unit No. 1 Module 1201 Natural Gas Firing without Duct Firing, OS3 Unit No. 2 Module 2101 Natural Gas Firing without Duct Firing, OS4 Unit No. 2 Module 2201 Natural Gas Firing without Duct Firing**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 10 % , exclusive of visible condensed water vapor, for a period of more than 10 seconds. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	NOx (Total) <= 0.0086 lb/MMBTU. The pounds of Nitrogen Oxides (NOx) as Nitrogen Dioxide (NO2), emitted per million British Thermal Units (MMBTU) combusted (lbs/MMBTU) shall not exceed 0.0086 at the High Heat Value (HHV). [N.J.A.C. 7:27-18.3(b)], [N.J.A.C. 7:27-22.16(e)], and. [40 CFR 52.21]	NOx (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. The permittee shall determine the lb NOx-NO2/MMBTU during stack testing, performed according to the conditions of this permit, while the turbine is operating at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. The lb NOx-NO2/MMBTU shall be computed as follows: lb NOx-NO2/hr divided by actual heat input (MMBTU/hr) at HHV during stack testing. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). The permittee shall record the lb NOx-NO2/MMBTU as measured through stack testing. All records and calculations shall be kept on-site, along with stack testing results, for at least five (5) years, made readily available to the Department upon request. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	NOx (Total) <= 0.096 lb/MW-hr The pounds of NOx emitted per Megawatts-Hour (lbs NOx/MW-hr) <= 0.096 per module at HHV. The lbs NOx/MW-hr shall be computed by dividing the lbs NOx/hr emitted with the Total MW produced by each gas turbine.[N.J.A.C. 7:27-18.3(b)], [N.J.A.C. 7:27-22.16(e)], and. [40 CFR 52.21]	NOx (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). The permittee shall record the lb NOx-NO2/MW-hr as measured through stack testing, as specified in the conditions of this permit. All records and calculations shall be kept on-site, along with stack testing results, for at least five (5) years, made readily available to the Department upon request. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(e)]	None.
4	TSP <= 11 lb/hr [N.J.A.C. 7:27-22.16(e)] and. [40 CFR 52.21]	None.	None.	None.
5	PM-10 (Total) <= 21 lb/hr [N.J.A.C. 7:27-22.16(e)] and. [40 CFR 52.21]	None.	None.	None.
6	PM-2.5 (Total) <= 21 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 7 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(e)]	CO: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test) See Stack Testing Summary at U43 OS Summary, for stack test details. All records shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(e)]
8	CO <= 2 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(e)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(a)]	CEMS/COMS - Submit equipment protocol, submit a PST protocol, conduct PST and submit results: As per the approved schedule. Refer to CEM requirements specified in this permit. [N.J.A.C. 7:27-22.16(e)]
9	SO2 <= 2 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	NOx (Total) <= 14.2 lb/hr [N.J.A.C. 7:27-18.3(b)], [N.J.A.C. 7:27-22.16(e)], and. [40 CFR 52.21]	NOx (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test).See Stack Testing Summary at U43 OS Summary, for stack test details. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(e)]
11	NOx (Total) <= 2 ppmvd @ 15% O2 [N.J.A.C. 7:27-18.3(b)], [N.J.A.C. 7:27-22.16(e)], and. [40 CFR 52.21]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(a)]	CEMS/COMS - Submit equipment protocol, submit a PST protocol, conduct PST and submit results: As per the approved schedule. Refer to CEM requirements specified in this permit. [N.J.A.C. 7:27-22.16(e)]
12	VOC (Total) <= 2.1 lb/hr. This limit includes formaldehyde emissions. [N.J.A.C. 7:27-22.16(e)], and. [N.J.A.C. 7:27-18.3(b)]	None.	None.	None.
13	VOC (Total) <= 2 ppmvd @ 15% O2. This limit includes formaldehyde emissions. [N.J.A.C. 7:27-22.16(e)], and. [N.J.A.C. 7:27-18.3(b)]	None.	None.	None.
14	Natural Gas Usage: <= 67,100E6 ft^3/any period of 365 consecutive days [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C. 7:27-22.16(e)]	Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage daily. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(a)]	None.
15	Acetaldehyde <= 0.106 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	Acrolein <= 0.017 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
17	Arsenic Emissions <= 0.000134 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
18	Benzene <= 0.0318 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
19	Butadiene (1,3-) <= 0.00114 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
20	Dioxins/Furans (Total) <= 0.000000663 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
21	Ethylbenzene <= 0.0848 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	Formaldehyde <= 1.88 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
23	Pb <= 0.00137 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
24	Manganese Emissions <= 0.021 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Manganese Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Manganese Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
25	Mercury Emissions <= 0.00111 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
26	2-Methylnaphthalene <= 0.00044 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
27	Nickel Emissions <= 0.00395 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
28	Naphthalene <= 0.00345 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for elec
OS1, OS2, OS3, OS4

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
29	Propylene oxide <= 0.0769 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
30	Polycyclic organic matter <= 0.00583 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
31	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00583 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
32	Toluene <= 0.345 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Toluene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Toluene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Emission Unit: **U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers**

Operating Scenario: **OS5 Unit No. 1 Module 1101 Natural Gas Firing with Duct Firing, OS6 Unit No. 1 Module 1201 Natural Gas Firing with Duct Firing, OS7 Unit No. 2 Module 2101 Natural Gas Firing with Duct Firing, OS8 Unit No. 2 Module 2201 Natural Gas Firing with Duct Firing**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 10 % , exclusive of visible condensed water vapor, for a period of more than 10 seconds. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	TSP <= 15.5 lb/hr [N.J.A.C. 7:27-22.16(e)] and. [40 CFR 52.21]	None.	None.	None.
3	PM-10 (Total) <= 30 lb/hr [N.J.A.C. 7:27-22.16(e)] and. [40 CFR 52.21]	None.	None.	None.
4	PM-2.5 (Total) <= 30 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	VOC (Total) <= 5.5 lb/hr. This limit includes formaldehyde emissions. [N.J.A.C. 7:27-22.16(e)], and. [N.J.A.C. 7:27-18.3(b)]	None.	None.	None.
6	VOC (Total) <= 5 ppmvd @ 15% O2 except for periods of start-up, shutdown and fuel transfer as defined in this permit. . This limit includes formaldehyde emissions. [N.J.A.C. 7:27-22.16(e)], and. [N.J.A.C. 7:27-18.3(b)]	None.	None.	None.
7	CO <= 11.8 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(e)]	CO: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). See Stack Testing Summary at U43 OS Summary, for stack test details. All records shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(e)]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	CO <= 2 ppmvd @ 15% O2 except for periods of startup, shutdown and fuel transfer as defined in this permit. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	CEMS/COMS - Submit equipment protocol, submit a PST protocol, conduct PST and submit results: As per the approved schedule. Refer to CEM requirements specified in this permit. [N.J.A.C. 7:27-22.16(e)]
9	SO2 <= 2 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
10	NOx (Total) <= 17.8 lb/hr [N.J.A.C. 7:27-22.16(e)], and,. [N.J.A.C. 7:27-18.3(b)]	NOx (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test) See Stack Testing Summary at U43 OS Summary, for stack test details. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(e)]
11	NOx (Total) <= 2 ppmvd @ 15% O2 except for periods of startup, shutdown and fuel transfer as defined in this permit. [N.J.A.C. 7:27-18.3(b)], [N.J.A.C. 7:27-22.16(e)], and,. [40 CFR 52.21]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(a)]	CEMS/COMS - Submit equipment protocol, submit a PST protocol, conduct PST and submit results: As per the approved schedule. Refer to CEM Requirements specified within this permit. [N.J.A.C. 7:27-22.16(o)]
12	Natural Gas Usage: <= 67,100E6 ft^3/any period of 365 consecutive days [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. . See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(e)]	Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage daily. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(a)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	NOx (Total) <= 0.0079 lb/MMBTU The pounds of Nitrogen Oxides (NOx) as Nitrogen Dioxide (NO2), emitted per million British Thermal Units (MMBTU) combusted (lbs/MMBTU) shall not exceed 0.0079 at the High Heat Value (HHV). [N.J.A.C. 7:27-18.3(b)], [N.J.A.C. 7:27-22.16(e)], and. [40 CFR 52.21]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. The permittee shall determine the lb NOx-NO2/MMBTU during stack testing, performed according to the conditions of this permit, while the turbine is operating at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. The lb NOx-NO2/MMBTU shall be computed as follows: lb NOx-NO2/hr divided by actual heat input (MMBTU/hr) at HHV during stack testing. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit renewal. The permittee shall record the lb NOx-NO2/MMBTU as measured through stack testing, and as specified in the conditions of this permit. All records and calculations shall be kept on-site, along with stack testing results, for at least five (5) years, made readily available to the Department upon request. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(e)]	None.
14	NOx (Total) <= 0.12 lb/MW-hr (HHV). The pounds of NOx emitted per Megawatts-Hour (lbs NOx/MW-hr) <= 0.12 per module at HHV. The lbs NOx/MW-hr shall be computed by dividing the lbs NOx/hr emitted with the Total MW produced by each gas turbine.[N.J.A.C. 7:27-18.3(b)], [N.J.A.C. 7:27-22.16(e)], and. [40 CFR 52.21]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. The permittee shall record the lb NOx-NO2/MW-hr as measured through stack testing, and as specified in the conditions of this permit. All records and calculations shall be kept on-site, along with stack testing results, for at least five (5) years, and make them readily available to the Department upon request. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(e)]	None.
15	Ammonia <= 36.1 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Ammonia: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ammonia: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	Acetaldehyde <= 0.106 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
17	Acrolein <= 0.017 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	None.	None.
18	Arsenic Emissions <= 0.000273 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI Duct Burner emission limit based maximum heat input rate (HHV) of the HRSG, and emission factor from AP 42, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
19	Benzene <= 0.0332 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. Duct Burner emission limit based maximum heat input rate (HHV) of the HRSG, and emission factor from AP 42, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	Butadiene (1,3-) <= 0.00114 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
21	Cadmium Emissions <= 0.000763 lb/hr. Duct Burner emission limit based maximum heat input rate (HHV) of the duct burner, and emission factor from AP 42, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
22	Dioxins/Furans (Total) <= 6.63E-7 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
23	Ethylbenzene <= 0.0848 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
24	Formaldehyde <= 1.93 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. Duct Burner emission limit based maximum heat input rate (HHV) of the HRSG, and emission factor from AP 42, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
25	Hexane (n-) <= 1.22 lb/hr. Duct Burner emission limit based maximum heat input rate (HHV) of the HRSG, and emission factor from AP 42, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Hexane (n-): Monitored by calculations once initially. Calculate by using the following equation: Hexane (n-): [Maximum Heat Input per Duct Burner (MMBtu/hr) x (Emission Factor (1.83 E-03 lb/MMBtu)]. [N.J.A.C. 7:27-22.16(o)]	Hexane (n-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
26	Pb <= 0.00172 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. Duct Burner emission limit based maximum heat input rate (HHV) of the HRSG, and emission factor from AP 42, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
27	Manganese Emissions <= 0.0213 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. Duct Burner emission limit based maximum heat input rate (HHV) of the HRSG, and emission factor from AP 42, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Manganese Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Manganese Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
28	Mercury Emissions <= 0.00129 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI Duct Burner emission limit based maximum heat input rate (HHV) of the HRSG, and emission factor from AP 42, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
29	2-Methylnaphthalene <= 0.000457 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
30	Nickel Emissions <= 0.00538 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. Duct Burner emission limit based maximum heat input rate (HHV) of the HRSG, and emission factor from AP 42, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
31	Naphthalene <= 0.00386 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. Duct Burner emission limit based maximum heat input rate (HHV) of the HRSG, and emission factor from AP 42, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
32	Propylene oxide <= 0.0769 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
33	Polycyclic organic matter <= 0.00628 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. Duct Burner emission limit based maximum heat input rate (HHV) of the HRSG, and emission factor from AP 42, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
34	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00628 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. Duct Burner emission limit based maximum heat input rate (HHV) of the HRSG, and emission factor from AP 42, Table 1.4-3, 1.4-4 and 1.4-5 (Dated 7/1998) - Natural Gas Combustion. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
35	Toluene <= 0.345 lb/hr. CT emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Toluene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Toluene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Emission Unit: U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers

Operating Scenario: OS9 Unit No. 1 Module 1101 Minimum Load Firing Natural Gas , OS10 Unit No. 1 Module 1201 Minimum Load Firing Natural Gas, OS11 Unit No. 2 Module 2101 Minimum Load Firing Natural Gas, OS12 Unit No. 2 Module 2201 Minimum Load Firing Natural Ga

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 10 % , exclusive of visible condensed water vapor, for a period of more than 10 seconds. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	TSP <= 11 lb/hr [N.J.A.C. 7:27-22.16(e)] and. [40 CFR 52.21]	None.	None.	None.
3	PM-10 (Total) <= 21 lb/hr [N.J.A.C. 7:27-22.16(e)] and. [40 CFR 52.21]	None.	None.	None.
4	PM-2.5 (Total) <= 21 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	VOC (Total) <= 1.4 lb/hr. This limit includes formaldehyde emissions. [N.J.A.C. 7:27-22.16(e)], and. [N.J.A.C. 7:27-18.3(b)]	None.	None.	None.
6	VOC (Total) <= 2 ppmvd @ 15% O2. This limit includes formaldehyde emissions.[N.J.A.C. 7:27-22.16(e)], and. [N.J.A.C. 7:27-18.3(b)]	None.	None.	None.
7	CO <= 6.9 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(e)]	CO: Recordkeeping by stack test results prior to permit expiration date.See Stack Testing Summary at U43 OS Summary, for stack test details. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(e)]
8	CO <= 3 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(a)]	CEMS/COMS - Submit equipment protocol, submit a PST protocol, conduct PST and submit results: As per the approved schedule. Refer to CEM requirements specified in this permit. [N.J.A.C. 7:27-22.16(e)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	NOx (Total) <= 2.5 ppmvd @ 15% O2 [N.J.A.C. 7:27-18.3(b)], [N.J.A.C. 7:27-22.16(e)], and. [40 CFR 52.21]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(a)]	CEMS/COMS - Submit equipment protocol, submit a PST protocol, conduct PST and submit results: As per the approved schedule. Refer to CEM requirements specified in this permit. [N.J.A.C. 7:27-22.16(e)]
10	NOx (Total) <= 11.3 lb/hr [N.J.A.C. 7:27-18.3(b)], [N.J.A.C. 7:27-22.16(e)], and. [40 CFR 52.21]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. See Stack Testing Summary at U43 OS Summary, for stack test details. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(e)]
11	SO2 <= 2 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
12	The combined annual heat input limit for Unit Nos. 1 and 2 while combusting natural gas at minimum load is 4.30 E13 Btu (HHV)/any consecutive 365 days. Total annual heat input during any consecutive 365-day period shall be calculated by adding the total heat input for a given day to the total heat input during the preceding 364 day period. [N.J.A.C. 7:27-22.16(a)]	Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). The permittee shall install and operate totalizing meters on each turbine to monitor the consumption of natural gas. The gas meters shall be installed, operated and calibrated according to manufacturer's recommendations. [N.J.A.C. 7:27-22.16(a)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All operating records, including records of natural gas usage, shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(a)]	None.
13	Acetaldehyde <= 0.106 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
14	Acrolein <= 0.017 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	Arsenic Emissions <= 0.000134 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
16	Benzene <= 0.0318 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
17	Butadiene (1,3-) <= 0.00114 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
18	Dioxins/Furans (Total) <= 6.63E-7 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
19	Ethylbenzene <= 0.0848 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
20	Formaldehyde <= 1.88 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
21	Pb <= 0.00137 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for elec
OS9, OS10, OS11, OS12

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	Manganese Emissions <= 0.021 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Manganese Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Manganese Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
23	Mercury Emissions <= 0.00111 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
24	2-Methylnaphthalene <= 0.00044 lb/hr [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
25	Nickel Emissions <= 0.00395 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
26	Naphthalene <= 0.00345 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially . [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
27	Propylene oxide <= 0.0769 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
28	Polycyclic organic matter <= 0.00583 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
29	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00583 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
30	Toluene <= 0.345 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Toluene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Toluene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers**

Operating Scenario: **OS13 Unit No. 1 Module 1101 Oil Firing, OS14 Unit No. 1 Module 1201 Oil Firing, OS15 Unit No. 2 Module 2101 Oil Firing, OS16 Unit No. 2 Module 2201 Oil Firing**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 10 % , exclusive of visible condensed water vapor, for a period of more than 10 seconds. [N.J.A.C. 7:27-22.16(e)]	Opacity: Monitored by visual determination at the approved frequency, based on an instantaneous determination. The permittee shall observe the stacks of the four (4) modules once every 100 hours or less of oil firing operation. [N.J.A.C. 7:27-22.16(o)]	Opacity: Recordkeeping by manual logging of parameter at the approved frequency. The permittee shall record the date and time when visible emissions are observed during operation of the four (4) modules under the operating conditions specified in this scenario. All records shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
2	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). [N.J.A.C. 7:27-9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery , manual logging of % Sulfur per delivery in a permanently bound log book or readily accessible computer memories. [N.J.A.C. 7:27-22.16(o)]	None.
3	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B [N.J.A.C. 7:27- 9.2(b)]	None.	None.	None.
4	TSP <= 72 lb/hr [N.J.A.C. 7:27-22.16(e)] and. [40 CFR 52.21]	TSP: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results at the approved frequency. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	PM-10 (Total) <= 78 lb/hr [N.J.A.C. 7:27-22.16(e)] and. [40 CFR 52.21]	PM-10 (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results at the approved frequency. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(o)]
6	PM-2.5 (Total) <= 78 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	VOC (Total) <= 5.6 lb/hr. This limit includes formaldehyde emissions. [N.J.A.C. 7:27-22.16(e)], and. [N.J.A.C. 7:27-18.3(b)]	VOC (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results at the approved frequency. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(o)]
8	VOC (Total) <= 4 ppmvd @ 15% O2. This limit includes formaldehyde emissions. [N.J.A.C. 7:27-22.16(e)], and. [N.J.A.C. 7:27-18.3(b)]	VOC (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results at the approved frequency. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(o)]
9	CO <= 13.7 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results at the approved frequency. See Stack Testing Summary at U43 OS Summary, for stack test details. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(o)]
10	CO <= 4 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	CEMS/COMS - Submit equipment protocol, submit a PST protocol, conduct PST and submit results: As per the approved schedule. Refer to CEM requirements specified in this permit. [N.J.A.C. 7:27-22.16(e)]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	NOx (Total) <= 48.2 lb/hr [N.J.A.C. 7:27-18.3(b)], [N.J.A.C. 7:27-22.16(e)], and. [40 CFR 52.21]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. See Stack Testing Summary at U43 OS Summary, for stack test details. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(o)]
12	NOx (Total) <= 6 ppmvd @ 15% O2 [N.J.A.C. 7:27-18.3(b)], [N.J.A.C. 7:27-22.16(e)], and. [40 CFR 52.21]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	CEMS/COMS - Submit equipment protocol, submit a PST protocol, conduct PST and submit results: As per the approved schedule. Refer to CEM requirements specified in this permit. [N.J.A.C. 7:27-22.16(e)]
13	SO2 <= 3.86 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	NOx (Total) <= 0.0267 lb/MMBTU. The pounds of Nitrogen Oxides (NOx) as Nitrogen Dioxide (NO2), emitted per million British Thermal Units (MMBTU) combusted (lbs/MMBTU) shall not exceed 0.0267 at the High Heat Value (HHV).[N.J.A.C. 7:27-22.16(e)], [N.J.A.C. 7:27-18.3(b)], and. [40 CFR 52.21]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The permittee shall determine the lb NOx-NO2/MMBTU during stack testing, performed according to the conditions of this permit, while the turbine is operating at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. The lb NOx-NO2/MMBTU shall be computed as follows: lb NOx-NO2/hr divided by actual heat input (MMBTU/hr) at HHV during stack testing. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. The permittee shall record the lb NOx-NO2/MMBTU as measured through stack testing, and as specified in the conditions of this permit. All records and calculations shall be kept on-site, along with stack testing results, for at least five (5) years, readily made available to the Department upon request. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	NOx (Total) <= 0.305 lb/MW-hr. The pounds of NOx emitted per Megawatts.Hour (lbs NOx/MW-hr) <= 0.305 per module at HHV. The lbs NOx/MW-hr shall be computed by dividing the lbs NOx/hr emitted with the Total MW produced by each gas turbine.[N.J.A.C. 7:27-22.16(e)], [N.J.A.C. 7:27-18.3(b)], and. [40 CFR 52.21]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. The permittee shall record the lb NOx-NO2/MW-hr as measured through stack testing, and as specified in the conditions of this permit. All records and calculations shall be kept on-site, along with stack testing results, for at least five (5) years, readily made available to the Department upon request. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(e)]	None.
16	Ammonia <= 38.1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	Ammonia: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ammonia: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
17	Arsenic Emissions <= 0.0292 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
18	Benzene <= 0.146 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
19	Beryllium Emissions <= 0.000822 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Beryllium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	Butadiene (1,3-) <= 0.0424 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
21	Cadmium Emissions <= 0.0127 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
22	Chromium Emissions <= 0.0292 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Chromium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Chromium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
23	Formaldehyde <= 0.742 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
24	Pb <= 0.0371 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
25	Manganese compounds <= 0.273 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from California Air Toxics Emission Factor (CATEF, CARB 1996) for Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Manganese compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Manganese compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for elec
OS13, OS14, OS15, OS16

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
26	Methylnaphthalene (2-) <= 0.00107 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Methylnaphthalene (2-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methylnaphthalene (2-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
27	1-Methylnaphthalene <= 0.0048 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
28	Mercury Emissions <= 0.00318 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
29	Naphthalene <= 0.0928 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
30	Nickel Emissions <= 0.0122 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
31	Polycyclic organic matter <= 0.106 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
32	Polynuclear aromatic hydrocarbons (PAHs) <= 0.106 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers**

Operating Scenario: **OS17 Unit No. 1 Module 1101 Oil Firing Minimum Load, OS18 Unit No. 1 Module 1201 Oil Firing Minimum Load, OS19 Unit No. 2 Module 2101 Oil Firing Minimum Load, OS20 Unit No. 2 Module 2201 Oil Firing Minimum Load**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 10 % , exclusive of visible condensed water vapor, for a period of more than 10 seconds. [N.J.A.C. 7:27-22.16(e)]	Opacity: Monitored by visual determination at the approved frequency, based on an instantaneous determination. The permittee shall observe the stacks of the four (4) modules once every 100 hours or less of oil firing operation. [N.J.A.C. 7:27-22.16(o)]	Opacity: Recordkeeping by manual logging of parameter at the approved frequency. The permittee shall record the date and time when visible emissions are observed during operation of the four (4) modules under the operating conditions specified in this scenario. All records shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.
2	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight.). Effective July 1, 2016. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery , manual logging of % Sulfur per delivery in a permanently bound log book or readily accessible computer memories. [N.J.A.C. 7:27-22.16(o)]	None.
3	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B [N.J.A.C. 7:27- 9.2(b)]	None.	None.	None.
4	TSP <= 72 lb/hr [N.J.A.C. 7:27-22.16(e)] and. [40 CFR 52.21]	TSP: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results at the approved frequency. See Stack Testing Summary at U43 OS Summary, for stack test details. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	PM-10 (Total) <= 78 lb/hr [N.J.A.C. 7:27-22.16(e)] and. [40 CFR 52.21]	PM-10 (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results at the approved frequency. See Stack Testing Summary at U43 OS Summary, for stack test details. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(e)]
6	PM-2.5 (Total) <= 78 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	VOC (Total) <= 3.5 lb/hr. This limit includes formaldehyde emissions.[N.J.A.C. 7:27-22.16(e)], and. [N.J.A.C. 7:27-18.3(b)]	VOC (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results at the approved frequency. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(e)]
8	VOC (Total) <= 4 ppmvd @ 15% O2. This limit includes formaldehyde emissions.[N.J.A.C. 7:27-22.16(e)], and. [N.J.A.C. 7:27-18.3(b)]	VOC (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results at the approved frequency. See Stack Testing Summary at U43 OS Summary, for stack test details. All records shall be kept on-site for at least five (5) years, readily made available to the Deaprtment upon request. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(o)]
9	CO <= 9.1 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing at the approved frequency, based on each of three Department validated stack test runs. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results at the approved frequency. See Stack Testing Summary at U43 OS Summary, for stack test details. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(o)]
10	CO <= 4 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(e)]	CO: Recordkeeping by strip chart or data acquisition (DAS) system continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(e)]	CEMS/COMS - Submit equipment protocol, submit a PST protocol, conduct PST and submit results: As per the approved schedule. Refer to CEM requirements specified in this permit. [N.J.A.C. 7:27-22.16(e)]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	NOx (Total) <= 30.7 lb/hr [N.J.A.C. 7:27-22.16(e)], [N.J.A.C. 7:27-18.3(b)], and. [40 CFR 52.21]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three 1-hour tests. See Stack Testing Summary at U43 OS Summary, for stack test details. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. See Stack Testing Summary at U43 OS Summary, for stack test details. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See U43 OS Summary for stack test details. [N.J.A.C. 7:27-22.16(e)]
12	NOx (Total) <= 6 ppmvd @ 15% O2 [N.J.A.C. 7:27-22.16(e)], [N.J.A.C. 7:27-18.3(b)], and. [40 CFR 52.21]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-22.16(e)]	CEMS/COMS - Submit equipment protocol, submit a PST protocol, conduct PST and submit results: As per the approved schedule. Refer to CEM requirements specified in this permit. [N.J.A.C. 7:27-22.16(e)]
13	The operating scenarios OS17, OS18, OS19 and OS20 correspond to the operation of each of the four (4) gas turbines, Module 1101, 1201 and 2101, 2201, respectively, firing ultra low sulfur distillate oil (ULSD) at minimum load. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
14	SO2 <= 3.86 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.
15	Arsenic Emissions <= 0.0292 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
16	Benzene <= 0.146 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	Beryllium Emissions <= 0.000822 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Beryllium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
18	Butadiene (1,3-) <= 0.0424 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
19	Cadmium Emissions <= 0.0127 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
20	Chromium Emissions <= 0.0292 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Chromium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Chromium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
21	Formaldehyde <= 0.742 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	Pb <= 0.0371 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
23	Manganese compounds <= 0.273 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from California Air Toxics Emission Factor (CATEF, CARB 1996) for Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Manganese compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Manganese compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
24	Methylnaphthalene (2-) <= 0.00107 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Methylnaphthalene (2-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methylnaphthalene (2-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
25	1-Methylnaphthalene <= 0.0048 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
26	Mercury Emissions <= 0.00318 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
27	Naphthalene <= 0.0928 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
28	Nickel Emissions <= 0.0122 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
29	Polycyclic organic matter <= 0.106 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
30	Polynuclear aromatic hydrocarbons (PAHs) <= 0.106 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers**

Operating Scenario: **OS21 Unit No. 1 Module 1101 Startup-Gas, OS22 Unit No. 1 Module 1201 Startup-Gas, OS23 Unit No. 2 Module 2101 Startup-Gas, OS24 Unit No. 2 Module 2201 Startup-Gas**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Start-up is defined as the period of time from initiation of combustion turbine operation until the unit reaches a steady state of 50 to 100 percent load conditions, not to exceed 240 minutes. [N.J.A.C. 7:27-22.16(e)]	Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system continuously. [N.J.A.C. 7:27-22.16(o)]	None.
2	Particulate Emissions <= 245 lb/hr. [N.J.A.C. 7:27- 4.2]	None.	None.	None.
3	Nitrogen oxides (NOx) <= 1 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	Nitrogen oxides (NOx): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-19.15(a)]	Nitrogen oxides (NOx): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
4	Carbon monoxide <= 250 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	Carbon monoxide: Monitored by continuous emission monitoring system continuously, based on one calendar day. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-16.23(a)]	Carbon monoxide: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
5	VOC (Total) <= 50 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during startup on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
6	TSP <= 11 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the TSP emission limits during startup on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	PM-2.5 (Total) <= 21 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 (total) emission limits during startup on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
8	SO2 <= 2 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.
9	PM-10 (Total) <= 21 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 (total) emission limits during startup on natural gas.[N.J.A.C. 7:27-22.16(e)].	None.
10	Acetaldehyde <= 0.106 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
11	Acrolein <= 0.017 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
12	Arsenic Emissions <= 0.000134 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
13	Benzene <= 0.0318 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
14	Butadiene (1,3-) <= 0.00114 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	Dioxins/Furans (Total) <= 0.000000663 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
16	Ethylbenzene <= 0.0848 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
17	Formaldehyde <= 1.88 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
18	Pb <= 0.00137 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
19	Manganese Emissions <= 0.021 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Manganese Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Manganese Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
20	Mercury Emissions <= 0.00111 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	2-Methylnaphthalene <= 0.00044 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
22	Nickel Emissions <= 0.00395 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
23	Naphthalene <= 0.00345 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
24	Propylene oxide <= 0.0769 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
25	Polycyclic organic matter <= 0.00583 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
26	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00583 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
27	Toluene <= 0.345 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Toluene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Toluene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Emission Unit: **U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers**

Operating Scenario: **OS25 Unit No. 1 Module 1101 Shutdown-Gas, OS26 Unit No. 1 Module 1201 Shutdown-Gas, OS27 Unit No. 2 Module 2101 Shutdown-Gas, OS28 Unit No. 2 Module 2201 Shutdown-Gas**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Shutdown Period <= 120 minutes. Shutdown is defined as the period of time from the initial lowering of combustion turbine output with the intent to cease generation of electrical power output and concludes with the cessation of combustion turbine operation, not to exceed 120 minutes. [N.J.A.C. 7:27-22.16(a)]	Shutdown Period: Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Shutdown Period: Recordkeeping by manual logging of parameter or storing data in a computer data system continuously. [N.J.A.C. 7:27-22.16(o)]	None.
2	Particulate Emissions <= 245 lb/hr. [N.J.A.C. 7:27- 4.2]	None.	None.	None.
3	Carbon monoxide <= 250 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	Carbon monoxide: Monitored by continuous emission monitoring system continuously, based on one calendar day. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-16.23(a)]	Carbon monoxide: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
4	Nitrogen oxides (NOx) <= 1 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	Nitrogen oxides (NOx): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-19.15(a)]	Nitrogen oxides (NOx): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
5	VOC (Total) <= 50 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during shutdown on ULSD[N.J.A.C. 7:27-22.16(o)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	TSP <= 11 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the TSP emission limits during shutdown on ULSD[N.J.A.C. 7:27-22.16(o)].	None.
7	PM-10 (Total) <= 21 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 emission limits during shutdown on ULSD[N.J.A.C. 7:27-22.16(o)].	None.
8	PM-2.5 (Total) <= 21 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 (Total) emission limits during shutdown on ULSD[N.J.A.C. 7:27-22.16(o)].	None.
9	SO2 <= 2 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Acetaldehyde <= 0.106 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
11	Acrolein <= 0.017 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
12	Arsenic Emissions <= 0.000134 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
13	Benzene <= 0.0318 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	Butadiene (1,3-) <= 0.00114 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
15	Dioxins/Furans (Total) <= 0.000000663 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
16	Ethylbenzene <= 0.0848 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
17	Formaldehyde <= 1.88 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
18	Pb <= 0.00137 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
19	Manganese Emissions <= 0.021 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Manganese Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Manganese Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	Mercury Emissions <= 0.00111 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
21	2-Methylnaphthalene <= 0.00044 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
22	Nickel Emissions <= 0.00395 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
23	Naphthalene <= 0.00345 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
24	Propylene oxide <= 0.0769 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
25	Polycyclic organic matter <= 0.00583 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
26	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00583 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
27	Toluene <= 0.345 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-3, (Dated 4/2000), Natural Gas Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Toluene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Toluene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Emission Unit: **U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers**

Operating Scenario: **OS29 Unit No. 1 Module 1101 Maintenance , OS30 Unit No. 1 Module 1201 Maintenance, OS31 Unit No. 2 Module 2101 Maintenance, OS32 Unit No. 2 Module 2201 Maintenance**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Mechanical safety testing is defined as the period of time following mechanical servicing or repair when mechanical safety tests are conducted, not to exceed 12 hours per year per turbine. [N.J.A.C. 7:27-22.16(e)]	None.	Recordkeeping by manual logging of parameter upon occurrence of event. [N.J.A.C. 7:27-22.16(e)]	None.
2	Particulate Emissions <= 245 lb/hr. [N.J.A.C. 7:27- 4.2]	None.	None.	None.
3	Nitrogen oxides (NOx) <= 1 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	Nitrogen oxides (NOx): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-19.15(a)]	Nitrogen oxides (NOx): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
4	Carbon monoxide <= 250 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	Carbon monoxide: Monitored by continuous emission monitoring system continuously, based on one calendar day. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-16.23(a)]	Carbon monoxide: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
5	VOC (Total) <= 50 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during Mechanical safety testing[N.J.A.C. 7:27-22.16(o)].	None.
6	TSP <= 11 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the TSP emission limits during Mechanical safety testing[N.J.A.C. 7:27-22.16(o)].	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	PM-10 (Total) <= 21 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 (total) emission limits during Mechanical safety testing[N.J.A.C. 7:27-22.16(o)].	None.
8	PM-2.5 (Total) <= 21 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 (total) emission limits during Mechanical safety testing[N.J.A.C. 7:27-22.16(o)].	None.
9	SO2 <= 2 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers**
Operating Scenario: **OS33 Cooling Tower 1, OS34 Cooling Tower 2**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 30 lb/hr. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
2	Opacity <= 20 % except for 3 minutes in any 30-minute period. [N.J.A.C. 7:27-6.2(d)] &. [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
3	TSP <= 3.35 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations each month during operation TSP (lb/hr) = 0.000501 x D x C x Total Basin Solids; where: D = fraction of circulating water lost to drift = 0.0005% C = circulating water rate (gal/min) = 146,000 gal/min (based on maximum capacity of cooling tower) Total Basin Solids = sum of concentration of total suspended solids (TSS) and total dissolved solids (TDS in circulating water (mg/l) A sample of the circulating water will be taken a minimum of monthly and analyzed for Total Basin Solids. From BOP130002. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. From BOP130002. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	PM-10 (Total) <= 3.35 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations each month during operation PM-10 (lb/hr) = 0.000501 x D x C x Total Basin Solids; where: D = fraction of circulating water lost to drift = 0.0005% C = circulating water rate (gal/min) = 146,000 gal/min (based on maximum capacity of cooling tower) Total Basin Solids = sum of concentration of total suspended solids (TSS) and total dissolved solids (TDS in circulating water (mg/l) A sample of the circulating water will be taken a minimum of monthly and analyzed for Total Basin Solids. From BOP130002. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. From BOP130002. [N.J.A.C. 7:27-22.16(o)]	None.
5	PM-2.5 (Total) <= 3.35 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations each month during operation PM-2.5 (lb/hr) = 0.000501 x D x C x Total Basin Solids; where: D = fraction of circulating water lost to drift = 0.0005% C = circulating water rate (gal/min) = 146,000 gal/min (based on maximum capacity of cooling tower) Total Basin Solids = sum of concentration of total suspended solids (TSS) and total dissolved solids (TDS in circulating water (mg/l) A sample of the circulating water will be taken a minimum of monthly and analyzed for Total Basin Solids. From BOP130002. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. From BOP130002. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	VOC (Total) <= 2.21 lb/hr. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Monitored by calculations annually. A 24-hour continuous sample from the cooling tower make-up water shall be collected and analyzed for VOC(Total) once per year. . [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by certified lab analysis results annually. [N.J.A.C. 7:27-22.16(o)]	None.
7	Total Basin Solids: The concentration of total dissolved (TDS) and suspended solids (TSS) in the cooling tower circulating water shall not exceed 9,150 milligrams per liter (mg/l). From BOP130002 [N.J.A.C. 7:27-22.16(a)]	Monitored by other method (provide description) each month during operation. A 24 hour continuous sample from the cooling tower circulating water shall be collected once per month during periods of cooling tower operation. The composite sample shall be analyzed for total suspended solids (TSS) and total dissolved solids (TDS). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by certified lab analysis results each month during operation. [N.J.A.C. 7:27-22.16(o)]	Submit a report: As per the approved schedule within 30 calendar days after the end of each calendar year, submit report to the Central Regional Enforcement Office. The report shall include the concentration of TSS and TDS in the cooling tower circulating water. . [N.J.A.C. 7:27-22.16(e)]
8	Cooling tower make-up water: VOC (Total) <= 1.5 ppmw. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations annually. A 24-hour continuous sample from the cooling tower make-up water shall be collected and analyzed for VOC(Total) once per year. Compliance with the limit specified above shall be based on the concentration of VOC measured in the cooling tower make-up water for the calendar year during which the sample was collected. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by certified lab analysis results annually. [N.J.A.C. 7:27-22.16(e)]	Submit a report: As per the approved schedule within 30 calendar days after the end of each calendar year, submit report to the Central Regional Enforcement Office. [N.J.A.C. 7:27-22.16(e)]
9	Water treatment chemicals containing hexavalent chromium shall not be added to the cooling tower circulating water. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Cooling water chemicals shall be limited to: The facility shall not use any HAP as cooling water chemical and shall provide the Department by certified letter the list and amount of any cooling water chemicals that it uses in the cooling tower water upon request. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain process records showing list of materials/chemicals added/mixed.[N.J.A.C. 7:27-22.16(o)].	None.

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Facility Specific Requirements

Emission Unit: **U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers**

Operating Scenario: **OS105 Unit No. 1 Module 1101 Fuel Transfer, OS106 Unit No. 1 Module 1201 Fuel Transfer, OS107 Unit No. 1 Module 2101 Fuel Transfer, OS108 Unit No. 1 Module 2201 Fuel Transfer**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Fuel transfer is defined as that period of time during which the combustion turbine is switching between natural gas and ULSD, not to exceed 45 minutes. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter upon occurrence of event. [N.J.A.C. 7:27-22.16(a)]	None.
2	Particulate Emissions <= 245 lb/hr. [N.J.A.C. 7:27- 4.2]	None.	None.	None.
3	Carbon monoxide <= 250 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	Carbon monoxide: Monitored by continuous emission monitoring system continuously, based on one calendar day. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-16.23(a)]	Carbon monoxide: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
4	Nitrogen oxides (NOx) <= 1.6 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	Nitrogen oxides (NOx): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-19.15(a)]	Nitrogen oxides (NOx): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
5	VOC (Total) <= 50 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during shutdown on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.
6	TSP <= 72 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the TSP emission limits during shutdown on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	PM-10 (Total) <= 78 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 emission limits during shutdown on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.
8	PM-2.5 (Total) <= 78 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 (Total) emission limits during shutdown on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.
9	SO2 <= 3.86 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers**

Operating Scenario: **OS109 Unit No. 1 Module 1101 Startup-ULSD, OS110 Unit No. 1 Module 1201 Startup-ULSD, OS111 Unit No. 1 Module 2101 Startup-ULSD, OS112 Unit No. 1 Module 2201 Startup-ULSD**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Start-up Period <= 240 minutes. Start-up is defined as the period of time from initiation of combustion turbine operation until the unit reaches a steady state of 50 to 100 percent load conditions, not to exceed 240 minutes. [N.J.A.C. 7:27-22.16(a)]	Start-up Period: Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Start-up Period: Recordkeeping by manual logging of parameter or storing data in a computer data system continuously. [N.J.A.C. 7:27-22.16(o)]	None.
2	Carbon monoxide <= 250 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	Carbon monoxide: Monitored by continuous emission monitoring system continuously, based on one calendar day. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-16.23(a)]	Carbon monoxide: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
3	Nitrogen oxides (NOx) <= 1.6 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	Nitrogen oxides (NOx): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-19.15(a)]	Nitrogen oxides (NOx): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
4	VOC (Total) <= 50 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during startup on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP <= 72 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the TSP emission limits during startup on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	PM-10 (Total) <= 78 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 emission limits during startup on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.
7	PM-2.5 (Total) <= 78 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 (Total) emission limits during startup on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.
8	SO2 <= 3.86 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	Arsenic Emissions <= 0.0292 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
10	Benzene <= 0.146 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
11	Beryllium Emissions <= 0.000822 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Beryllium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
12	Butadiene (1,3-) <= 0.0424 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	Cadmium Emissions <= 0.0127 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
14	Chromium Emissions <= 0.0292 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Chromium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Chromium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
15	Formaldehyde <= 0.742 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
16	Pb <= 0.0371 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
17	Manganese compounds <= 0.273 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from California Air Toxics Emission Factor (CATEF, CARB 1996) for Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Manganese compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Manganese compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
18	Methylnaphthalene (2-) <= 0.00107 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Methylnaphthalene (2-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methylnaphthalene (2-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	1-Methylnaphthalene <= 0.0048 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
20	Mercury Emissions <= 0.00318 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
21	Naphthalene <= 0.0928 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
22	Nickel Emissions <= 0.0122 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
23	Polycyclic organic matter <= 0.106 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
24	Polynuclear aromatic hydrocarbons (PAHs) <= 0.106 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Emission Unit: **U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers**

Operating Scenario: **OS113 Unit No. 1 Module 1101 Shutdown-ULSD, OS114 Unit No. 1 Module 1201 Shutdown-ULSD, OS115 Unit No. 1 Module 2101 Shutdown-ULSD, OS116 Unit No. 1 Module 2201 Shutdown-ULSD**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Shutdown Period <= 120 minutes. Shutdown commences with initiation of lowering turbine power output with the intent to cease generation of electrical power output and concludes with the cessation of the combustion turbine operation. Shut-down duration shall not exceed 120 minutes. [N.J.A.C7:27-22.16(e) and. [N.J.A.C. 7:27-22.16(a)]	Shutdown Period: Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(a)]	Shutdown Period: Recordkeeping by manual logging of parameter or storing data in a computer data system continuously. [N.J.A.C. 7:27-22.16(o)]	None.
2	Particulate Emissions <= 245 lb/hr. [N.J.A.C. 7:27- 4.2]	None.	None.	None.
3	Carbon monoxide <= 250 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	Carbon monoxide: Monitored by continuous emission monitoring system continuously, based on one calendar day. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-16.23(a)]	Carbon monoxide: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
4	Nitrogen oxides (NOx) <= 1.6 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	Nitrogen oxides (NOx): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. [N.J.A.C. 7:27-19.15(a)]	Nitrogen oxides (NOx): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. See CEMS REQUIREMENTS SUMMARY at U43 OS Summary. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
5	VOC (Total) <= 50 ppm @ 15% O2. [N.J.A.C. 7:27-16.9]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during shutdown on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	TSP <= 72 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the TSP emission limits during shutdown on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.
7	PM-10 (Total) <= 78 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 emission limits during shutdown on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.
8	PM-2.5 (Total) <= 78 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 (Total) emission limits during shutdown on ULSD.[N.J.A.C. 7:27-22.16(o)].	None.
9	SO2 <= 3.86 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Arsenic Emissions <= 0.0292 lb/hr. Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
11	Benzene <= 0.146 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
12	Beryllium Emissions <= 0.000822 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Beryllium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	Butadiene (1,3-) <= 0.0424 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
14	Cadmium Emissions <= 0.0127 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
15	Chromium Emissions <= 0.0292 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Chromium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Chromium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
16	Formaldehyde <= 0.742 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
17	Pb <= 0.0371 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Pb: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
18	Manganese compounds <= 0.273 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from California Air Toxics Emission Factor (CATEF, CARB 1996) for Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Manganese compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Manganese compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

U43 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for elec

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	Methylnaphthalene (2-) <= 0.00107 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Methylnaphthalene (2-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methylnaphthalene (2-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
20	1-Methylnaphthalene <= 0.0048 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
21	Mercury Emissions <= 0.00318 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
22	Naphthalene <= 0.0928 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
23	Nickel Emissions <= 0.0122 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
24	Polycyclic organic matter <= 0.106 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
25	Polynuclear aromatic hydrocarbons (PAHs) <= 0.106 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP 42, 5th Edition, Table 3.1-4 and Table 3.1-5, (Dated 4/2000), Oil Fired Turbines. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Emission Unit: **U45 Make-up Air Heaters Nos. 1 - 4**
Operating Scenario: **OS Summary**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 6.1 tons/yr from all four MUA Heaters combined. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	CO <= 5.13 tons/yr from all four MUA Heaters combined. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	VOC (Total) <= 0.34 tons/yr from all four MUA Heaters combined. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Emissions of all other contaminants, are below the respective reporting thresholds per N.J.A.C. 7:27-22 Appendix Tables A & B. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Cadmium compounds <= 0.0000671 tons/yr. [N.J.A.C. 7:27-22.16(a)]	Cadmium compounds: Monitored by calculations once initially Calculate by using following equation: Cadmium (tons per year) = [(Heater Natural Gas (NG) emission factor for Cadmium (lb./MMBtu) x Sum of Heat Input (MMBTU/year of NG for four(4) Heaters)]/2000 lb/ton]. [N.J.A.C. 7:27-22.16(o)]	Cadmium compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All records shall be kept on-site for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	The owner or operator of an industrial/commercial/institutional boiler or other indirect heat exchanger with a gross heat input of at least five million BTU per hour or more shall adjust the combustion process annually in the same quarter of each calendar year. If the source is not operated during the quarter of the calendar year in which the annual adjustment is to be performed, the owner or operator shall perform the adjustment within seven days after the boiler or other indirect heat exchanger is next operated. The adjustment of the combustion process shall be done in accordance with the procedure set forth at N.J.A.C. 7:27-19.16. [N.J.A.C. 7:27-16.8(b)], [N.J.A.C. 7:27-16.8(c)] and [N.J.A.C. 7:27-19.7(g)]	Monitored by periodic emission monitoring annually. The owner or operator shall perform the adjustment of the combustion process in accordance with the combustion adjustment monitoring procedures specified in NJDEP Technical Manual 1005 and the procedure at N.J.A.C. 7:27-19.16(a) as follows: 1.Inspect the burner, and clean or replace any components of the burner as necessary; 2. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern consistent with the manufacturer's specifications; 3. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly; 4. Minimize the total emissions of NOx and CO consistent with the manufacturer's specifications; 5. Measure the concentrations in the effluent stream of NOx and CO in ppmvd and O2 in percent, before and after the adjustment is made; and 6. Convert the measured emission values of NOx, CO and O2 concentrations to lb/MMBTU according to the following formula: Lb/MMBTU = ppmvd * MW * F dry factor * O2 correction factor/387,000,000, where: ppmvd is the concentration in parts per million by volume, dry basis, of NOx or CO; MW is the Molecular Weight for NOx=46 lb/lb-mole, CO=28 lb/lb-mole; F Dry factor for: Natural Gas = 8,710 dscf/MMBTU, Residual or fuel oil = 9,190 dscf/MMBTU; O2 correction factor: (20.9%)/(20.9% - O2 measured), where O2 measured is percent oxygen on a dry basis. [N.J.A.C. 7:27-19.16(a)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon performing combustion adjustment of the following information for each adjustment: 1. The date of the adjustment and the times at which it began and ended; 2. The name, title and affiliation of the person who made the adjustment; 3. The NOx and CO concentrations in the effluent stream, in ppmvd, before and after each actual adjustment was made; 4. The concentration of O2 (in percent dry basis) at which the CO and NOx concentrations were measured; 5. A description of any corrective action taken; 6. Results from any subsequent test performed after taking any corrective action, including concentrations and converted emission values in (lb/MMBTU); 7. The type and amount of fuel used over the 12 months prior to the annual adjustment; 8. Any other information which the Department or the EPA has required as a condition of approval of any permit or certificate issued for the source operation. The records must be retained for a minimum of five years and to be made readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(b)]	Submit a report: Annually. The owner or operator shall submit an annual adjustment combustion process report to the department within 45 days after the adjustment of the combustion process is completed. The report shall be submitted electronically to: www.njdeponline.com. Instructions for submitting this report online are specified at: https://dep.nj.gov/boss/annual-combustion-a [N.J.A.C. 7:27-19.16(d)] and. [N.J.A.C. 7:27-19.16(c)]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	The owner or operator of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)]	Other: Monitored by the operating parameter settings that are established after the combustion process is adjusted in order to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)].	Other: The owner or operator shall record the operating parameter settings that are established after the combustion process is adjusted and retain until the next annual adjustment, to be made readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(e)].	None.

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Facility Specific Requirements

Emission Unit: **U45 Make-up Air Heaters Nos. 1 - 4**
Operating Scenario: **OS1 Make-up Air Heater No. 1, OS2 Make-up Air Heater No. 2, OS3 Make-up Air Heater No. 3, OS4 Make-up Air Heater No.4**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 3.18 lb/hr. [N.J.A.C. 7:27- 4.2]	None.	None.	None.
2	CO <= 0.44 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	NOx (Total) <= 0.52 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Cadmium Emissions <= 0.00000575 lb/hr Emission limit based maximum heat input rate (HHV) of the heater, and emission factor from AP-42 Chapter 3.4, Table 3.4-3 and Table 3.4-4. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
5	Maximum Gross Heat Input <= 5.33 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records showing maximum heat input rate for the Heater[N.J.A.C. 7:27-22.16(o)].	None.
6	Maximum Annual Heat Input Maximum Gross Heat Input <= 31,124 MMBTU/yr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Fuel limited to Natural Gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	The four (4) MUA heaters shall operate only during the 8 calendar month period beginning on October 1 and ending on May 31. During the period of June 1 through September 30, the fuel supply to each heater shall be physically shut off and the fuel line to each heater shall be affixed with a readily visible red blocking tag. The electric powered fans serving each heater may be operated throughout the year for air circulation purposes. [N.J.A.C. 7:27-22.16(a)]	Other: During the period of June 1 through September 30, the fuel supply to each heater shall be physically shut off and the fuel line to each heater shall be affixed with a readily visible red blocking tag.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Emission Unit: **U50 Portable Air Compressor Engines No. 1 and 2**
Operating Scenario: **OS Summary**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR 60 Subpart A and [40 CFR 60.Subpart(IIII)]	None.	None.	None.
2	Two diesel fuel fired, reciprocating internal combustion engines (E50 and E51), model year 2007 or later, certified to USEPA Tier 2 or Tier 3 or Tier 4 as available non-road engine emission standards in accordance with 40 CFR 89 Subparts B, D and E or 40 CFR 94 Subpart C or 40 CFR 1039 Subpart C or as supplemented or amended, whichever is applicable. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	U50 involves up to two (2) Reciprocating Internal Combustion Engines ("RICE") that can be used to support one or both of the existing electric air compressor systems that serve Linden Units No. 1 and 2 on an as-needed basis. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Opacity: <= 20%, exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
5	Sulfur Content in Fuel: <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
6	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27- 9.2(b)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Generator fuel limited to No. 2 fuel oil, diesel fuel or kerosene. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	The owner or operator shall keep records of engine manufacturer data showing the rated Maximum Gross Heat Input, Maximum Rated Power Output, Model Year and Displacement. [N.J.A.C. 7:27-22.16(a)]	None.	Other: The owner or operator shall keep records of engine manufacturer data showing the rated Maximum Gross Heat Input, Maximum Rated Power Output, Model Year and Displacement. The owner or operator shall maintain the above records for a period no less than five (5) years after the record was made and shall make the records readily available to the Department or EPA upon request.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	When utilized/operated as an emergency generator, the engines shall not be used: 1. For normal testing and maintenance on days when the Department forecasts air quality anywhere in New Jersey to be "unhealthy for sensitive groups," "unhealthy," or "very unhealthy" as defined in the EPA's Air Quality Index at http://airnow.gov/, as supplemented or amended and incorporated herein by reference, 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 https://dep.nj.gov/boss/air-quality-forecast-fc and 2. As a source of energy or power after the primary energy or power source has become operable again. If the primary energy or power source is under the control of the owner or operator of the emergency generator, the owner or operator shall make a reasonable, timely effort to repair the primary energy or power source. [N.J.A.C. 7:27-19.2(d)]	None.	None.	None.
10	VOC (Total) <= 0.113 tons/yr for both engines combined. Annual emission limit based on 100 hours/yr per engine of non-emergency operation for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	When utilized/operated as an emergency generator, the engines shall be located at the facility and produce mechanical or thermal energy, or electrical power exclusively for use at the facility. This engines shall be operated only: 1. During the performance of normal testing and maintenance procedures, as recommended in writing by the manufacturer and/or as required in writing by a Federal or State law or regulation, 2. When there is power outage or the primary source of mechanical or thermal energy fails because of an emergency, or 3. When there is a voltage reduction issued by PJM and posted on the PJM internet website (www.pjm.com) under the "emergency procedures" menu. [N.J.A.C. 7:27-19.1]	Monitored by hour/time monitor continuously. In addition, the owner or operator shall monitor, once per month, the total operating time from the generator's hour meter; hours of operation for emergency use; hours of operation for testing and maintenance; and the total fuel usage calculated by the following: Fuel Usage (Gallons per month) = (Hours of operation per month) x (Maximum emergency generator fuel usage rate in gallons per hour from Table 3 of the General Operating Permit Registration Form). Hours of operation for emergency use (per month) = (The monthly total operating time from the generator's hour meter) - (The monthly total operating time for testing or maintenance). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. The owner or operator shall maintain on site and record in a logbook or computer data system, the following information: 1. Once per month, the total operating time from the generator's hour meter, the fuel usage (gallons per month) and the hours of operation for emergency use (per month). Document if the emergency use was due to internal or external loss of primary source of energy. If internal loss at the facility, document the emergency that occurred, the damages to the primary source of energy and the amount of time needed for repairs. 2. For each time the emergency generator is specifically operated for testing or maintenance: i. The reason for its operation; ii. The date(s) of operation and the start up and shut down time; iii. The total operating time for testing or maintenance based on the generator's hour meter; and iv. The name of the operator; and 3. If a voltage reduction is the reason for the use of the emergency generator, a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction. The owner or operator of an emergency generator shall maintain the above records for a period no less than 5 years after the record was made and shall make the records readily available to the Department or the EPA upon request. [N.J.A.C. 7:27-19.11] and. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	NOx (Total) <= 1.106 tons/yr for both engines combined. Annual emission limit based on 100 hours/yr per engine of non-emergency operation for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	CO <= 0.617 tons/yr for both engines combined. Annual emission limit based on 100 hours/yr per engine of non-emergency operation for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	TSP <= 0.035 tons/yr for both engines combined. Annual emission limit based on 100 hours/yr per engine of non-emergency operation for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	PM-10 (Total) <= 0.035 tons/yr for both engines combined. Annual emission limit based on 100 hours/yr per engine of non-emergency operation for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	PM-2.5 (Total) <= 0.035 tons/yr for both engines combined. Annual emission limit based on 100 hours/yr per engine of non-emergency operation for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
17	SO2: Maximum emission rate of SO2 is below reporting threshold of 0.05 lb/hr in Appendix to N.J.A.C. 7:27-22. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	The Permittee shall ensure that the engine is easily identifiable, by clear and conspicuous labeling, as "Portable Engine". In addition, the labeling shall include the following: i) Unique serial number and model number of the engine, and ii) EPA standardized designation for the engine family (and subfamily, where applicable). [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. In addition, the permittee shall keep the following records on-site, for at least five (5) years, and readily made available to the Department or its representatives upon request: 1. Engine manufacturing date & (model) year; 2. Engine emission control system information (as applicable); 3. USEPA engine emission certification records (or certificate of conformity) and respective engine family name (as applicable) or engine manufacturer emissions performance data; 4. Preconstruction permit activity number (PCP number) or General Permit number (GP number); and 5. Facility ID number. [N.J.A.C. 7:27-22.16(o)]	None.
19	The permittee shall keep the following: i) A record indicating the total hours the engines operated at the site; and ii) Total emissions based on actual hours of operation of the engines at the site. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously. The Permittee shall monitor the total hours of operation of the engines using a hour-meter built into the equipment. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall record for each site: i) The hour meter reading upon initial start-up of the engines, and upon departure from the site; ii) Total emissions based on actual hours of operation of the engines. The above records shall be maintained at the site of operation. All records must be maintained for at least five (5) years, and be readily available to the Department or its representatives upon request. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	The air compressor engines must not operate for more than 90 days in any calendar year. The engines must not be installed permanently or used permanently on site. [N.J.A.C. 7:27-22.16(a)]	Other: The permittee shall monitor the total days of operation of the engines using an usage meter built into the engines for this site.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall record the usage meter reading based on actual days of operation. [N.J.A.C. 7:27-22.16(o)]	None.
21	The air compressor engines will not circumvent any State or Federal rules and regulations, even for a short period of time, and the subject engines will comply with all applicable performance standards. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
22	The permittee must maintain on site a list of engines being used at the facility with the start date, end date, and record of the emissions from all such engines (amount and type of each air contaminant) no later than 30 days after the engines completed its job in accordance with N.J.A.C. 7:27-22.19(i)(3). [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously. The permittee shall monitor the total hours of operation. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall record the hour meter reading and total emissions based on actual hours of operation. [N.J.A.C. 7:27-22.16(o)]	None.
23	The air compressor engines must have an approved mobile preconstruction permit or General Permit, issued pursuant to N.J.A.C. 7:27-8, prior to bringing it to operate at the facility. Also the engines must comply with the terms and conditions of the approved mobile preconstruction permit or General Permit when the engines operate at the facility. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep the record of the approved mobile preconstruction permit or General Permit.[N.J.A.C. 7:27-22.16(o)].	None.
24	Emissions from the air compressor engines must be included in the emission netting analysis consistent with N.J.A.C. 7:27-18.7. This information must be maintained on-site. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep emissions record on-site.[N.J.A.C. 7:27-22.16(o)].	None.
25	Copies of all information submitted to EPA pursuant to 40 CFR Part 60, must also be submitted to the appropriate Regional Enforcement Office of NJDEP (NSPS Subpart A). [40 CFR 60.4(b)]	None.	None.	Submit a report: As per the approved schedule to the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60. [40 CFR 60.b]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
26	Emissions of each hazardous air pollutant (HAP), including lead, from each air compressor engine must be below the reporting thresholds in Table A at N.J.A.C. 7:27-22 during its 90 days of operation during any calendar year at the facility. [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	Other: Keep emissions record.[N.J.A.C. 7:27-22.16(o)].	None.
27	The permittee must report all actual emissions from all air compressor engines in the facility annual emissions statement. [N.J.A.C. 7:27-22.16(a)]	Other: Monitor annual emissions statement.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by record of Emission Statement data annually. [N.J.A.C. 7:27-22.16(o)]	None.
28	All requests, reports, applications, submittals, and other communications to the Administrator pursuant to Part 60 shall be submitted in duplicate to the Regional Office of US Environmental Protection Agency. Submit information to: Director, Division of Enforcement & Compliance Assistance, US EPA, Region 2, 290 Broadway, New York, NY 10007-1866 (NSPS Subpart A) [40 CFR 60.4(a)]	None.	None.	Submit a report: As per the approved schedule to EPA Region 2 as required by 40 CFR 60. [40 CFR 60.4(a)]
29	No owner or operator subject to NSPS standards in Part 60, shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere (NSPS Subpart A). [40 CFR 60.12]	None.	None.	None.
30	The provisions set forth under an applicable subparts of 40 CFR Part 60 supersede conflicting provisions listed under Modification in 40 CFR Part 60.14. [40 CFR 60.14(f)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
31	Upon modifications, emission rates for an affected facility shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard applies. [40 CFR 60.14(b)]	None.	None.	None.
32	Compliance with all applicable standards must be achieved within 180 days of completion of any physical or operational change subject to the control measures specified in 40 CFR Part 60.14(a). [40 CFR 60.14(g)]	None.	None.	None.
33	The owner or operator shall notify the Administrator of the proposed replacement of components (NSPS Subpart A). [40 CFR 60.15]	None.	None.	Submit notification: At a common schedule agreed upon by the operator and the Administrator. The notification shall include information listed under 40 CFR Part 60.15(d). The notification shall be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced. [40 CFR 60.15(d)]
34	Owners and operators of stationary CI internal combustion engines must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 over the entire life of the engine. [40 CFR 60.4206]	Other: The owner or operator shall review the emission-related manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. [40 CFR 60.4206].	Other: The owner or operator shall keep the manufacturer's emission-related written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. If the manufacturer's emission-related written instructions are not followed, the owner or operator must keep the results of the performance test(s) demonstrating compliance with the applicable emission limits. [40 CFR 60.4206].	None.
35	Changes in time periods for submittal of information and postmark deadlines set forth in this subpart, may be made only upon approval by the Administrator and shall follow procedures outlined in 40 CFR Part 60.19 (NSPS Subpart A) [40 CFR 60.19]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
36	Applicable subpart in 40 CFR Part 60 includes specific provisions which refine and delimit reconstruction as defined in 40 CFR Part 60.15. [40 CFR 60.15(g)]	None.	None.	None.
37	Beginning October 1, 2010, the CI internal combustion engines with a displacement of less than 30 liters per cylinder subject to NSPS IIII (manufactured after April 1, 2006 or modified or reconstructed after July 11, 2005) that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) that contains the following per gallon standards: 15 ppm (0.0015 percent) maximum sulfur content and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR 60.4207(b)]	Monitored by review of fuel delivery records once per bulk fuel shipment For each diesel delivery received, the owner or operator shall review written documentation of the delivery to ensure the maximum allowable fuel oil sulfur content and either a minimum cetane index or a maximum aromatic content is not being exceeded. Such written documentation can include, but is not limited to: bill of lading, delivery invoice, certificate of analysis. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by invoices / bills of lading / certificate of analysis once per bulk fuel shipment The owner or operator shall keep records of fuel showing oil sulfur content and either a minimum cetane index or a maximum aromatic content for each delivery received. All records must be maintained for a minimum of 2 years following the date of such records per 40 CFR 60.7(f). [N.J.A.C. 7:27-22.16(o)]	None.
38	Owners and operators of a 2007 and later model year stationary CI internal combustion engines must follow the deadline for installing or importing CI ICE produced in the previous model year as specified in 40 CFR 60.4208(a) through (g), except for engines that have been modified or reconstructed, and except for engines that were removed from one existing location and reinstalled at a new location. [40 CFR 60.4208]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
39	The owner or operator of a 2007 model year and later stationary CI internal combustion engine complying with the emission standards specified in 40 CFR 60.4204(b) or 40 CFR 60.4205(b), must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b) or 40 CFR 60.4205(b), for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications (NSPS Subpart IIII). [40 CFR 60.4211(c)]	Other: The owner or operator must keep documentation for the life of the equipment from the manufacturer that the engine is certified to meet the emission standards as applicable, for the same model year and maximum engine power.[40 CFR 60.4211(c)].	Recordkeeping by other recordkeeping method (provide description) at no required frequency The owner or operator must keep documentation from the manufacturer, for the life of the equipment, that the engine is certified to meet the emission standards as applicable, for the same model year and maximum engine power. If the engine and control device is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or emission-related settings are changed in a way that is not permitted by the manufacturer, the owner or operator must demonstrate compliance as prescribed at 40 CFR 60.4211(g)(1), (2) or (3) depending on the maximum engine power. [40 CFR 60.4211(c)]	None.
40	Owners and operators of a stationary CI internal combustion engine equipped with a diesel particulate filter must install a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b)]	Monitored by pressure measurement device continuously. The backpressure monitor must alert the operator when the diesel particulate filter requires service. The service monitor should be mounted in a location that is clearly visible to the operator during operation. [40 CFR 60.4209(b)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. [40 CFR 60.4214(c)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
41	The owner or operator that must comply with the emission standards specified in 40 CFR 60 Subpart IIII must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. The owner or operator must also meet the requirements of 40 CFR parts 89, 94 and/or 1068 (General Compliance Provisions), as applicable. [40 CFR 60.4211(a)]	Other: The owner or operator shall review the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, once initially. [40 CFR 60.4211(a)].	Other: The owner or operator shall keep the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. [40 CFR 60.4211(a)].	None.
42	A new or reconstructed stationary RICE located at an area HAP source must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60 Subpart IIII, for compression ignition engines or 40 CFR 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR 63. [40 CFR 63.6590(c)]	Other: Comply with all applicable provisions at NSPS IIII. [40 CFR 63].	Other: Comply with all applicable provisions at NSPS IIII. [40 CFR 63].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
43	The Emergency Generator may be operated at other locations (within the State of New Jersey) only in the event of an emergency, as defined at N.J.A.C. 7:27-19.1. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event 1. For each time the emergency generator is operated at a location other than the facility for which it is originally permitted in the event of an emergency, the Permittee of the emergency generator shall record the following: i) Document the location (name of facility with address) where the emergency generator is operated; ii) Document the emergency that occurred and describe whether the emergency was due to internal or external loss of primary source of energy at the location; iii) If emergency is due to internal loss at the location, document the damages to the primary source of energy and the amount of time needed for repairs; iv) Document the date(s) of operation and the start up and shut down time on each date; v) Document the total operating time at the location based on the generator's hour meter and the total amount of fuel and fuel type used for the duration of the emergency; vi)The name and contact information of the operator of the emergency generator at the location. 2. If a voltage reduction is the reason for the use of the emergency generator, a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction. The Permittee of the emergency generator shall have the above records on site within 30 days of the occurrence of the emergency event, maintain the record for a period of no less than 5 years after the record was made, and shall make the records readily available to the Department or the EPA upon request. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U50 Portable Air Compressor Engines No. 1 and 2**
Operating Scenario: **OS1 Portable Air Compressor Engine 1 (Tier III)**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 3.64 lb/hr. Particulate emission limit from the combustion of fuel based on the rated heat input of source (per engine). [N.J.A.C. 7:27-4.2(a)]	None.	None.	None.
2	The owner or operator of a 2007 model year and later emergency generator with a displacement of < 10 liters per cylinder and a maximum engine power >= 130 kW and no greater than 560 kW must comply with the certification emissions standards in 40 CFR 89.112 and smoke standards in 40 CFR 89.113 for the same model year and maximum engine power as follows: NMHC + NOx <= 4 g/kW-hr, CO <= 3.5 g/kW-hr, PM <= 0.2 g/kW-hr, weighted average emissions as defined in 40 CFR 89.404. (NSPS Subpart IIII). [40 CFR 60.4205(b)]	Other: The owner or operator of a 2007 model year or later engine must review manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power, once initially.[40 CFR 60.4211].	Recordkeeping by other recordkeeping method (provide description) at no required frequency. The owner or operator of a 2007 model year or later engine must keep manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power. [40 CFR 60.4211]	None.
3	Total Hours of Operation <= 100 hr/yr for non-emergency testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	Total Hours of Operation: Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Total Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system continuously. [N.J.A.C. 7:27-22.16(o)]	None.
4	NOx (Total) <= 4.84 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	VOC (Total) <= 0.49 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	TSP <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	PM-10 (Total) <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	PM-2.5 (Total) <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	CO <= 4.32 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	Maximum Gross Heat Input <= 6.06 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by hour/time monitor upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Other: Keep records showing maximum heat input rate for the engine.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U50 Portable Air Compressor Engines No. 1 and 2**
Operating Scenario: **OS2 Portable Air Compressor Engine 2 (Tier III)**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 3.64 lb/hr. Particulate emission limit from the combustion of fuel based on the rated heat input of source (per engine). [N.J.A.C. 7:27-4.2(a)]	None.	None.	None.
2	The owner or operator of a 2007 model year and later emergency generator with a displacement of < 10 liters per cylinder and a maximum engine power >= 130 kW and no greater than 560 kW must comply with the certification emissions standards in 40 CFR 89.112 and smoke standards in 40 CFR 89.113 for the same model year and maximum engine power as follows: NMHC + NOx <= 4 g/kW-hr, CO <= 3.5 g/kW-hr, PM <= 0.2 g/kW-hr, weighted average emissions as defined in 40 CFR 89.404. (NSPS Subpart IIII). [40 CFR 60.4205(b)]	Other: The owner or operator of a 2007 model year or later engine must review manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power, once initially.[40 CFR 60.4211].	Recordkeeping by other recordkeeping method (provide description) at no required frequency. The owner or operator of a 2007 model year or later engine must keep manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power. [40 CFR 60.4211]	None.
3	Total Hours of Operation <= 100 hr/yr for non-emergency testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	Total Hours of Operation: Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Total Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system continuously. [N.J.A.C. 7:27-22.16(o)]	None.
4	NOx (Total) <= 4.84 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	VOC (Total) <= 0.49 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	TSP <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	PM-10 (Total) <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	PM-2.5 (Total) <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	CO <= 4.32 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	Maximum Gross Heat Input <= 6.06 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by hour/time monitor upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Other: Keep records showing maximum heat input rate for the engine.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U50 Portable Air Compressor Engines No. 1 and 2**
Operating Scenario: **OS3 Portable Air Compressor Engine 1 (Tier II)**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 5.19 lb/hr. Particulate emission limit from the combustion of fuel based on the rated heat input of source (per engine). [N.J.A.C. 7:27-4.2(a)]	None.	None.	None.
2	The owner or operator of a 2007 model year and later emergency generator with a displacement of < 10 liters per cylinder and a maximum engine power >= 560 kW must comply with the certification emissions standards in 40 CFR 89.112 and smoke standards in 40 CFR 89.113 for the same model year and maximum engine power as follows: NMHC + NOx <= 6.4 g/kW-hr, CO <= 3.5 g/kW-hr, PM <= 0.2 g/kW-hr, weighted average emissions as defined in 40 CFR 89.404. (NSPS Subpart IIII). [40 CFR 60.4205(b)]	Other: The owner or operator of a 2007 model year or later engine must review manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power, once initially.[40 CFR 60.4211].	Recordkeeping by other recordkeeping method (provide description) at no required frequency. The owner or operator of a 2007 model year or later engine must keep manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power. [40 CFR 60.4211]	None.
3	Total Hours of Operation <= 100 hr/yr for non-emergency testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	Total Hours of Operation: Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Total Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system continuously. [N.J.A.C. 7:27-22.16(o)]	None.
4	NOx (Total) <= 11.06 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	VOC (Total) <= 1.13 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	TSP <= 0.35 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	PM-10 (Total) <= 0.35 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	PM-2.5 (Total) <= 0.35 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	CO <= 6.17 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Methane <= 0.06 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	Maximum Gross Heat Input <= 8.65 MMBTU/hr (HHV) . [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by hour/time monitor upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Other: Keep records showing maximum heat input rate for the engine.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U50 Portable Air Compressor Engines No. 1 and 2**
Operating Scenario: **OS4 Portable Air Compressor Engine 2 (Tier II)**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 5.19 lb/hr. Particulate emission limit from the combustion of fuel based on the rated heat input of source (per engine). [N.J.A.C. 7:27-4.2(a)]	None.	None.	None.
2	The owner or operator of a 2007 model year and later emergency generator with a displacement of < 10 liters per cylinder and a maximum engine power >= 560 kW must comply with the certification emissions standards in 40 CFR 89.112 and smoke standards in 40 CFR 89.113 for the same model year and maximum engine power as follows: NMHC + NOx <= 6.4 g/kW-hr, CO <= 3.5 g/kW-hr, PM <= 0.2 g/kW-hr, weighted average emissions as defined in 40 CFR 89.404. (NSPS Subpart IIII). [40 CFR 60.4205(b)]	Other: The owner or operator of a 2007 model year or later engine must review manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power, once initially.[40 CFR 60.4211].	Recordkeeping by other recordkeeping method (provide description) at no required frequency. The owner or operator of a 2007 model year or later engine must keep manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power. [40 CFR 60.4211]	None.
3	Total Hours of Operation <= 100 hr/yr for non-emergency testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	Total Hours of Operation: Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Total Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system continuously. [N.J.A.C. 7:27-22.16(o)]	None.
4	NOx (Total) <= 11.06 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	VOC (Total) <= 1.13 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	TSP <= 0.35 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	PM-10 (Total) <= 0.35 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	PM-2.5 (Total) <= 0.35 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	CO <= 6.17 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Methane <= 0.06 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	Maximum Gross Heat Input <= 8.65 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by hour/time monitor upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Other: Keep records showing maximum heat input rate for the engine.[N.J.A.C. 7:27-22.16(o)].	None.

LINDEN GENERATING STATION (41810)
BOP190002

New Jersey Department of Environmental Protection
Facility Profile (General)

Facility Name (AIMS): Linden Generating Station Facility **Facility ID (AIMS):** 41810

Street Address: 4001 S WOOD AVE
LINDEN, NJ 07036

Mailing Address: 4001 S WOOD AVE
LINDEN, NJ 07036

State Plane Coordinates:

X-Coordinate:	174,829
Y-Coordinate:	198,511
Units:	Meters
Datum:	NAD27
Source Org.:	Other/Unknown
Source Type:	Digital Image

County: Union

Location Description:

Industry:

Primary SIC:	4911
Secondary SIC:	
NAICS:	221112

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: **Air Permit Information Contact**

Organization: Parkway Generation Operating LLC
Org. Type: LLC
Name: Guy Rivera
NJ EIN: 00824081414
Title: EHS Manager
Phone: (201) 572-8391 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: grivera@camsops.com
Mailing Address: 4001 S Wood Ave
Linden, NJ 07036

Contact Type: **BOP - Operating Permits**

Organization: Parkway Generation Operating LLC
Org. Type: LLC
Name: Guy Rivera
NJ EIN: 00824081414
Title: EHS Manager
Phone: (201) 572-8391 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: grivera@camsops.com
Mailing Address: 4001 S Wood Ave
Linden, NJ 07036

Contact Type: **Consultant**

Organization: CAMS
Org. Type: LLC
Name: Lucian Hill
NJ EIN: 00000000000
Title: Environmental Director
Phone: (225) 678-2060 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: lhill@camstex.com
Mailing Address: 910 Louisiana Street, Suite 2400
Suite 160
Houston, TX 77002

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Emission Statements

Organization: Parkway Generation Operating LLC
Org. Type: LLC
Name: Guy Rivera
NJ EIN: 00824081414
Title: EHS Manager
Phone: (201) 572-8391 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: grivera@camsops.com
Mailing Address: 4001 S Wood Ave
Linden, NJ 07036

Contact Type: Fees/Billing Contact

Organization: Parkway Generation Operating LLC
Org. Type: LLC
Name: Guy Rivera
NJ EIN: 00824081414
Title: EHS Manager
Phone: (201) 572-8391 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: grivera@camsops.com
Mailing Address: 4001 S Wood Ave
Linden, NJ 07036

Contact Type: General Contact

Organization: eSPARC
Org. Type: LLC
Name: Derek Furstenwerth
NJ EIN: 00000000000
Title: VP Environmental Services
Phone: (713) 380-4782 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: dfrustenwerth@camstex.com
Mailing Address: 910 Louisiana Street, Suite 2400
Suite 2400
Houston, TX 77002

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: **On-Site Manager**

Organization: Parkway Generation Operating LLC
Org. Type: LLC
Name: Sean Wessel
NJ EIN: 00824081414
Title: Plant Manager
Phone: (908) 474-8701 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: swessel@camsops.com
Mailing Address: 4001 S Wood Ave
Linden, NJ 07036

Contact Type: **Operator**

Organization: CAMS
Org. Type: LLC
Name: Derek Furstenwerth
NJ EIN: 00000000000
Title: VP Environmental Services
Phone: (713) 380-4782 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: dfrustenwerth@camstex.com
Mailing Address: 910 Louisiana Street, Suite 2400
Suite 2400
Houston, TX 77002

Contact Type: **Owner (Current Primary)**

Organization: Alpha Generation
Org. Type: Corporation
Name: Natalia Hernandez
NJ EIN: 00000000000
Title: VP, EHS
Phone: (718) 570-7198 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: nhernandez@alphagen.com
Mailing Address: 300 Atlantic Street
5th Floor
Stamford, CT 06901

LINDEN GENERATING STATION (41810)
BOP190002

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: **Responsible Official**

Organization: Parkway Generation Operating LLC
Org. Type: LLC

Name: Sean Wessel
NJ EIN: 00824081414

Title: Plant Manager

Phone: (908) 474-8701 x

Fax: ( ) - x

Other: ( ) - x

Type:

Email: swessel@camsops.com

Mailing Address: 4001 S Wood Ave
Linden, NJ 07036

LINDEN GENERATING STATION (41810) Date: 01/28/2025
BOP190002

New Jersey Department of Environmental Protection
Non-Source Fugitive Emissions

FG NJID	Description of Activity Causing Emission	Location Description	Reasonable Estimate of Emissions (tpy)								
			VOC (Total)	NOx	CO	SO	TSP (Total)	PM-10	Pb	HAPS (Total)	Other (Total)
FG1	Fuel Handling Systems										
FG2	Miscellaneous Oil Systems										
FG3	Miscellaneous Solvent Uses										
Total			4.000								

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Insignificant Source Emissions

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1	Insignificant Liquid Storage Tanks or Vessels	Storage Vessel										
IS2	Commercial Fuel Burning Equipment < 1MMBtu/hr	Fuel Combustion Equipment (Other)										
IS3	Wastewater treatment equipment <100 ppbw each TXS and <3500 ppbw total VOC	Other Equipment										
IS4	Miscellaneous pipes, flanges, fittings	Other Equipment										
IS5	Surface/Parts cleaners (<6 sq.ft; capacity <100 gallons)	Other Equipment										
IS7	Satellite accumulation areas (concentration of each TXS <100ppbw and total VOC <3500ppbw)	Other Equipment										
IS8	Fuel reclaim area	Other Equipment										
IS9	Fire protection systems (<50 lbs/hr raw material)	Other Equipment										

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Insignificant Source Emissions

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS10	Building sumps (concentration of each TXS <100ppbw and total VOC <3500ppbw)	Other Equipment										
IS11	Chemical cleaning equipment (<50 lbs/hr raw material)	Other Equipment										
IS12	Generator purge system (<50 lbs/hr raw material)	Other Equipment										
IS13	Floor drain collection systems (concentration of each TXS <100ppbw and total VOC <3500ppbw)	Other Equipment										
IS15	Distillate Fuel Oil Tanks (<0.02 psia vapor pressure)	Storage Vessel	Facility Wide									
IS16	Welding equipment < 12 lb/calendar day of welding rod or wire											
Total				1.310	8.310	2.610	0.030	0.390	0.460	0.000	0.18000000	0.000

LINDEN GENERATING STATION (41810) Date: 1/28/2025

BOP190002

New Jersey Department of Environmental Protection
Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand-Fathered	Last Mod. (Since 1968)	Equip. Set ID
E6	Unit No.5	Unit No. 5	Combustion Turbine	PCP990002	4/1/2000	No		
E7	Unit No.6	Unit No. 6	Combustion Turbine	PCP990002	4/1/2000	No		
E8	Unit No.7	Unit No. 7	Combustion Turbine	PCP990002	6/1/1995	No		
E9	Unit No.8	Unit No. 8	Combustion Turbine	PCP990002	6/1/1995	No		
E24	Module 1101	Unit No. 1 Module 1101	Combustion Turbine	PCP000001	5/1/2003	No		
E25	Module 1201	Unit No. 1 Module 1201	Combustion Turbine	PCP000001	5/1/2003	No		
E26	Module 2101	Unit No. 2 Module 2101	Combustion Turbine	PCP000001	5/1/2003	No		
E27	Module 2201	Unit No. 2 Module 2201	Combustion Turbine	PCP000001	5/1/2003	No		
E28	Tower 1	Cooling Tower 1	Other Equipment	PCP000001	5/1/2003	No		
E29	Tower 2	Cooling Tower 2	Other Equipment	PCP000001	5/1/2003	No		
E33	Fire Pump 2	Emergency Diesel Fire Pump No. 2	Stationary Reciprocating Engine	PCP060001	5/11/2006	No		
E35	MUA-1	Make-up Air Heater No. 1	Fuel Combustion Equipment (Other)	PCP080001	5/1/2003	No		
E36	MUA-2	Make-up Air Heater No. 2	Fuel Combustion Equipment (Other)	PCP080001	5/1/2003	No		
E37	MUA-3	Make-up Air Heater No. 3	Fuel Combustion Equipment (Other)	PCP080001	5/1/2003	No		
E38	MUA-4	Make-up Air Heater No. 4	Fuel Combustion Equipment (Other)	PCP080001	5/1/2003	No		
E40	EDG	Emergency Diesel Generator	Emergency Generator	GOP140001	12/31/2014	No		
E50	Engine1	Air Compressor Engine 1	Other Equipment	BOP150002	1/6/2017	No		

LINDEN GENERATING STATION (41810) Date: 1/28/2025
BOP190002

New Jersey Department of Environmental Protection
Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand-Fathered	Last Mod. (Since 1968)	Equip. Set ID
E51	Engine2	Air Compressor Engine 2	Other Equipment	BOP150002	1/6/2017	No		

41810 LINDEN GENERATING STATION BOP190002 E6 (Combustion Turbine)
Print Date: 12/11/2024

Make:	GE Frame 7EA		
Manufacturer:	General Electric		
Model:	GE Frame 7EA		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1,200.00		
Type of Turbine:	Industrial		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generator	Description:	
Power Output:	105.00	Units:	Megawatts

Is the combustion turbine using (check all that apply):

A Dry Low NOx Combustor:	☑		
Steam Injection:	☐	Steam to Fuel Ratio:	
Water Injection:	☑	Water to Fuel Ratio:	0.70
Other:	☐	Description:	

Is the turbine Equipped with a Duct Burner? ○ Yes ● No

Have you attached a diagram showing the location and/or the configuration of this equipment? ○ Yes ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? ○ Yes ● No

Comments:

41810 LINDEN GENERATING STATION BOP190002 E7 (Combustion Turbine)
Print Date: 12/11/2024

Make:	GE Frame 7EA		
Manufacturer:	General Electric		
Model:	GE Frame 7EA		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1,200.00		
Type of Turbine:	Industrial		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generator	Description:	
Power Output:	105.00	Units:	Megawatts

Is the combustion turbine using (check all that apply):

A Dry Low NOx Combustor:	☑		
Steam Injection:	☐	Steam to Fuel Ratio:	
Water Injection:	☑	Water to Fuel Ratio:	0.70
Other:	☐	Description:	

Is the turbine Equipped with a Duct Burner? ○ Yes ● No

Have you attached a diagram showing the location and/or the configuration of this equipment? ○ Yes ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? ○ Yes ● No

Comments:

41810 LINDEN GENERATING STATION BOP190002 E8 (Combustion Turbine)
Print Date: 12/11/2024

Make:	GE Frame 7EA		
Manufacturer:	General Electric		
Model:	GE Frame 7EA		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1,200.00		
Type of Turbine:	Industrial		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generator	Description:	
Power Output:	105.00	Units:	Megawatts

Is the combustion turbine using (check all that apply):

A Dry Low NOx Combustor:	☑		
Steam Injection:	☐	Steam to Fuel Ratio:	
Water Injection:	☑	Water to Fuel Ratio:	0.70
Other:	☐	Description:	

Is the turbine Equipped with a Duct Burner? ○ Yes ● No

Have you attached a diagram showing the location and/or the configuration of this equipment? ○ Yes ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? ○ Yes ● No

Comments:

41810 LINDEN GENERATING STATION BOP190002 E9 (Combustion Turbine)
Print Date: 12/11/2024

Make:	GE Frame 7EA		
Manufacturer:	General Electric		
Model:	GE Frame 7EA		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1,200.00		
Type of Turbine:	Industrial		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generator	Description:	
Power Output:	105.00	Units:	Megawatts

Is the combustion turbine using (check all that apply):

A Dry Low NOx Combustor:	☑		
Steam Injection:	☐	Steam to Fuel Ratio:	
Water Injection:	☑	Water to Fuel Ratio:	0.70
Other:	☐	Description:	

Is the turbine Equipped with a Duct Burner? ○ Yes ● No

Have you attached a diagram showing the location and/or the configuration of this equipment? ○ Yes ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? ○ Yes ● No

Comments:

41810 LINDEN GENERATING STATION BOP190002 E24 (Combustion Turbine)
Print Date: 12/11/2024

Make:	GE Frame 7FA		
Manufacturer:	General Electric		
Model:	GE Frame 7FA		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	2,650.00		
Type of Turbine:	Industrial		
Type of Cycle:	Combined-Cycle	Description:	
Industrial Application:	Electrical Generato	Description:	
Power Output:	307.00	Units:	Megawatts

Is the combustion turbine using (check all that apply):

A Dry Low NOx Combustor:	☑		
Steam Injection:	☐	Steam to Fuel Ratio:	
Water Injection:	☑	Water to Fuel Ratio:	0.90
Other:	☑	Description:	SCR and Oxidatic

Is the turbine Equipped with a Duct Burner? ● Yes ○ No

Have you attached a diagram showing the location and/or the configuration of this equipment? ○ Yes ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? ○ Yes ● No

Comments: The maximum heat input for turbine on Natural Gas and ULSD is 2,650 MMBtu/hr. The maximum heat input for Natural Gas fired Duct Burner is 693 MMBtu/hr

41810 LINDEN GENERATING STATION BOP190002 E25 (Combustion Turbine)
Print Date: 12/11/2024

Make:	GE Frame 7FA		
Manufacturer:	General Electric		
Model:	GE Frame 7FA		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	2,650.00		
Type of Turbine:	Industrial		
Type of Cycle:	Combined-Cycle	Description:	
Industrial Application:	Electrical Generator	Description:	
Power Output:	307.00	Units:	Megawatts

Is the combustion turbine using (check all that apply):

A Dry Low NOx Combustor:	☑		
Steam Injection:	☐	Steam to Fuel Ratio:	
Water Injection:	☑	Water to Fuel Ratio:	0.90
Other:	☑	Description:	SCR and Oxidatic

Is the turbine Equipped with a Duct Burner? ● Yes ○ No

Have you attached a diagram showing the location and/or the configuration of this equipment? ○ Yes ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? ○ Yes ● No

Comments: The maximum heat input for turbine on Natural Gas and ULSD is 2,650 MMBtu/hr. The maximum heat input for Natural Gas fired Duct Burner is 693 MMBtu/hr

41810 LINDEN GENERATING STATION BOP190002 E26 (Combustion Turbine)
Print Date: 12/11/2024

Make:	GE Frame 7FA		
Manufacturer:	General Electric		
Model:	GE Frame 7FA		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	2,650.00		
Type of Turbine:	Industrial		
Type of Cycle:	Combined-Cycle	Description:	
Industrial Application:	Electrical Generator	Description:	
Power Output:	307.00	Units:	Megawatts

Is the combustion turbine using (check all that apply):

A Dry Low NOx Combustor:	☑		
Steam Injection:	☐	Steam to Fuel Ratio:	
Water Injection:	☑	Water to Fuel Ratio:	0.90
Other:	☑	Description:	SCR and Oxidatic

Is the turbine Equipped with a Duct Burner? ● Yes ○ No

Have you attached a diagram showing the location and/or the configuration of this equipment? ○ Yes ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? ○ Yes ● No

Comments: The maximum heat input for turbine on Natural Gas and ULSD is 2,650 MMBtu/hr. The maximum heat input for Natural Gas fired Duct Burner is 693 MMBtu/hr

41810 LINDEN GENERATING STATION BOP190002 E27 (Combustion Turbine)
Print Date: 12/11/2024

Make:	GE Frame 7FA		
Manufacturer:	General Electric		
Model:	GE Frame 7FA		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	2,650.00		
Type of Turbine:	Industrial		
Type of Cycle:	Combined-Cycle	Description:	
Industrial Application:	Electrical Generator	Description:	
Power Output:	307.00	Units:	Megawatts

Is the combustion turbine using (check all that apply):

A Dry Low NOx Combustor:	☑		
Steam Injection:	☐	Steam to Fuel Ratio:	
Water Injection:	☑	Water to Fuel Ratio:	0.90
Other:	☑	Description:	SCR and Oxidatic

Is the turbine Equipped with a Duct Burner? ● Yes ○ No

Have you attached a diagram showing the location and/or the configuration of this equipment? ○ Yes ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? ○ Yes ● No

Comments: The maximum heat input for turbine on Natural Gas and ULSD is 2,650 MMBtu/hr. The maximum heat input for Natural Gas fired Duct Burner is 693 MMBtu/hr

41810 LINDEN GENERATING STATION BOP190002 E28 (Other Equipment)
Print Date: 12/11/2024

Make:	Hamon
Manufacturer:	Hamon
Model:	CF1412WDFRP
Equipment Type:	Mechanical Draft Cooling Tower
Capacity:	2,434.00
Units:	gal/hr
Description:	

Have you attached a diagram showing the location and/or the configuration of this equipment?

- ○ Yes
- ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

- ○ Yes
- ● No

Comments: Capacity of cooling tower = 146,000 gallons per minute

41810 LINDEN GENERATING STATION BOP190002 E29 (Other Equipment)
Print Date: 12/11/2024

Make:	Hamon
Manufacturer:	Hamon
Model:	CF1412WDFRP
Equipment Type:	Mechanical Draft Cooling Tower
Capacity:	2,434.00
Units:	gal/hr
Description:	

Have you attached a diagram showing the location and/or the configuration of this equipment?

- ○ Yes
- ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

- ○ Yes
- ● No

Comments:

41810 LINDEN GENERATING STATION BOP190002 E33 (Stationary Reciprocating Engine)
Print Date: 12/11/2024

Make:	Clarke
Manufacturer:	Clarke
Model:	JW6H-UF30 (JDFP-06WA)
Maximum Rated Gross Heat Input (MMBtu/hr):	2.1
Class:	Lean Burn
Description:	
Duty:	
Description:	
Minimum Load Range (%):	
Maximum Load Range (%):	
Stroke:	4-stroke
Power Output (BHP):	265
Electric Output(KW):	
Compression Ratio:	16.5
Ignition Type:	Compression
Description:	
Engine Speed (RPM):	1760
Engine Exhaust Temperature (°F):	840
Air to Fuel Ratio at Peak Load:	16.5
Ratio Basis:	
Lambda Factor (scfm/scfm):	
Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr):	7925
Output Type:	Pump/Compressor
Heat to Power Ratio:	
Is the Engine Using a Turbocharger?	● Yes ○ No
Is the Engine Using an Aftercooler?	● Yes ○ No

Is the Engine Using (check all that apply):

A Prestratified Charge (PSC)	☐	A NOx Converter	☐
Air to Fuel Adjustment (AF)	☐	Ignition Timing Retard	☐
Low Emission Combustion	☐	Non-Selective Catalytic Retard (NSCR)	☐
Other	☐		

Description:

Have you attached a diagram showing the location and/or the configuration of this equipment?	○ Yes ● No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	● Yes ○ No

Comments:

Include Emission Rates on the Potential to Emit Screen for each contaminant in ppmvd @ 7%O2 in addition to lbs/hr and tons/yr.

41810 LINDEN GENERATING STATION BOP190002 E35 (Fuel Combustion Equipment (Other))
Print Date: 12/11/2024

Make:	Moffitt
Manufacturer:	Moffitt
Model:	HT-280-230
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	5.33
Type of Heat Exchange:	Direct
Equipment Type Description:	Natural gas-fired make-up air heater.

Have you attached a diagram showing the location and/or the configuration of this equipment?

- ○ Yes
- ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

- ○ Yes
- ● No

Comments:

Include Emission Rates on the Potential to Emit Screen for each contaminant in ppmvd @ 7%O2 in addition to lbs/hr and tons/yr.

41810 LINDEN GENERATING STATION BOP190002 E36 (Fuel Combustion Equipment (Other))
Print Date: 12/11/2024

Make:	Moffitt
Manufacturer:	Moffitt
Model:	HT-280-230
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	5.33
Type of Heat Exchange:	Direct
Equipment Type Description:	Natural gas-fired make-up air heater.

Have you attached a diagram showing the location and/or the configuration of this equipment?

- ○ Yes
- ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

- ○ Yes
- ● No

Comments:

Include Emission Rates on the Potential to Emit Screen for each contaminant in ppmvd @ 7%O2 in addition to lbs/hr and tons/yr.

41810 LINDEN GENERATING STATION BOP190002 E37 (Fuel Combustion Equipment (Other))
Print Date: 12/11/2024

Make:	Moffitt
Manufacturer:	Moffitt
Model:	HT-280-230
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	5.33
Type of Heat Exchange:	Direct
Equipment Type Description:	Natural gas-fired make-up air heater.

Have you attached a diagram showing the location and/or the configuration of this equipment?

- ○ Yes
- ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

- ○ Yes
- ● No

Comments:

Include Emission Rates on the Potential to Emit Screen for each contaminant in ppmvd @ 7%O2 in addition to lbs/hr and tons/yr.

41810 LINDEN GENERATING STATION BOP190002 E38 (Fuel Combustion Equipment (Other))
Print Date: 12/11/2024

Make:	Moffitt
Manufacturer:	Moffitt
Model:	HT-280-230
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	5.33
Type of Heat Exchange:	Direct
Equipment Type Description:	Natural gas-fired make-up air heater.

Have you attached a diagram showing the location and/or the configuration of this equipment?

- ○ Yes
- ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

- ○ Yes
- ● No

Comments:

Include Emission Rates on the Potential to Emit Screen for each contaminant in ppmvd @ 7%O2 in addition to lbs/hr and tons/yr.

41810 LINDEN GENERATING STATION BOP190002 E40 (Emergency Generator)
Print Date: 12/11/2024

Make:	CATERPILLAR
Manufacturer:	CATERPILLAR
Model:	3516C
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	19.32
Will the equipment be used in excess of 500 hours per year?	○ Yes ● No
Have you attached a diagram showing the location and/or the configuration of this equipment?	○ Yes ● No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	○ Yes ● No
Comments:	The kW value is 2000, and the HP is 2937

41810 LINDEN GENERATING STATION BOP190002 E50 (Other Equipment)
Print Date: 12/11/2024

Make:	TBD - Rental
Manufacturer:	TBD - Rental
Model:	TBD - Rental
Equipment Type:	CI RICE EPA Tier III (<560 kW (751 bhp)) or Tier II (> 560 kW (751 hp)) certified.
Capacity:	800.00
Units:	Kilowatts
Description:	

Have you attached a diagram showing the location and/or the configuration of this equipment?

- ○ Yes
- ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

- ○ Yes
- ● No

Comments: 1073 HP

41810 LINDEN GENERATING STATION BOP190002 E51 (Other Equipment)
Print Date: 12/11/2024

Make:	TBD - Rental
Manufacturer:	TBD - Rental
Model:	TBD - Rental
Equipment Type:	CI RICE EPA Tier III (<560 kW (751 bhp)) or Tier II (> 560 kW (751 hp)) certified.
Capacity:	800.00
Units:	Kilowatts
Description:	

Have you attached a diagram showing the location and/or the configuration of this equipment?

- ○ Yes
- ● No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

- ○ Yes
- ● No

Comments: 1073 HP

LINDEN GENERATING STATION (41810) Date: 1/28/2025

BOP190002

New Jersey Department of Environmental Protection
Control Device Inventory

CD NJID	Facility's Designation	Description	CD Type	Install Date	Grand-Fathered	Last Mod. (Since 1968)	CD Set ID
CD6	Low NOx No.7	Dry Low NOx Combustors on Unit No. 7	Other	6/1/1995	No		
CD7	WI No. 7	Water Injection on Unit No. 7	Other	6/1/1995	No		
CD8	Low NOx No.8	Dry Low Nox Combustors on Unit No. 8	Other	6/1/1995	No		
CD9	WI No. 8	Water Injection on Unit No. 8	Other	6/1/1995	No		
CD11	Low NOx No.5	Dry Low NOx Combustors on Unit No. 5	Other	4/1/2000	No		
CD12	WI No. 5	Water Injection on Unit No. 5	Other	4/1/2000	No		
CD13	Low NOx No.6	Dry Low NOx Combustors on Unit No. 6	Other	4/1/2000	No		
CD14	WI No. 6	Water Injection on Unit No. 6	Other	4/1/2000	No		
CD15	Water 1101	Water Injection Unit 1 Module 1101	Other	5/1/2003	No		
CD16	SCR 1101	Selective Catalytic Reduction Unit 1 Module 1101	Selective Catalytic Reduction	6/2/2005	No		
CD17	Ox Cat 1101	Oxidation Catalyst Unit 1 Module 1101	Oxidizer (Catalytic)	6/2/2005	No		
CD18	DLN 1101	Dry Low Nox Unit 1 Module 1101	Other	5/1/2003	No		
CD19	Water 1201	Water Injection Unit 1 Module 1201	Other	5/1/2003	No		
CD20	SCR 1201	Selective Catalytic Reduction Unit 1 Module 1201	Selective Catalytic Reduction	6/3/2005	No		

LINDEN GENERATING STATION (41810) Date: 1/28/2025

BOP190002

New Jersey Department of Environmental Protection
Control Device Inventory

CD NJID	Facility's Designation	Description	CD Type	Install Date	Grand-Fathered	Last Mod. (Since 1968)	CD Set ID
CD21	Ox Cat 1201	Oxidation Catalyst Unit 1 Module 1201	Oxidizer (Catalytic)	6/3/2005	No		
CD22	DLN 1201	Dry Low Nox Unit 1 Module 1201	Other	5/1/2003	No		
CD23	Water 2101	Water Injection Unit 2 Module 2101	Other	5/1/2003	No		
CD24	SCR 2101	Selective Catalytic Reduction Unit 2 Module 2101	Selective Catalytic Reduction	10/1/2005	No		
CD25	Ox Cat 2101	Oxidation Catalyst Unit 2 Module 2101	Oxidizer (Catalytic)	10/1/2005	No		
CD26	DLN 2101	Dry Low Nox Unit 2 Module 2101	Other	5/1/2003	No		
CD27	Water2201	Water Injection Unit 2 Module 2201	Other	5/1/2003	No		
CD28	SCR 2201	Selective Catalytic Reduction Unit 2 Module 2201	Selective Catalytic Reduction	10/1/2005	No		
CD29	Ox Cat 2201	Oxidation Catalyst Unit 2 Module 2201	Oxidizer (Catalytic)	10/1/2005	No		
CD30	DLN 2201	Dry Low Nox Unit 2 Module 2201	Other	5/1/2003	No		
CD31	Drift 1	Drift Eliminator Tower 1	Other	5/1/2003	No		
CD32	Drift 2	Drift Eliminator Tower 2	Other	5/1/2003	No		

41810 LINDEN GENERATING STATION BOP190002 CD6 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7EA
Manufacturer:	General Electric
Model:	GE Frame 7EA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	No - A diagram was included in the original November 1995 Title V Application submittal.

41810 LINDEN GENERATING STATION BOP190002 CD7 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7EA
Manufacturer:	General Electric
Model:	GE Frame 7EA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	No - A diagram was included in the original November 1995 Title V Application submittal.

41810 LINDEN GENERATING STATION BOP190002 CD8 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7EA
Manufacturer:	General Electric
Model:	GE Frame 7EA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	No - A diagram was included in the original November 1995 Title V Application submittal.

41810 LINDEN GENERATING STATION BOP190002 CD9 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7EA
Manufacturer:	General Electric
Model:	GE Frame 7EA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	No - A diagram was included in the original November 1995 Title V Application submittal.

41810 LINDEN GENERATING STATION BOP190002 CD11 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7EA
Manufacturer:	General Electric
Model:	GE Frame 7EA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	No - A diagram was included in the original November 1995 Title V Application submittal.

41810 LINDEN GENERATING STATION BOP190002 CD12 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7EA
Manufacturer:	General Electric
Model:	GE Frame 7EA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	No - A diagram was included in the original November 1995 Title V Application submittal.

41810 LINDEN GENERATING STATION BOP190002 CD13 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7EA
Manufacturer:	General Electric
Model:	GE Frame 7EA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	No - A diagram was included in the original November 1995 Title V Application submittal.

41810 LINDEN GENERATING STATION BOP190002 CD14 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7EA
Manufacturer:	General Electric
Model:	GE Frame 7EA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	No - A diagram was included in the original November 1995 Title V Application submittal.

41810 LINDEN GENERATING STATION BOP190002 CD15 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7FA
Manufacturer:	General Electric
Model:	GE Frame 7FA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	

41810 LINDEN GENERATING STATION BOP190002 CD16 (Selective Catalytic Reduction)
Print Date: 12/11/2024

Make:	Hitachi
Manufacturer:	Hitachi
Model:	N/A
Minimum Temperature at Catalyst Bed (°F):	550
Maximum Temperature at Catalyst Bed (°F):	800
Minimum Temperature at Reagent Injection Point (°F):	550
Maximum Temperature at Reagent Injection Point (°F):	800
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH3OH
Minimum Reagent Charge Rate (gpm):	0.3
Maximum Reagent Charge Rate (gpm):	2
Minimum Concentration of Reagent in Solution (% Volume):	25
Minimum NOx to Reagent Mole Ratio:	0.42
Maximum NOx to Reagent Mole Ratio:	0.53
Maximum Anticipated Ammonia Slip (ppm):	10
Type of Catalyst:	Titanium-Vanadium-Pentoxide
Volume of Catalyst (ft^3):	3335
Form of Catalyst:	Honeycomb
Anticipated Life of Catalyst:	5
Units:	Years
Have you attached a catalyst replacement schedule?	○ Yes ● No
Method of Determining Breakthrough:	Catalytyst coupon sampling
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	CEM
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No

41810 LINDEN GENERATING STATION BOP190002 CD16 (Selective Catalytic Reduction)
Print Date: 12/11/2024

Comments:

41810 LINDEN GENERATING STATION BOP190002 CD17 (Oxidizer (Catalytic))
Print Date: 12/11/2024

Make:	Englehard
Manufacturer:	Englehard
Model:	NA
Minimum Inlet Temperature (°F):	550
Maximum Inlet Temperature (°F)	800
Minimum Outlet Temperature (°F)	550
Maximum Outlet Temperature (°F):	800
Minimum Residence Time (sec)	1
Fuel Type:	
Description:	
Maximum Rated Gross Heat Input (MMBtu/hr):	
Minimum Pressure Drop Across Catalyst (psi):	0.036
Maximum Pressure Drop Across Catalyst (psi):	0.1
Catalyst Material:	Platinum/Metal substrate
Form of Catalyst:	Honeycomb
Description:	
Minimum Expected Life of Catalyst:	3
Units:	
Volume of Catalyst (ft^3):	240
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	CEM
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No
Comments:	

41810 LINDEN GENERATING STATION BOP190002 CD18 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7FA
Manufacturer:	General Electric
Model:	GE Frame 7FA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No
Comments:	

41810 LINDEN GENERATING STATION BOP190002 CD19 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7FA
Manufacturer:	General Electric
Model:	GE Frame 7FA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	

41810 LINDEN GENERATING STATION BOP190002 CD20 (Selective Catalytic Reduction)
Print Date: 12/11/2024

Make:	Hitachi
Manufacturer:	Hitachi
Model:	N/A
Minimum Temperature at Catalyst Bed (°F):	550
Maximum Temperature at Catalyst Bed (°F):	800
Minimum Temperature at Reagent Injection Point (°F):	550
Maximum Temperature at Reagent Injection Point (°F):	800
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH3OH
Minimum Reagent Charge Rate (gpm):	0.3
Maximum Reagent Charge Rate (gpm):	2
Minimum Concentration of Reagent in Solution (% Volume):	25
Minimum NOx to Reagent Mole Ratio:	0.42
Maximum NOx to Reagent Mole Ratio:	0.53
Maximum Anticipated Ammonia Slip (ppm):	10
Type of Catalyst:	Titanium-Vanadium-Pentoxide
Volume of Catalyst (ft^3):	3335
Form of Catalyst:	Honeycomb
Anticipated Life of Catalyst:	5
Units:	Years
Have you attached a catalyst replacement schedule?	○ Yes ● No
Method of Determining Breakthrough:	Catalytyst coupon sampling
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	CEM
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No

41810 LINDEN GENERATING STATION BOP190002 CD20 (Selective Catalytic Reduction)
Print Date: 12/11/2024

Comments:

41810 LINDEN GENERATING STATION BOP190002 CD21 (Oxidizer (Catalytic))
Print Date: 12/11/2024

Make:	Englehard
Manufacturer:	Englehard
Model:	NA
Minimum Inlet Temperature (°F):	550
Maximum Inlet Temperature (°F)	800
Minimum Outlet Temperature (°F)	550
Maximum Outlet Temperature (°F):	800
Minimum Residence Time (sec)	1
Fuel Type:	
Description:	
Maximum Rated Gross Heat Input (MMBtu/hr):	
Minimum Pressure Drop Across Catalyst (psi):	0.036
Maximum Pressure Drop Across Catalyst (psi):	0.1
Catalyst Material:	Platinum/Metal substrate
Form of Catalyst:	Honeycomb
Description:	
Minimum Expected Life of Catalyst:	3
Units:	
Volume of Catalyst (ft^3):	240
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	CEM
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No
Comments:	

41810 LINDEN GENERATING STATION BOP190002 CD22 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7FA
Manufacturer:	General Electric
Model:	GE Frame 7FA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No
Comments:	

41810 LINDEN GENERATING STATION BOP190002 CD23 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7FA
Manufacturer:	General Electric
Model:	GE Frame 7FA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	

41810 LINDEN GENERATING STATION BOP190002 CD24 (Selective Catalytic Reduction)
Print Date: 12/11/2024

Make:	Hitachi
Manufacturer:	Hitachi
Model:	N/A
Minimum Temperature at Catalyst Bed (°F):	550
Maximum Temperature at Catalyst Bed (°F):	800
Minimum Temperature at Reagent Injection Point (°F):	550
Maximum Temperature at Reagent Injection Point (°F):	800
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH3OH
Minimum Reagent Charge Rate (gpm):	0.3
Maximum Reagent Charge Rate (gpm):	2
Minimum Concentration of Reagent in Solution (% Volume):	25
Minimum NOx to Reagent Mole Ratio:	0.42
Maximum NOx to Reagent Mole Ratio:	0.53
Maximum Anticipated Ammonia Slip (ppm):	10
Type of Catalyst:	Titanium-Vanadium-Pentoxide
Volume of Catalyst (ft^3):	3335
Form of Catalyst:	Honeycomb
Anticipated Life of Catalyst:	5
Units:	Years
Have you attached a catalyst replacement schedule?	○ Yes ● No
Method of Determining Breakthrough:	Catalytyst coupon sampling
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	CEM
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No

41810 LINDEN GENERATING STATION BOP190002 CD24 (Selective Catalytic Reduction)
Print Date: 12/11/2024

Comments:

41810 LINDEN GENERATING STATION BOP190002 CD25 (Oxidizer (Catalytic))
Print Date: 12/11/2024

Make:	Englehard
Manufacturer:	Englehard
Model:	NA
Minimum Inlet Temperature (°F):	550
Maximum Inlet Temperature (°F)	800
Minimum Outlet Temperature (°F)	550
Maximum Outlet Temperature (°F):	800
Minimum Residence Time (sec)	1
Fuel Type:	
Description:	
Maximum Rated Gross Heat Input (MMBtu/hr):	
Minimum Pressure Drop Across Catalyst (psi):	0.036
Maximum Pressure Drop Across Catalyst (psi):	0.1
Catalyst Material:	Platinum/Metal substrate
Form of Catalyst:	Honeycomb
Description:	
Minimum Expected Life of Catalyst:	3
Units:	
Volume of Catalyst (ft^3):	240
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	CEM
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No
Comments:	

41810 LINDEN GENERATING STATION BOP190002 CD26 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7FA
Manufacturer:	General Electric
Model:	GE Frame 7FA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No
Comments:	

41810 LINDEN GENERATING STATION BOP190002 CD27 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7FA
Manufacturer:	General Electric
Model:	GE Frame 7FA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	

41810 LINDEN GENERATING STATION BOP190002 CD28 (Selective Catalytic Reduction)
Print Date: 12/11/2024

Make:	Hitachi
Manufacturer:	Hitachi
Model:	N/A
Minimum Temperature at Catalyst Bed (°F):	550
Maximum Temperature at Catalyst Bed (°F):	800
Minimum Temperature at Reagent Injection Point (°F):	550
Maximum Temperature at Reagent Injection Point (°F):	800
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH3OH
Minimum Reagent Charge Rate (gpm):	0.3
Maximum Reagent Charge Rate (gpm):	2
Minimum Concentration of Reagent in Solution (% Volume):	25
Minimum NOx to Reagent Mole Ratio:	0.42
Maximum NOx to Reagent Mole Ratio:	0.53
Maximum Anticipated Ammonia Slip (ppm):	10
Type of Catalyst:	Titanium-Vanadium-Pentoxide
Volume of Catalyst (ft^3):	3335
Form of Catalyst:	Honeycomb
Anticipated Life of Catalyst:	5
Units:	Years
Have you attached a catalyst replacement schedule?	○ Yes ● No
Method of Determining Breakthrough:	Catalytyst coupon sampling
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	CEM
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No

41810 LINDEN GENERATING STATION BOP190002 CD28 (Selective Catalytic Reduction)
Print Date: 12/11/2024

Comments:

41810 LINDEN GENERATING STATION BOP190002 CD29 (Oxidizer (Catalytic))
Print Date: 12/11/2024

Make:	Englehard
Manufacturer:	Englehard
Model:	NA
Minimum Inlet Temperature (°F):	550
Maximum Inlet Temperature (°F)	800
Minimum Outlet Temperature (°F)	550
Maximum Outlet Temperature (°F):	800
Minimum Residence Time (sec)	1
Fuel Type:	
Description:	
Maximum Rated Gross Heat Input (MMBtu/hr):	
Minimum Pressure Drop Across Catalyst (psi):	0.036
Maximum Pressure Drop Across Catalyst (psi):	0.1
Catalyst Material:	Platinum/Metal substrate
Form of Catalyst:	Honeycomb
Description:	
Minimum Expected Life of Catalyst:	3
Units:	
Volume of Catalyst (ft^3):	240
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	CEM
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No
Comments:	

41810 LINDEN GENERATING STATION BOP190002 CD30 (Other)
Print Date: 12/11/2024

Make:	GE Frame 7FA
Manufacturer:	General Electric
Model:	GE Frame 7FA
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No
Comments:	

41810 LINDEN GENERATING STATION BOP190002 CD31 (Other)
Print Date: 12/11/2024

Make:	Hamon
Manufacturer:	Hamon
Model:	N/A
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No
Comments:	

41810 LINDEN GENERATING STATION BOP190002 CD32 (Other)
Print Date: 12/11/2024

Make:	Hamon
Manufacturer:	Hamon
Model:	N/A
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No
Comments:	

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam. (in.)	Height (ft.)	Dist. to Prop. Line (ft)	Exhaust Temp. (deg. F)			Exhaust Vol. (acfm)			Discharge Direction	PT Set ID
							Avg.	Min.	Max.	Avg.	Min.	Max.		
PT7	Unit No. 5	Unit No. 5, Turbine	Round	192	100	490	990.0	940.0	1,100.0	1,460,000.0	950,000.0	1,675,000.0	Up	
PT8	Unit No. 6	Unit No. 6, Turbine	Round	192	100	490	990.0	940.0	1,100.0	1,460,000.0	950,000.0	1,675,000.0	Up	
PT9	Unit No. 7	Unit No. 7, Turbine	Round	192	100	490	990.0	940.0	1,100.0	1,460,000.0	950,000.0	1,675,000.0	Up	
PT10	Unit No. 8	Unit No. 8, Turbine	Round	192	100	490	990.0	940.0	1,100.0	1,460,000.0	950,000.0	1,675,000.0	Up	
PT26	Unit 1101	Unit No. 1 Module 1101	Round	228	225	490	197.0	150.0	265.0	1,000,000.0	600,000.0	1,400,000.0	Up	
PT27	Unit 1201	Unit No. 1 Module 1201	Round	228	225	395	197.0	150.0	265.0	1,000,000.0	600,000.0	1,400,000.0	Up	
PT28	Unit 2101	Unit No. 2 Module 2101	Round	228	225	205	197.0	150.0	265.0	1,000,000.0	600,000.0	1,400,000.0	Up	
PT29	Unit 2201	Unit No. 2 Module 2201	Round	228	225	70	197.0	150.0	265.0	1,000,000.0	600,000.0	1,400,000.0	Up	
PT30	Tower 1	Cooling Tower 1	Round	999	60	70	94.0	50.0	120.0	9,999,999.0	9,999,999.0	9,999,999.0	Up	
PT31	Tower 2	Cooling Tower 2	Round	999	60	70	94.0	50.0	120.0	9,999,999.0	9,999,999.0	9,999,999.0	Up	
PT33	Fire Pump 2	Emergency Diesel Fire Pump No. 2	Round	6	11	70	840.0	400.0	1,300.0	1,400.0	700.0	2,100.0	Up	
PT35	EF-1	EF-1	Square	18	78	60	70.0	45.0	120.0	350.0	0.0	350.0	Up	
PT36	EF-2	EF-2	Square	18	41	90	70.0	45.0	120.0	350.0	0.0	350.0	Up	
PT37	EF-3	EF-3	Square	18	78	120	70.0	45.0	120.0	350.0	0.0	350.0	Up	
PT38	EF-4	EF-4	Square	18	78	120	70.0	45.0	120.0	350.0	0.0	350.0	Up	
PT39	EF-5	EF-5	Square	18	78	150	70.0	45.0	120.0	350.0	0.0	350.0	Up	
PT40	EF-6	EF-6	Square	18	78	180	70.0	45.0	120.0	350.0	0.0	350.0	Up	
PT41	EF-7	EF-7	Square	18	41	240	70.0	45.0	120.0	350.0	0.0	350.0	Up	
PT42	EF-8	EF-8	Square	18	78	270	70.0	45.0	120.0	350.0	0.0	350.0	Up	

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam. (in.)	Height (ft.)	Dist. to Prop. Line (ft)	Exhaust Temp. (deg. F)			Exhaust Vol. (acfm)			Discharge Direction	PT Set ID
							Avg.	Min.	Max.	Avg.	Min.	Max.		
PT43	EF-9	EF-9	Square	18	78	360	70.0	45.0	120.0	350.0	0.0	350.0	Up	
PT44	EF-10	EF-10	Square	18	41	390	70.0	45.0	120.0	350.0	0.0	350.0	Up	
PT45	EF-11	EF-11	Square	18	78	420	70.0	45.0	120.0	350.0	0.0	350.0	Up	
PT46	EF-12	EF-12	Square	18	78	450	70.0	45.0	120.0	350.0	0.0	350.0	Up	
PT47	EF-13	EF-13	Square	18	78	480	70.0	45.0	120.0	350.0	0.0	350.0	Up	
PT48	EF-14	EF-14	Square	18	41	510	70.0	45.0	120.0	350.0	0.0	350.0	Up	
PT49	EF-15	EF-15	Square	18	78	540	70.0	45.0	120.0	350.0	0.0	350.0	Up	
PT50	EF-16	EF-16	Square	18	78	570	70.0	45.0	120.0	350.0	0.0	350.0	Up	
PT52	EDGen	Emergency Diesel Generator	Round	10	10	490	885.0	885.0	885.0	16,700.0	16,700.0	16,700.0	Up	
PT53	Engine1	Air Compressor Engine 1	Round	10	10	150	885.0	885.0	885.0	16,700.0	16,700.0	16,700.0	Up	
PT54	Engine2	Air Compressor Engine 2	Round	10	10	150	885.5	885.5	888.5	16,700.0	16,700.0	16,700.0	Up	

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 4 Unit 5,6,7,8 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	5-Gas	Unit No. 5 firing natural gas (base load & below)	Normal - Steady State	E6	CD11 (P)	PT7								
OS2	6-Gas	Unit No. 6 firing natural gas (base load & below)	Normal - Steady State	E7	CD13 (P)	PT8								
OS3	7-Gas	Unit No. 7 firing natural gas (base load & below)	Normal - Steady State	E8	CD6 (P)	PT9								
OS4	8-Gas	Unit No. 8 firing natural gas (base load & below)	Normal - Steady State	E9	CD8 (P)	PT10								
OS5	5-Oil	Unit No. 5 firing ultra low sulfur distillate oil (ULSD)	Normal - Steady State	E6	CD12 (P)	PT7								
OS6	6-Oil	Unit No. 6 firing ultra low sulfur distillate oil (ULSD)	Normal - Steady State	E7	CD14 (P)	PT8								
OS7	7-Oil	Unit No. 7 firing ultra low sulfur distillate oil (ULSD)	Normal - Steady State	E8	CD7 (P)	PT9								
OS8	8-Oil	Unit No. 8 firing ultra low sulfur distillate oil (ULSD)	Normal - Steady State	E9	CD9 (P)	PT10								
OS9	5-Gas/Peak	Unit No. 5 firing natural gas at peak load	Normal - Steady State	E6	CD11 (P)	PT7								
OS10	6-Gas/Peak	Unit No. 6 firing natural gas at peak load	Normal - Steady State	E7	CD13 (P)	PT8								
OS11	7-Gas/Peak	Unit No. 7 firing natural gas at peak load	Normal - Steady State	E8	CD6 (P)	PT9								
OS12	8-Gas/Peak	Unit No. 8 firing natural gas at peak load	Normal - Steady State	E9	CD8 (P)	PT10								
OS13	5-Gas-SU	Unit No. 5 Start-up on Natural Gas	Normal - Steady State	E6		PT7								
OS14	6-Gas-SU	Unit No. 6 Start-up on Natural Gas	Normal - Steady State	E7		PT8								
OS15	7-Gas-SU	Unit No. 7 Start-upon Natural Gas	Normal - Steady State	E8		PT9								

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 4 Unit 5,6,7,8 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS16	8-Gas-SU	Unit No. 8 Start-up on Natural Gas	Normal - Steady State	E9		PT10								
OS17	5-ULSD-SU	Unit No. 5 Start-up on ULSD	Normal - Steady State	E6		PT7								
OS18	6-ULSD-SU	Unit No. 6 Start-up on ULSD	Normal - Steady State	E7		PT8								
OS19	7-ULSD-SU	Unit No. 7 Start-up on ULSD	Normal - Steady State	E8		PT9								
OS20	8-ULSD-SU	Unit No. 8 Start-up on ULSD	Normal - Steady State	E9		PT10								
OS21	5-Gas-SD	Unit No. 5 Shutdown on Natural Gas	Shutdown	E6		PT7								
OS22	6-Gas-SD	Unit No. 6 Shutdown on Natural Gas	Shutdown	E7		PT8								
OS23	7-Gas-SD	Unit No. 7 Shutdown on Natural Gas	Shutdown	E8		PT9								
OS24	8-Gas-SD	Unit No. 8 Shutdown on Natural Gas	Shutdown	E9		PT10								
OS25	5-ULSD-SD	Unit No. 5 Shutdown on ULSD	Shutdown	E6		PT7								
OS26	6-ULSD-SD	Unit No. 6 Shutdown on ULSD	Shutdown	E7		PT8								
OS27	7-ULSD-SD	Unit No. 7 Shutdown on ULSD	Shutdown	E8		PT9								
OS28	8-ULSD-SD	Unit No. 8 Shutdown on ULSD	Shutdown	E9		PT10								
OS29	5-Fuel T	Unit No. 5 Fuel Transfer	Startup	E6		PT7								
OS30	6-Fuel T	Unit No. 6 Fuel Transfer	Startup	E7		PT8								
OS31	7-Fuel T	Unit No. 7 Fuel Transfer	Startup	E8		PT9								
OS32	8-Fuel T	Unit No. 8 Fuel Transfer	Startup	E9		PT10								

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 4 Unit 5,6,7,8 Unit Nos. 5, 6, 7, and 8 Simple-cycle stationary gas Turbines (used for electric power generation)

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS33	5-Mode T	Unit No. 5 Mode Transfer	Normal - Steady State	E6		PT7								
OS34	6-Mode T	Unit No. 6 Mode Transfer	Normal - Steady State	E7		PT8								
OS35	7-Mode T	Unit No. 7 Mode Transfer	Normal - Steady State	E8		PT9								
OS36	8-Mode T	Unit No. 8 Mode Transfer	Normal - Steady State	E9		PT10								
OS37	5-MSTest	Unit No. 5 Mechanical Testing	Maintenance	E6		PT7								
OS38	6-MSTest	Unit No. 6 Mechanical Testing	Maintenance	E7		PT8								
OS39	7-MSTest	Unit No.7 Mechanical Testing	Maintenance	E8		PT9								
OS40	8-MSTest	Unit No. 8 Mechanical Testing	Maintenance	E9		PT10								

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 8 Fire Pump Emergency Diesel Fire Pump No. 2

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	Fire Pump 2	Emergency Diesel Fire Pump No. 2	Normal - Steady State	E33		PT33	2-03-001-01	0.0	500.0		700.0	2,100.0	400.0	840.0

U 40 EDG EDG

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	Emergency DG	Emergency CI Engine 560<=kW<=2237(750<=H 2007 model year or later	Normal - Steady State	E40		PT52	2-02-001-02		100.0			16,700.0		885.0

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 43 Units 1 & 2 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	1101 NG N/DF	Unit No. 1 Module 1101 Natural Gas Firing without Duct Firing	Normal - Steady State	E24	CD16 (S) CD17 (T) CD18 (P)	PT26								
OS2	1201 NG N/DF	Unit No. 1 Module 1201 Natural Gas Firing without Duct Firing	Normal - Steady State	E25	CD20 (S) CD21 (T) CD22 (P)	PT27								
OS3	2101 NG N/DF	Unit No. 2 Module 2101 Natural Gas Firing without Duct Firing	Normal - Steady State	E26	CD24 (S) CD25 (T) CD26 (P)	PT28								
OS4	2201 NG N/DF	Unit No. 2 Module 2201 Natural Gas Firing without Duct Firing	Normal - Steady State	E27	CD28 (S) CD29 (T) CD30 (P)	PT29								
OS5	1101 NG W/DF	Unit No. 1 Module 1101 Natural Gas Firing with Duct Firing	Normal - Steady State	E24	CD16 (S) CD17 (T) CD18 (P)	PT26								
OS6	1201 NG W/DF	Unit No. 1 Module 1201 Natural Gas Firing with Duct Firing	Normal - Steady State	E25	CD20 (S) CD21 (T) CD22 (P)	PT27								
OS7	2101 NG W/DF	Unit No. 2 Module 2101 Natural Gas Firing with Duct Firing	Normal - Steady State	E26	CD24 (S) CD25 (T) CD26 (P)	PT28								
OS8	2201 NG W/DF	Unit No. 2 Module 2201 Natural Gas Firing with Duct Firing	Normal - Steady State	E27	CD28 (S) CD29 (T) CD30 (P)	PT29								

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BOP190002

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New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 43 Units 1 & 2 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS9	1101 NG MIN	Unit No. 1 Module 1101 Minimum Load Firing Natural Gas	Normal - Steady State	E24	CD16 (S) CD17 (T) CD18 (P)	PT26								
OS10	1201 NG MIN	Unit No. 1 Module 1201 Minimum Load Firing Natural Gas	Normal - Steady State	E25	CD20 (S) CD21 (T) CD22 (P)	PT27								
OS11	2101 NG MIN	Unit No. 2 Module 2101 Minimum Load Firing Natural Gas	Normal - Steady State	E26	CD24 (S) CD25 (T) CD26 (P)	PT28								
OS12	2201 NG MIN	Unit No. 2 Module 2201 Minimum Load Firing Natural Ga	Normal - Steady State	E27	CD28 (S) CD29 (T) CD30 (P)	PT29								
OS13	1101 OIL	Unit No. 1 Module 1101 Oil Firing	Normal - Steady State	E24	CD15 (T) CD16 (P) CD17 (S)	PT26								
OS14	1201 OIL	Unit No. 1 Module 1201 Oil Firing	Normal - Steady State	E25	CD19 (T) CD20 (P) CD21 (S)	PT27								
OS15	2101 OIL	Unit No. 2 Module 2101 Oil Firing	Normal - Steady State	E26	CD23 (T) CD24 (P) CD25 (S)	PT28								
OS16	2201 OIL	Unit No. 2 Module 2201 Oil Firing	Normal - Steady State	E27	CD27 (P) CD28 (S) CD29 (T)	PT29								

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 43 Units 1 & 2 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS17	1101 MIN OIL	Unit No. 1 Module 1101 Oil Firing Minimum Load	Normal - Steady State	E24	CD15 (P) CD16 (S) CD17 (T)	PT26								
OS18	1201 MIN OIL	Unit No. 1 Module 1201 Oil Firing Minimum Load	Normal - Steady State	E25	CD19 (P) CD20 (S) CD21 (T)	PT27								
OS19	2101 MIN OIL	Unit No. 2 Module 2101 Oil Firing Minimum Load	Normal - Steady State	E26	CD23 (P) CD24 (S) CD25 (T)	PT28								
OS20	2201 MIN OIL	Unit No. 2 Module 2201 Oil Firing Minimum Load	Normal - Steady State	E27	CD27 (P) CD28 (S) CD29 (T)	PT29								
OS21	1101 Gas SU	Unit No. 1 Module 1101 Startup-Gas	Startup	E24		PT26								
OS22	1201 Gas SU	Unit No. 1 Module 1201 Startup-Gas	Startup	E25		PT27								
OS23	2101 Gas SU	Unit No. 2 Module 2101 Startup-Gas	Startup	E26		PT28								
OS24	2201 Gas SU	Unit No. 2 Module 2201 Startup-Gas	Startup	E27		PT29								
OS25	1101 Gas SD	Unit No. 1 Module 1101 Shutdown-Gas	Shutdown	E24		PT26								
OS26	1201 Gas SD	Unit No. 1 Module 1201 Shutdown-Gas	Shutdown	E25		PT27								
OS27	2101 Gas SD	Unit No. 2 Module 2101 Shutdown-Gas	Shutdown	E26		PT28								
OS28	2201 Gas SD	Unit No. 2 Module 2201 Shutdown-Gas	Shutdown	E27		PT29								

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 43 Units 1 & 2 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS29	1101 MT	Unit No. 1 Module 1101 Maintenance	Maintenance	E24		PT26								
OS30	1201 MT	Unit No. 1 Module 1201 Maintenance	Maintenance	E25		PT27								
OS31	2101 MT	Unit No. 2 Module 2101 Maintenance	Maintenance	E26		PT28								
OS32	2201 MT	Unit No. 2 Module 2201 Maintenance	Maintenance	E27		PT29								
OS33	TOWER 1	Cooling Tower 1	Normal - Steady State	E28	CD31 (P)	PT30								
OS34	TOWER 2	Cooling Tower 2	Normal - Steady State	E29	CD32 (P)	PT31								
OS101	1101 OpFlex	Unit No. 1 Module 1101 OpFlex Advantage Peak Operation Firing Natural Gas	Normal - Steady State	E24	CD16 (P) CD17 (P) CD18 (P)	PT26		0.0	300.0					
OS102	1201 OpFlex	Unit No. 1 Module 1201 OpFlex Advantage Peak Operation Firing Natural Gas	Normal - Steady State	E25	CD20 (P) CD21 (P) CD22 (P)	PT27		0.0	300.0					
OS103	2101 OpFlex	Unit No. 1 Module 2101 OpFlex Advantage Peak Operation Firing Natural Gas	Normal - Steady State	E26	CD24 (P) CD25 (P) CD26 (P)	PT28		0.0	300.0					
OS104	2201OpFlex	Unit No. 1 Module 2201 OpFlex Advantage Peak Operation Firing Natural Gas	Normal - Steady State	E27	CD28 (P) CD29 (P) CD30 (P)	PT29		0.0	300.0					
OS105	1101 FT	Unit No. 1 Module 1101 Fuel Transfer	Startup	E24	CD16 (P) CD17 (P) CD18 (P)	PT26								

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 43 Units 1 & 2 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS106	1201 FT	Unit No. 1 Module 1201 Fuel Transfer	Startup	E25	CD20 (P) CD21 (P) CD22 (P)	PT27								
OS107	2101 FT	Unit No. 1 Module 2101 Fuel Transfer	Startup	E26	CD24 (P) CD25 (P) CD26 (P)	PT28								
OS108	2201 FT	Unit No. 1 Module 2201 Fuel Transfer	Startup	E27	CD28 (P) CD29 (P) CD30 (P)	PT29								
OS109	1101 ULSD SU	Unit No. 1 Module 1101 Startup-ULSD	Startup	E24	CD16 (P) CD17 (P) CD18 (P)	PT26								
OS110	1201 ULSD SU	Unit No. 1 Module 1201 Startup-ULSD	Startup	E25	CD20 (P) CD21 (P) CD22 (P)	PT27								
OS111	2101 ULSD SU	Unit No. 1 Module 2101 Startup-ULSD	Startup	E26	CD24 (P) CD25 (P) CD26 (P)	PT28								
OS112	2201 ULSD SU	Unit No. 1 Module 2201 Startup-ULSD	Startup	E27	CD28 (P) CD29 (P) CD30 (P)	PT29								
OS113	1101 ULSD SD	Unit No. 1 Module 1101 Shutdown-ULSD	Shutdown	E24	CD16 (P) CD17 (P) CD18 (P)	PT26								

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 43 Units 1 & 2 Units No. 1 and 2 Combined-cycle stationary gas Turbines (used for electric power generation) and two Cooling Towers

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS114	1201 ULSD SD	Unit No. 1 Module 1201 Shutdown-ULSD	Shutdown	E25	CD20 (P) CD21 (P) CD22 (P)	PT27								
OS115	2101 ULSD SD	Unit No. 1 Module 2101 Shutdown-ULSD	Shutdown	E26	CD24 (P) CD25 (P) CD26 (P)	PT28								
OS116	2201 ULSD SD	Unit No. 1 Module 2201 Shutdown-ULSD	Shutdown	E27	CD28 (P) CD29 (P) CD30 (P)	PT29								

U 45 MUA Heaters Make-up Air Heaters Nos. 1 - 4

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	MUA-1	Make-up Air Heater No. 1	Normal - Steady State	E35		PT35 PT36 PT37 PT38		0.0	5,840.0		0.0	1,400.0	45.0	120.0

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 45 MUA Heaters Make-up Air Heaters Nos. 1 - 4

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS2	MUA-2	Make-up Air Heater No. 2	Normal - Steady State	E36		PT39 PT40 PT41 PT42		0.0	5,840.0		0.0	1,400.0	45.0	120.0
OS3	MUA-3	Make-up Air Heater No. 3	Normal - Steady State	E37		PT43 PT44 PT45 PT46		0.0	5,840.0		0.0	1,400.0	45.0	120.0
OS4	MUA-4	Make-up Air Heater No.4	Normal - Steady State	E38		PT47 PT48 PT49 PT50		0.0	5,840.0		0.0	1,400.0	45.0	120.0

U 50 AC Engines Portable Air Compressor Engines No. 1 and 2

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	Engine1	Portable Air Compressor Engine 1 (Tier III)	Normal - Steady State	E50		PT53	2-01-001-02	0.0	2,050.0					
OS2	Engine2	Portable Air Compressor Engine 2 (Tier III)	Normal - Steady State	E51		PT54	2-01-001-02	0.0	2,050.0					

LINDEN GENERATING STATION (41810)
BOP190002

Date: 1/28/2025

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 50 AC Engines Portable Air Compressor Engines No. 1 and 2

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS3	Engine1	Portable Air Compressor Engine 1 (Tier II)	Normal - Steady State	E50		PT53	2-01-001-02	0.0	900.0					
OS4	Engine2	Portable Air Compressor Engine 2 (Tier II)	Normal - Steady State	E51		PT54	2-01-001-02	0.0	900.0					

Date: 1/28/2025

New Jersey Department of Environmental Protection
Subject Item Group Inventory

Group NJID: GR101 U43 1&2OpFlx

Members:

Type	ID	OS	Step
U	U 43	OS101 1101 OpFlex	
U	U 43	OS102 1201 OpFlex	
U	U 43	OS103 2101 OpFlex	
U	U 43	OS104 2201OpFlex	

Formal Reason(s) for Group/Cap:

☑ Other

Other (explain): Similar conditions for each module during OpFlex Advantage Peak operation.

Condition/Requirements that will be complied with or are no longer applicable as a result of this Group:

Operating Circumstances:

New Jersey Department of Environmental Protection
Subject Item Group Inventory

Group NJID: GR102 RGGI

Members:

Type	ID	OS	Step
U	U 4	OS0 Summary	
U	U 43	OS0 Summary	

Formal Reason(s) for Group/Cap:

☑ Other

Other (explain): RGGI Requirements

Condition/Requirements that will be complied with or are no longer applicable as a result of this Group:

Operating Circumstances:

New Jersey Department of Environmental Protection
Subject Item Group Inventory

Group NJID: GR103 NJAC 7:27F

Members:

Type	ID	OS	Step
U	U 4	OS0 Summary	
U	U 43	OS0 Summary	

Formal Reason(s) for Group/Cap:

☑ Other

Other (explain): NJ PACT NJAC 7:27F RULE REQUIREMENTS FOR CO2 Control - Applicable to Combustion Turbines

Condition/Requirements that will be complied with or are no longer applicable as a result of this Group:

Operating Circumstances:

State of New Jersey
Department of Environmental Protection
AIR, ENERGY AND MATERIALS SUSTAINABILITY
Division of Air Quality and Radiation Protection
Bureau of Stationary Sources
401 E. State Street, 2nd Floor, P.O. Box 420, Mail Code 401-02
Trenton, NJ 08625-0420

PHILIP D. MURPHY
Governor

TAHESHA WAY
Lt. Governor

SHAWN M. LATOURETTE
Commissioner

PHASE II ACID RAIN PERMIT

Issued to: Linden Generating Station
Wood Avenue South
Linden, NJ 07036

Owned by: Alpha Generation
300 Atlantic Street 5th Floor
Stamford, CT 06901

Operated by: CAMS LLC
910 Louisiana St
Suite 2400
Houston, TX 77002

ORIS Code: 2406

Effective: To coincide with the Operating Permit Dates (**Expiry Date: Coincides with Title V permit expiry date)**

This Acid Rain Permit is issued under the authority of Chapter 106, P.L.1967 (N.J.S.A. 26:2C-9.2) and Titles IV and V of the Clean Air Act. The owners and operators of each affected unit at this facility shall comply with all of the requirements established in this permit.

Approved by:

_____

David J. Owen
Bureau of Stationary Sources

ACID RAIN PERMIT CONTENTS

1) STATEMENT OF BASIS

2) UNIT SPECIFIC REQUIREMENTS

3) COMMENTS, NOTES, AND JUSTIFICATIONS REGARDING PERMIT DECISIONS

4) PHASE II PERMIT APPLICATION

1) Statement of Basis

In accordance with N.J.S.A. 26:2C-9.2 and Titles IV and V of the Clean Air Act, the Department issues this permit pursuant to N.J.A.C. 7:27 et seq.

2) Unit Specific Requirements

Refer to 40 CFR 72 for specific requirements.

3) Comments, Notes, And Justifications Regarding Permit Decisions

This facility is subject to the Operating Permit regulations promulgated at N.J.A.C. 7:27-22. Therefore, the facility must obtain an Operating Permit. The Department is currently reviewing the Operating Permit application filed by the applicant, and expects to issue a permit decision on their application in the near future. The procedures for incorporating this Acid Rain permit into the Operating Permit shall be consistent with the state requirements at N.J.A.C. 7:27-22.29, the federal requirements at 40 CFR 72, and any official guidance issued by USEPA.

4) Phase II Permit Application

The owners and operators shall comply with all of the standard requirements and special provisions set forth on the attached Phase II Permit Application for each affected unit.

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2018

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ **new** ☐ **revised** ☒ **for ARP permit renewal**

STEP 1

Identify the facility name, State, and plant (ORIS) code.

Facility (Source) Name	State	Plant Code
G	N	6

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
5	Yes
6	Yes
7	Yes
8	Yes
0	Yes
0	Yes
0	Yes
0	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

Facility (Source) Name (from STEP 1)

STEP 3

Read the standard requirements.

Permit Requirements

(1) The designated representative of each affected source and each affected unit at the source shall:
  (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
  (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:
  (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  (ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:
  (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
  (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Facility (Source) Name (from STEP 1)

STEP 3, Cont'd.

Excess Emissions Requirements

(1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
  (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
  (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
  (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Facility (Source) Name (from STEP 1)

STEP 3, Cont'd.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; provided, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Read the certification statement, sign, and date.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	
Signature 	Date 04/30/2019

Instructions for the Acid Rain Program Permit Application

The Acid Rain Program requires the designated representative to submit an Acid Rain permit application for each source with an affected unit. A complete Certificate of Representation must be received by EPA before the permit application is submitted to the title V permitting authority. A complete Acid Rain permit application, once submitted, is binding on the owners and operators of the affected source and is enforceable in the absence of a permit until the title V permitting authority either issues a permit to the source or disapproves the application.

Please type or print. If assistance is needed, contact the title V permitting authority.

STEP 1 A Plant Code is a 4 or 5 digit number assigned by the Department of Energy's (DOE) Energy Information Administration (EIA) to facilities that generate electricity. For older facilities, "Plant Code" is synonymous with "ORISPL" and "Facility" codes. If the facility generates electricity but no Plant Code has been assigned, or if there is uncertainty regarding what the Plant Code is, send an email to the EIA. The email address is EIA-860@eia.gov.

STEP 2 In column "a," identify each unit at the facility by providing the appropriate unit identification number, consistent with the identifiers used in the Certificate of Representation and with submissions made to DOE and/or EIA. Do not list duct burners. For new units without identification numbers, owners and operators must assign identifiers consistent with EIA and DOE requirements. Each Acid Rain Program submission that includes the unit identification number(s) (e.g., Acid Rain permit applications, monitoring plans, quarterly reports, etc.) should reference those unit identification numbers in exactly the same way that they are referenced on the Certificate of Representation.

Submission Deadlines

For new units, an initial Acid Rain permit application must be submitted to the title V permitting authority 24 months before the date the unit commences operation. Acid Rain permit renewal applications must be submitted at least 6 months in advance of the expiration of the acid rain portion of a title V permit, or such longer time as provided for under the title V permitting authority's operating permits regulation.

Submission Instructions

Submit this form to the appropriate title V permitting authority. If you have questions regarding this form, contact your local, State, or EPA Regional Acid Rain contact, or call EPA's Acid Rain Hotline at (202) 343-9620.

Paperwork Burden Estimate

The public reporting and record keeping burden for this collection of information is estimated to average 8 hours per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. **Do not send the completed form to this address.**

ATTACHMENT

Cross-State Air Pollution Rule (CSAPR) for the CSAPR NOx Annual Trading Program requirements, CSAPR NOx Ozone Season Trading Program, and CSAPR SO2 Trading Program

Transport Rule (TR) Trading Program Title V Requirements

TR NO_X Annual Trading Program requirements (40 CFR 97.406)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the designated representative, of each TR NO_X Annual source and each TR NO_X Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of TR NO_X Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NO_X Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO_X emissions requirements.

(1) TR NO_X Annual emissions limitation.

(i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_X Annual source and each TR NO_X Annual unit at the source shall hold, in the source's compliance account, TR NO_X Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO_X emissions for such control period from all TR NO_X Annual units at the source.

(ii). If total NO_X emissions during a control period in a given year from the TR NO_X Annual units at a TR NO_X Annual source are in excess of the TR NO_X Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:

(A). The owners and operators of the source and each TR NO_X Annual unit at the source shall hold the TR NO_X Annual allowances required for deduction under 40 CFR 97.424(d); and

(B). The owners and operators of the source and each TR NO_X Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess

emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

(2) TR NO_X Annual assurance provisions.

(i). If total NO_X emissions during a control period in a given year from all TR NO_X Annual units at TR NO_X Annual sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_X emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_X Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such NO_X emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_X emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO_X emissions from all TR NO_X Annual units at TR NO_X Annual sources in the state for such control period exceed the state assurance level.

(ii). The owners and operators shall hold the TR NO_X Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii). Total NO_X emissions from all TR NO_X Annual units at TR NO_X Annual sources in the State during a control period in a given year exceed the state assurance level if such total NO_X emissions exceed the sum, for such control period, of the state NO_X Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).

(iv). It shall not be a violation of 40 CFR part 97, subpart AAAAA or of the Clean Air Act if total NO_X emissions from all TR NO_X Annual units at TR NO_X Annual sources in the State during a control period exceed the state assurance level or if a common designated representative's share of total NO_X emissions from the TR NO_X Annual units at TR NO_X Annual sources in the state during a control period exceeds the common designated representative's assurance level.

(v). To the extent the owners and operators fail to hold TR NO_X Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,

(A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B). Each TR NO_X Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

(3) Compliance periods.

(i). A TR NO_X Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.

(ii). A TR NO_X Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

(i). A TR NO_X Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO_X Annual allowance that was allocated for such control period or a control period in a prior year.

(ii). A TR NO_X Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO_X Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR NO_X Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA.

(6) Limited authorization. A TR NO_X Annual allowance is a limited authorization to emit one ton of NO_X during the control period in one year. Such authorization is limited in its use and duration as follows:

(i). Such authorization shall only be used in accordance with the TR NO_X Annual Trading Program; and

(ii). Notwithstanding any other provision of 40 CFR part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR NO_X Annual allowance does not constitute a property right.

(d) Title V permit revision requirements.

(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO_X Annual allowances in accordance with 40 CFR part 97, subpart AAAAA.

(2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

(1) Unless otherwise provided, the owners and operators of each TR NO_X Annual source and each TR NO_X Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(i). The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each TR NO_X Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such

certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.

(ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA.

(iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_X Annual Trading Program.

(2) The designated representative of a TR NO_X Annual source and each TR NO_X Annual unit at the source shall make all submissions required under the TR NO_X Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

(1) Any provision of the TR NO_X Annual Trading Program that applies to a TR NO_X Annual source or the designated representative of a TR NO_X Annual source shall also apply to the owners and operators of such source and of the TR NO_X Annual units at the source.

(2) Any provision of the TR NO_X Annual Trading Program that applies to a TR NO_X Annual unit or the designated representative of a TR NO_X Annual unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the TR NO_X Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_X Annual source or TR NO_X Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

TR NO_X Ozone Season Trading Program Requirements (40 CFR 97.506)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.513 through 97.518.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the designated representative, of each TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.530 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.531 (initial monitoring system certification and recertification procedures), 97.532 (monitoring system out-of-control periods), 97.533 (notifications concerning monitoring), 97.534 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.535 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(2) The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate allocations of TR NO_X Ozone Season allowances under 40 CFR 97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NO_X Ozone Season emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO_X emissions requirements.

(1) TR NO_X Ozone Season emissions limitation.

(i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, TR NO_X Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) in an amount not less than the tons of total NO_X emissions for such control period from all TR NO_X Ozone Season units at the source.

(ii). If total NO_X emissions during a control period in a given year from the TR NO_X Ozone Season units at a TR NO_X Ozone Season source are in excess of the TR NO_X Ozone Season emissions limitation set forth in paragraph (c)(1)(i) above, then:

(A). The owners and operators of the source and each TR NO_X Ozone Season unit at the source shall hold the TR NO_X Ozone Season allowances required for deduction under 40 CFR 97.524(d); and

(B). The owners and operators of the source and each TR NO_X Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

(2) TR NO_X Ozone Season assurance provisions.

(i). If total NO_X emissions during a control period in a given year from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more

sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_X emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_X Ozone Season allowances available for deduction for such control period under 40 CFR 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.525(b), of multiplying—

(A). The quotient of the amount by which the common designated representative's share of such NO_X emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_X emissions exceeds the respective common designated representative's assurance level; and

(B). The amount by which total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state for such control period exceed the state assurance level.

(ii). The owners and operators shall hold the TR NO_X Ozone Season allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii). Total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state during a control period in a given year exceed the state assurance level if such total NO_X emissions exceed the sum, for such control period, of the State NO_X Ozone Season trading budget under 40 CFR 97.510(a) and the state's variability limit under 40 CFR 97.510(b).

(iv). It shall not be a violation of 40 CFR part 97, subpart BBBBB or of the Clean Air Act if total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_X emissions from the TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state during a control period exceeds the common designated representative's assurance level.

(v). To the extent the owners and operators fail to hold TR NO_X Ozone Season allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,

(A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B). Each TR NO_X Ozone Season allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

(3) Compliance periods.

(i). A TR NO_X Ozone Season unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.

(ii). A TR NO_X Ozone Season unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.
   (i). A TR NO_X Ozone Season allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO_X Ozone Season allowance that was allocated for such control period or a control period in a prior year.
   (ii). A TR NO_X Ozone Season allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO_X Ozone Season allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR NO_X Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart BBBBB.

(6) Limited authorization. A TR NO_X Ozone Season allowance is a limited authorization to emit one ton of NO_X during the control period in one year. Such authorization is limited in its use and duration as follows:
   (i). Such authorization shall only be used in accordance with the TR NO_X Ozone Season Trading Program; and
   (ii). Notwithstanding any other provision of 40 CFR part 97, subpart BBBBB, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR NO_X Ozone Season allowance does not constitute a property right.

(d) Title V permit revision requirements.

(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO_X Ozone Season allowances in accordance with 40 CFR part 97, subpart BBBBB.

(2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.530 through 97.535, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.506(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

(1) Unless otherwise provided, the owners and operators of each TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
   (i). The certificate of representation under 40 CFR 97.516 for the designated representative for the source and each TR NO_X Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.516 changing the designated representative.

(ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart BBBBB.

(iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_X Ozone Season Trading Program.

(2) The designated representative of a TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall make all submissions required under the TR NO_X Ozone Season Trading Program, except as provided in 40 CFR 97.518. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

(1) Any provision of the TR NO_X Ozone Season Trading Program that applies to a TR NO_X Ozone Season source or the designated representative of a TR NO_X Ozone Season source shall also apply to the owners and operators of such source and of the TR NO_X Ozone Season units at the source.

(2) Any provision of the TR NO_X Ozone Season Trading Program that applies to a TR NO_X Ozone Season unit or the designated representative of a TR NO_X Ozone Season unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the TR NO_X Ozone Season Trading Program or exemption under 40 CFR 97.505 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_X Ozone Season source or TR NO_X Ozone Season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

TR SO_2 Group 1 Trading Program requirements (40 CFR 97.606)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the designated representative, of each TR SO_2 Group 1 source and each TR SO_2 Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of TR SO_2 Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO_2 Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) SO_2 emissions requirements.

(1) TR SO_2 Group 1 emissions limitation.

(i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO_2 Group 1 source and each TR SO2 Group 1 unit at the source shall hold, in the source's compliance account, TR SO_2 Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO_2 emissions for such control period from all TR SO_2 Group 1 units at the source.

(ii). If total SO_2 emissions during a control period in a given year from the TR SO_2 Group 1 units at a TR SO_2 Group 1 source are in excess of the TR SO_2 Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:

(A). The owners and operators of the source and each TR SO_2 Group 1 unit at the source shall hold the TR SO_2 Group 1 allowances required for deduction under 40 CFR 97.624(d); and

(B). The owners and operators of the source and each TR SO_2 Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR part 97, subpart CCCCC and the Clean Air Act.

(2) TR SO_2 Group 1 assurance provisions.

(i). If total SO_2 emissions during a control period in a given year from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and

units having a common designated representative for such control period, where the common designated representative's share of such SO_2 emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR SO_2 Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—

(A). The quotient of the amount by which the common designated representative's share of such SO_2 emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such SO_2 emissions exceeds the respective common designated representative's assurance level; and

(B). The amount by which total SO_2 emissions from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state for such control period exceed the state assurance level.

(ii). The owners and operators shall hold the TR SO_2 Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii). Total SO_2 emissions from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO_2 emissions exceed the sum, for such control period, of the state SO_2 Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).

(iv). It shall not be a violation of 40 CFR part 97, subpart CCCCC or of the Clean Air Act if total SO_2 emissions from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO_2 emissions from the TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state during a control period exceeds the common designated representative's assurance level.

(v). To the extent the owners and operators fail to hold TR SO_2 Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,

(A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B). Each TR SO_2 Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act.

(3) Compliance periods.

(i). A TR SO_2 Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.

(ii). A TR SO_2 Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

(i). A TR SO_2 Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR SO_2 Group 1 allowance that was allocated for such control period or a control period in a prior year.

(ii). A TR SO_2 Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR SO_2 Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR SO_2 Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart CCCCC.

(6) Limited authorization. A TR SO_2 Group 1 allowance is a limited authorization to emit one ton of SO_2 during the control period in one year. Such authorization is limited in its use and duration as follows:

(i). Such authorization shall only be used in accordance with the TR SO_2 Group 1 Trading Program; and

(ii). Notwithstanding any other provision of 40 CFR part 97, subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR SO_2 Group 1 allowance does not constitute a property right.

(d) Title V permit revision requirements.

(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR SO_2 Group 1 allowances in accordance with 40 CFR part 97, subpart CCCCC.

(2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR part 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E), Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

(1) Unless otherwise provided, the owners and operators of each TR SO_2 Group 1 source and each TR SO_2 Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(i). The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each TR SO_2 Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.

(ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart CCCCC.

(iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR SO_2 Group 1 Trading Program.

(2) The designated representative of a TR SO_2 Group 1 source and each TR SO_2 Group 1 unit at the source shall make all submissions required under the TR SO_2 Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

(1) Any provision of the TR SO_2 Group 1 Trading Program that applies to a TR SO_2 Group 1 source or the designated representative of a TR SO_2 Group 1 source shall also apply to the owners and operators of such source and of the TR SO_2 Group 1 units at the source.

(2) Any provision of the TR SO_2 Group 1 Trading Program that applies to a TR SO_2 Group 1 unit or the designated representative of a TR SO_2 Group 1 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the TR SO_2 Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR SO_2 Group 1 source or TR SO_2 Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.