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: 12200**

Mailing Address	Plant Location
PETER VAN DEN HOUTEN POWER PLANT MANAGER PARKWAY GENERATION OPERATING LLC 118 HACKENSACK AVE Kearny, NJ 07032	KEARNY GENERATING STATION 118 Hackensack Ave Kearny Hudson County

Initial Operating Permit Approval Date: **July 12, 2005**

Operating Permit Approval Date: **DRAFT**

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: KEARNY GENERATING STATION
Program Interest Number: 12200
Permit Activity Number: BOP190002

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Section A

Facility Name: KEARNY GENERATING STATION
Program Interest Number: 12200
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	25	168	175	6.84	70.9	70.9	70.9	0.003	2.24	
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	25	168	175	6.84	70.9	70.9	70.9	0.003	2.24	674567

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	5.0	1.03	0.72	0.2	0.2	0.2	0.0	0.0	0.0
Non-Source Fugitive Emissions	3.0	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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: KEARNY GENERATING STATION
Program Interest Number: 12200
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	0.004
7,12-Dimethylbenz(a)anthracene	0.0000065
Acetaldehyde	0.227
Acrolein	0.013
Arsenic	0.001
Benzene	0.072
Beryllium	0.00003
Cadmium	0.000043
Dioxin/Furan	0.0000003
Ethylbenzene	0.181
Formaldehyde	1.49
Lead	0.00179
Manganese	0.0707
Naphthalene	0.01
Nickel	0.0004
PAH	0.01
POM	0.01
Propylene Oxide	0.164

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

Other Air Contaminant	TPY
Methane	10.45
Nitrous Oxide	1.06
Ammonia	29.7

[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: KEARNY GENERATING STATION
Program Interest Number: 12200
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

   c. 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").

Section C

Facility Name: KEARNY GENERATING STATION
Program Interest Number: 12200
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	---	10b	---
D	FC	---	3
D	FC	---	9
D	GR 2	---	1-13
D	GR3	---	All

Section D

Facility Name: KEARNY GENERATING STATION
Program Interest Number: 12200
Permit Activity Number: BOP190002

FACILITY SPECIFIC REQUIREMENTS AND INVENTORIES

FACILITY SPECIFIC REQUIREMENTS PAGE INDEX

KEARNY GENERATING STATION (12200)
BOP190002

Date: 4/3/2025

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 Kearny Generating Station. The Title V permit expires on July 11, 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 (BOP160002) was approved on October 24, 2016.

This is a Permit Renewal includes the following changes:

1.Update of the facility wide requirements (FC) section of the compliance plan.
2.Update of Section B, General Provisions and Authority of the Permit Text.
3.Revision of Renewal Stack testing Requirements for Emission Units U13 and U14. The requirement for renewal stack emissions testing for emission units U13 and U14 was revised from “conduct stack emission testing prior to permit expiration date “ to “conduct stack testing every five years from the date of last stack test”. The monitoring and recordkeeping requirements were also changed accordingly.
4.Removal of following requirement from U14, OS Summary as the 10 years have been completed:
“Commencing with calendar year 2010 and continuing for ten 10) calendar years thereafter, the permittee shall calculate the actual tons of regulated NSR pollutants including CO, NOx, particulate Matter PM (Total suspended particulates TSP), PM-10, Sulfur dioxide (SO2) and VOC from Unit No. 12 (Emission Unit U14) in each calendar year period. [40 CFR 52.21(r)(6)(iii)]”
5.Removal of stack testing requirements of VOC lb/hr for U13 turbines as per Department’s “Testing and Monitoring Requirements for Existing Stationary Turbines” for natural gas. Stack tests conducted in 2013 and 2019 on all six turbines of U13 showed that each turbine met the permitted VOC emission limits. Furthermore, CO is the surrogate for VOC and facility monitors CO with CEMs.
6.Removal of fuel oil SO2 limits throughout the permit that were based on sulfur content limits (0.034%) that no longer apply. The facility currently uses ULSD (0.0015%).
7.Creation of new operating scenarios for all U13 turbines for start-up (SU) and Shutdown (SD) with all criteria pollutant’s emission limits..
8.Creation of new operating scenarios for all U14 turbines for SU, SD, fuel transfer, and mechanical safety testing with inclusion of all criteria pollutant’s emission limits in these operating scenarios.
9.Revision of permitted HAPs (U13, U14, and U56) to include all HAPs that have a potential to emit above the reporting thresholds at N.J.A.C. 7:27-17. These HAPs are 1,3-Butadiene, Acetaldehyde, Benzene, Beryllium, Cadmium, Ethyl benzene, Manganese, Naphthalene, Nickel, and Propylene oxide. Include HAPs in Startup/shutdown (SU/SD) scenarios as well.
10.Inclusion of methane emissions to U13, U14 and U56; and nitrous oxide emissions to U13 and U14 as they are above the 0.05 pound per hour N.J.A.C 7:27-8 reporting thresholds.

New Jersey Department of Environmental Protection
Reason for Application

11. Clarification that Formaldehyde emissions are included in the VOC emission limits for U13 and U14.
12. Addition of Federal Requirements Summary to U13, U14, and U56.
13. Update of the CEMs Summary Requirements to add language which states that Emission Measurement Section (EMS) approval is required for a change in units being modified.
14. Update of N.J.A.C. 7:27-19 monitoring requirements 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.
15. Removal of language related to shakedown period of U13 turbines as this is no longer applicable.
16. Renewal of Acid Rain Permit Pursuant to 40CFR72.

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	The operating temperature shall not be greater than 350 degrees F. [N.J.A.C. 7:27-22.1]	None.	None.	None.
2	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.
3	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.
4	The tank shall not emit any air contaminants which cause an odor detectable outside the property boundaries of the facility. [N.J.A.C. 7:27-22.1]	None.	None.	None.
5	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.
6	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.
7	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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	Sulfur Content in Fuel <= 15 Parts per Million (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.
9	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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS2 Commercial Fuel Burning Equipment < 1 MMBtu/hr and Non-Emergency Electric Generators< 37kW**

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 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.
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)]	Monitored by review of fuel delivery records upon occurrence of event and date of storage. [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 of fuel sulfur content (ppmw or % by weight) and date of storage. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS3 Wastewater Treatment Equipment<100 ppbw each TXS, and < 3,500 ppbw total VOC**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The VOC emitted from the tank shall not exceed 5000 ppmv measured at any point above the liquid surface at the height of the tank lip. [N.J.A.C. 7:27-16.6(b)3]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS5 Surface/Parts cleaners <6 SQFT, capacity<100 gallons (No HAPS, MACT)**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall comply, as applicable, with the requirements/standards for open top tank as required in N.J.A.C.7:27-16.6 [N.J.A.C. 7:27-16.6]	Other: The owner or operator shall comply, as applicable, with the monitoring requirements for open top tank as required in N.J.A.C.7:27-16.6[N.J.A.C. 7:27-16.6].	Other: The owner or operator shall comply, as applicable, with the recordkeeping requirements for open top tank as required in N.J.A.C.7:27-16.6[N.J.A.C. 7:27-16.6].	None.
2	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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	No person shall add solvent to a cold cleaning machine or a heated cleaning machine, or cause, suffer, allow, or permit the machine (that uses 2 gallons or more of solvents containing greater than 5 percent VOC content by weight for the cleaning of metal parts) to be operated, unless the following requirements are met: i. If the machine is an immersion cold cleaning machine or heated cleaning machine, it shall have: (1) A freeboard ratio of 0.75 or greater; and (2) A visible fill line and a high level liquid mark; ii. The machine shall have a permanent, conspicuous label placed in a prominent location on the machine setting forth the applicable provisions of the operating requirements in N.J.A.C. 7:27-16.6(j)2 below (Ref.#5 through 7); and iii. The machine shall be equipped with: (1) A tightly fitting working-mode cover that completely covers the machine's opening and that shall be kept closed at all times except when parts are being placed into or being removed from the machine or when solvent is being added or removed. For a remote reservoir cold cleaning machine which drains directly into the solvent storage reservoir, a perforated drain with a diameter of not more than six inches shall constitute an acceptable cover; and (2) If the machine is a heated cleaning machine, a thermostat. [N.J.A.C. 7:27-16.6(j)1]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	A person shall operate a cold cleaning machine (that uses 2 gallons or more of solvents containing greater than 5 percent VOC content by weight for the cleaning of metal parts) or a heated cleaning machine in accordance with the following procedures: i. The solvent level in the machine shall not exceed the fill line when there are no parts in the machine for cleaning and shall not exceed the high level liquid mark during cleaning operations; ii. Flushing of parts with a solvent spray, using a spray head attached to a flexible hose or other flushing device, shall be performed only within the freeboard area of the machine. The solvent spray shall be a continuous fluid stream, not an atomized or shower spray, and shall be under a pressure that does not exceed ten pounds per square inch gauge; iii. Parts being cleaned shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts shall be positioned so that solvent drains directly back into the machine. [N.J.A.C. 7:27-16.6(j)2i, ii] and. [N.J.A.C. 7:27-16.6(j)2iii]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	A person shall operate a cold cleaning machine (that uses 2 gallons or more of solvents containing greater than 5 percent VOC content by weight for the cleaning of metal parts) or a heated cleaning machine in accordance with the following procedures: iv. When the machine's cover is open, the machine shall not be exposed to drafts greater than 40 meters per minute (132 feet per minute), as measured between one and two meters (between 3.3 and 6.6 feet) upwind and at the same elevation as the tank lip; v. Sponges, fabric, leather, paper products and other absorbent materials shall not be cleaned in the machine; vi. When a pump-agitated solvent bath is used, the agitator shall be operated to produce a rolling motion of the solvent with no observable splashing of solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used; vii. Spills during solvent transfer and use of the machine shall be cleaned up immediately, and the wipe rags or other sorbent material used shall be immediately stored in covered containers for disposal or recycling; viii. Waste solvent shall be collected and stored in a closed container. The closed container may contain a device that allows pressure relief, provided that it does not allow liquid solvent to drain from the container. [N.J.A.C. 7:27-16.6(j)2iv through vii] and [N.J.A.C. 7:27-16.6(j)2viii]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	A person shall operate a cold cleaning machine (that uses 2 gallons or more of solvents containing greater than 5 percent VOC content by weight for the cleaning of metal parts) or a heated cleaning machine in accordance with the following procedures: ix. Work area fans shall be located and positioned so that they do not blow across the opening of the degreaser unit; and x. If the machine is a heated cleaning machine, the solvent shall be maintained at a temperature that is below its boiling point. [N.J.A.C. 7:27-16.6(j)2ix] and [N.J.A.C. 7:27-16.6(j)2x]	None.	None.	None.
7	A person shall not use, in a cold cleaning machine (that uses 2 gallons or more of solvents containing greater than 5 percent VOC content by weight for the cleaning of metal parts) or a heated cleaning machine, any solvent that has a vapor pressure of one millimeter of mercury or greater, measured at 20 degrees centigrade (68 degrees Fahrenheit). [N.J.A.C. 7:27-16.6(j)3]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	A person who owns or operates a cold cleaning machine (that uses 2 gallons or more of solvents containing greater than 5 percent VOC content by weight for the cleaning of metal parts) or a heated cleaning machine shall maintain, for not less than two years after the date of purchase of solvent for use in the machine, the information specified below and shall, upon the request of the Department or its representative, provide the information to the Department: i. The name and address of the person selling the solvent. An invoice, bill of sale, or a certificate that corresponds to a number of sales, if it has the seller's name and address on it, may be used to satisfy this requirement; ii. A list of VOC(s) and their concentration information in the solvent; iii. Information about each VOC listed pursuant to ii above. A Material Safety Data Sheet (MSDS) may be used to satisfy this requirement; iv. The solvents product number assigned by the manufacturer; and v. The vapor pressure of the solvent measured in millimeters of mercury at 20 degrees centigrade (68 degrees Fahrenheit). [N.J.A.C. 7:27-16.6(j)4i through iv] and. [N.J.A.C. 7:27-16.6(j)4v]	None.	Other: Maintain readily available records for two years[N.J.A.C. 7:27-16.6(j)4].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS15 Non-applicable VOC (<0.02 psia) storage tanks with capacities <10,000 gallons**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	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.
2	The tank shall be subject to the NSPS requirements to maintain a record of the contents of the tank, the period of storage of these contents, and the maximum true vapor pressure of the liquid stored. [N.J.A.C. 7:27-22.1]	None.	None.	None.
3	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.
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 1B [N.J.A.C. 7:27- 9.a]	Monitored by review of fuel delivery records upon occurrence of event and date of storage. [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 of fuel sulfur content (ppmw or % by weight) and date of storage. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **GR1 GE LM6000PC Turbine Exchange**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	A complete list of all GE LM6000PC turbines involved in the Turbine Engine Exchange Program shall be kept at the site. This list shall include detailed information on the Make, Model, Serial Number, and Maximum Heat Input. In addition, the Location of each turbine shall be identified and updated, as needed. Some turbine configurations may include inlet air cooling technology that would allow the GE LM6000PC model turbine to achieve a maximum heat input rate of no greater than 493 MMBtu/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and every time an turbine exchange occurs. Keep records of: a)The date the turbine exchange occurred, and b)Identification of the existing turbine being removed and exchange turbine by make, model, serial number and location. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Once initially and every time an engine exchange occurs. Submit notification to the Department's Regional Enforcement Office in writing no later than 7 days after any engine from the original fleet is exchanged with another engine from that fleet. [N.J.A.C. 7:27-22.16(o)]
2	The exchange turbine must have identical horsepower, heat rate, and maximum allowable emissions as the original turbine engine that is exchanged. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and every time an turbine exchange occurs. The Permittee shall keep a certification from the original manufacturer that all turbines in the turbine exchange program have the same air contaminant emissions profile. [N.J.A.C. 7:27-22.16(o)]	None.
3	The exchange program shall not exceed a 15-year period from the date of approval of BOP150001. [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. All records must be kept on site for at least fifteen years. [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
4	The facility must conduct a PSD applicability test by comparing the projected actual to baseline actual emissions each time a turbine is replaced. [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations 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. Keep records of the PSD applicability test on site for five years beginning on the date of operation of the replacement turbine engine. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Upon occurrence of event. If the actual annual emission records show a net significant increase above the baseline actual emissions the facility shall inform the Department within 30 days of the increase in emissions. The report shall include an explanation as to why the emissions differ from the preconstruction projection. Submit a PSD major modification application if the results of the PSD applicability test show a net significant emission increase above the baseline actual emissions. [N.J.A.C. 7:27-22.16(o)]
5	If any of the actions performed as a result of the repair and maintenance constitute a modification or reconstruction as defined in N.J.A.C. 7:27-22, the facility's air permit must be modified to address the change. [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. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Upon occurrence of event. The report shall be a permit modification application, if applicable. [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **GR2 RGGI Requirements**

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)3]

New Jersey Department of Environmental Protection
Facility Specific Requirements

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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Facility Specific Requirements

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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

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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Facility Specific Requirements

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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Facility Specific Requirements

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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Facility Specific Requirements

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]

New Jersey Department of Environmental Protection
Facility Specific Requirements

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)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

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
Facility Specific Requirements

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
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Subject Item: **GR3 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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

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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Facility Specific Requirements

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: **U13 Six simple-cycle stationary turbines used for electric power generation**

Subject Item: **CD6 Unit 13A - Water Injection, CD7 Unit 13B - Water Injection, CD8 Unit 13C - Water Injection, CD9 Unit 13D - Water Injection, CD10 Unit 14A - Water Injection, CD11 Unit 14B - Water Injection**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The permittee shall operate the Water Injection System (CD6, CD7, CD8, CD9, CD10, CD11) during all periods that the gas turbine is operating, except during start-up, and shutdown. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously, based on an instantaneous determination. The permittee shall record the time and duration of the operation of both the water injection system and the gas turbine. [N.J.A.C. 7:27-22.16(a)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The permittee shall continuously record the time and duration of the operation of the gas turbine and the water injection system. [N.J.A.C. 7:27-22.16(o)]	None.
2	Water-to-Fuel Ratio >= 0.8 and Water-to-Fuel Ratio <= 1.2 lb of water per pound of fuel. The water-to-fuel ratio must be maintained when NOx CEMs is not collecting valid data. [N.J.A.C. 7:27-22.16(a)]	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(o)]	Water-to-Fuel Ratio: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Emission Unit: **U13 Six simple-cycle stationary turbines used for electric power generation**

Subject Item: **CD12 Unit 13A - SCR, CD13 Unit 13B - SCR, CD14 Unit 13C - SCR, CD15 Unit 13D - SCR, CD16 Unit 14A - SCR, CD17 Unit 14B - SCR**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The Selective Catalytic Reduction system shall be used to destroy Nitrogen Oxides (NOx) resulting from combustion in the turbine, at the recommended manufacturer's operating flue gas flowrate range, such that NOx (Total) emissions as established for the turbines in this permit are met. [N.J.A.C. 7:27-22.16(a)]	None.	Other: The permittee shall maintain SCR system manufacturer's documentation, specifications, operation and maintenance manual on-site.[N.J.A.C. 7:27-22.16(o)].	None.
2	The SCRs (CD12, CD13, CD14, CD15, CD16, CD17) shall be operated at all times that the turbine is operating, except during start-up, and shutdown. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously. The permittee shall record the time and duration of the operation of both the SCR and the gas turbine. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The permittee shall continuously record the time and duration of the operation of the stationary combustion engine and the selective catalytic reduction unit (SCR). [N.J.A.C. 7:27-22.16(o)]	None.
3	The SCR catalyst, CD12, CD13, CD14, CD15, CD16, CD17 array(s) shall be maintained and replaced in accordance with the recommendations and schedules of the manufacturer and based on NOx emission levels indicated through CEM/stack testing. [N.J.A.C. 7:27-22.16(a)]	Monitored by documentation of construction once initially. [N.J.A.C. 7:27-22.16(o)]	Other: The permittee shall maintain the SCR system manufacturer's documentation, specifications, and operation & maintenance manual (O&M) on-site.[N.J.A.C. 7:27-22.16(o)].	None.
4	Temperature >= 550 and Temperature <= 860 degrees F at the entrance of catalyst, except during startup and shutdown periods. Applicable to SCRs (CD12, CD13, CD14, CD15, CD16, CD17). [N.J.A.C. 7:27-22.16(a)]	Other: Temperature at the Entrance of Catalyst: 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 strip chart or data acquisition (DAS) 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
5	NOx Control Efficiency >= 90 % (design value) for natural gas firing, applicable to: Selective Catalytic Reduction (CD12, CD13, CD14, CD15, CD16, CD17) :. [N.J.A.C. 7:27-22.16(a)]	NOx Control Efficiency: Monitored by documentation of construction once initially. [N.J.A.C. 7:27-22(16)o]	NOx Control Efficiency: Recordkeeping by ittee shall keep SCR manufacturer's documentation, as-built performance guarantee and operation and maintenance manual on-site.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U13 Six simple-cycle stationary turbines used for electric power generation**
Subject Item: **CD18 Unit 13A - Oxidation Cat**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Destruction and Removal Efficiency >= 90 %. The Oxidation Catalysts (CD18, CD19, CD20, CD21, CD22, CD23), shall be used to destroy carbon monoxide (CO) and volatile organic compounds (VOC) resulting from the combustion of fuel in the turbine at the recommended manufacturer's operating flue gas flowrate range. [N.J.A.C. 7:27-22.16(a)]	Other: Destruction and Removal Efficiency: Monitored by document of construction[N.J.A.C. 7:27-22.16(o)].	Destruction and Removal Efficiency: Recordkeeping by ittee 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(o)].	None.
2	The oxidation catalysts, referred by CD18, CD19, CD20, CD21, CD22, CD23 shall be operated at all times that the turbine is operating except during start-up, and shutdown. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously, based on an instantaneous determination. The permittee shall record the time and duration of the operation of both the oxidation catalyst and the gas turbine. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The permittee shall continuously record the time and duration of the operation of the gas turbine and the oxidation catalyst unit. [N.J.A.C. 7:27-22.16(o)]	None.
3	The Oxidation Catalysts CD18, CD19, CD20, CD21, CD22, CD23 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(a)]	Other: Monitored by documentation of construction.[N.J.A.C. 7:27-22.16(o)].	Other: Record keeping by mannual logging of parameter or storing data in computer system. The permittee shall maintain the catalyst maintenance and replacement records on-site.[N.J.A.C. 7:27-22.16(o)].	None.
4	Temperature >= 600 degrees F at the entrance of catalyst, except during startup and shutdown periods. Applicable to Oxidation Catalysts CD18, CD19, CD20, CD21, CD22, CD23. [N.J.A.C. 7:27-22.16(a)]	Temperature: Monitored by temperature instrument 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(o)]	Temperature: Recordkeeping by strip chart or data acquisition (DAS) system continuously. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Emission Unit: **U13 Six simple-cycle stationary 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 KKKK 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 5 years (see General Provisions) from the last stack test using an approved protocol to demonstrate compliance with emission limits for NOx, CO, PM2.5, PM10 and ammonia as specified in the compliance plan for OS1, OS2, OS3, OS4, OS5 and OS6. The permittee shall provide EMS with the turbine load performance curve with the protocol. The stack emission testing shall be conducted at worst-case 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). PERMITTEES OPERATING AFTER EXPIRATION DATE OF THE OPERATING PERMIT SHALL FOLLOW THE STACK TESTING SCHEDULE SPECIFIED IN THE REF.# LINE ITEM BELOW.[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: 380-01A, 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 stack emission testing on natural gas. 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. 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, as described in the protocol, 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. A copy of the certified summary test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit. Per stack testing protocol, the test results shall be reported in lb/hr, lb/MW-hr and ppmvd @ 15% O2. [N.J.A.C. 7:27-22.18(e)], [N.J.A.C. 7:27-22.18(h)] and. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	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]
4	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)] [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.
5	CO <= 250 ppmvd @ 15% O2. VOC RACT emission limit applies during all operation. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (Please see Stack Testing Summary at U13, OS Summary for details). [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). (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
6	VOC (Total) <= 50 ppmvd @ 15% O2. VOC RACT emission limit applies during all operation. [N.J.A.C. 7:27-16.9(b)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	The Permittee shall adjust the combustion process in accordance with the procedure set forth at N.J.A.C. 7:27-19.16, in order to optimize the emission of NOx, CO and VOC. Adjustment of the combustion process shall be carried out according to manufacturer's recommended procedures and maintenance schedules for each turbine. [N.J.A.C. 7:27-16.9(f)2, N.J.A.C. 7:27-19.5(e)2] & [N.J.A.C. 7:27-19.16(g)]	Monitored by continuous emission monitoring system upon performing combustion adjustment or Periodic Emission Monitoring. [N.J.A.C. 7:27-19.16(g)]	Recordkeeping by data acquisition system (DAS) / electronic data storage upon performing combustion adjustment or manual logging of parameter upon performing combustion adjustment. The records should be kept in a permanent form suitable for inspections. The owner or operator shall record 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 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 used since the last combustion adjustment was performed. [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. 7:27-19.16(e)].	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	Natural Gas Usage: <= 8.94E6 MMBtu/year (HHV) combined for all six gas turbines. [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 monitors) in accordance with the manufacturer's specifications. The monitors) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. The total fuel use for six turbines will be the sum of fuel use for each turbine. Each turbine shall be equipped with the flue flow/firing rate instrument. [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by ng by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	TSP <= 59.75 tons/yr [N.J.A.C. 7:27-22.16(a)] and,. [40 CFR 52.21]	TSP: Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). Calculate by using following equation: TSP (tons/month/turbine) = [(TSP average emission rate from the most recent stack test (lb/MMBtu)) x (Maximum monthly Heat Input from Natural Gas (MMBTU/month) per turbine))/2000 lb/ton. TSP tons/year/turbine is computed by adding the TSP tons/month for a given month to the TSP in tons in the preceding 11 months. The total tons per year for the six U13 turbines is the sum of tons/year/turbine. [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. [N.J.A.C. 7:27-22.16(o)]	None.
12	PM-10 (Total) <= 59.75 tons/yr [N.J.A.C. 7:27-22.16(a)] and,. [40 CFR 52.21]	PM-10 (Total): Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). Calculate by using following equation: PM-10 (Total) (tons/month/turbine) = [(PM-10 average emission rate from the most recent stack test (lb/MMBtu)) x (Maximum monthly Heat Input from Natural Gas (MMBTU/month) per turbine))/2000 lb/ton. PM-10 (Total) tons/year/turbine is computed by adding the PM-10 (Total) tons/month for a given month to the PM-10 (Total) in tons in the preceding 11 months. The total tons per year for the six U13 turbines is the sum of tons/year/turbine. [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. [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	PM-2.5 (Total) <= 59.75 tons/yr. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). Calculate by using following equation: PM-2.5 (Total) (tons/month/turbine) = [(PM-2.5 average emission rate from the most recent stack test (lb/MMBtu)) x (Maximum monthly Heat Input from Natural Gas (MMBTU/month) per turbine))/2000 lb/ton. PM-2.5 (Total) tons/year/turbine is computed by adding the PM-2.5 (Total) tons/month for a given month to the PM-2.5 (Total) in tons in the preceding 11 months. The total tons per year for the six U13 turbines is the sum of tons/year/turbine. [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. [N.J.A.C. 7:27-22.16(o)]	None.
14	VOC (Total) <= 14.06 tons/yr. These VOC emissions include Formaldehyde emissions. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). Calculate by using following equation: VOC(Total) (tons/month/turbine) = [(VOC (Total) average emission rate from the most recent stack test (lb/MMBtu)) x (Maximum monthly Heat Input from Natural Gas (MMBTU/month) per turbine))/2000 lb/ton. VOC (Total) tons/year/turbine is computed by adding the VOC (Total) tons/month for a given month to the VOC (Total) in tons in the preceding 11 months. The total tons per year for the six U13 turbines is the sum of tons/year/turbine. [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 each month during operation. [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	NOx (Total) <= 55.95 tons/yr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a consecutive 12 month period (rolling 1 month basis). (Please see CEMS/COMS REQUIREMENTS SUMMARY at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS/COMS REQUIREMENTS SUMMARY at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
16	CO <= 92.53 tons/yr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a consecutive 12 month period (rolling 1 month basis). (Please see CEMS/COMS REQUIREMENTS SUMMARY at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS/COMS REQUIREMENTS SUMMARY at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
17	SO2 <= 3.24 tons/yr. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). Calculate by using following equation: SO2 (tons/month/turbine) = [(SO2 average emission rate from the most recent stack test (lb/MMBtu)) x (Maximum monthly Heat Input from Natural Gas (MMBTU/month) per turbine))/2000 lb/ton. SO2 tons/year/turbine is computed by adding the SO2 tons/month for a given month to the SO2 in tons in the preceding 11 months. The total tons per year for the six U13 turbines is the sum of tons/year/turbine. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	Ammonia <= 29.65 tons/yr. [N.J.A.C. 7:27-22.16(a)]	Ammonia: Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). Calculate by using following equation: Ammonia (tons/month/turbine) = [(Ammonia average emission rate from the most recent stack test (lb/MMBtu)) x (Maximum monthly Heat Input from Natural Gas (MMBTU/month) per turbine))/2000 lb/ton. Ammonia tons/year/turbine is computed by adding the Ammonia tons/month for a given month to the Ammonia in tons in the preceding 11 months. The total tons per year for the six U13 turbines is the sum of tons/year/turbine. [N.J.A.C. 7:27-22.16(o)]	None.	None.
19	Methane <= 9.85 tons/yr. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). Calculate by using following equation: Methane (tons/month/turbine) = [(0.0022 lb/MMBtu)) x (Maximum monthly Heat Input from Natural Gas (MMBTU/month) per turbine))/2000 lb/ton. Methane tons/year/turbine is computed by adding the Methane tons/month for a given month to the Methane in tons in the preceding 11 months. The total tons per year for the six U13 turbines is the sum of tons/year/turbine. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [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	Acetaldehyde <= 0.179 tons/yr Maximum emission rate for six turbines based on : [(Natural Gas emission factor for Acetaldehyde (lb./MMBtu) and maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines) Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. Calculate using following equation: [(Natural Gas emission factor for Acetaldehyde (lb./MMBtu) x maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines)/2000 lb/ton]. [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.
21	Acrolein <= 0.00572 tons/yr Maximum emission rate for six turbines based on : Natural Gas emission factor for Acrolein (lb./MMBtu) , oxidation catalyst efficiency and maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. Calculate using following equation: (Natural Gas emission factor for Acrolein (lb./MMBtu) x 20 percent for oxidation catalyst efficiency x maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines)/2000 lb/ton]. [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.
22	Benzene <= 0.0536 tons/yr Maximum emission rate for six turbines based on : Natural Gas emission factor for Benzene (lb./MMBtu) and maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(o)]	Benzene: Monitored by calculations once initially. Calculate using following equation: (Natural Gas emission factor for Benzene (lb./MMBtu) x maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines)/2000 lb/ton]. [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
23	Butadiene (1,3-) <= 0.00192 tons/yr Maximum emission rate for six turbines based on : Natural Gas emission factor for Butadiene (1, 3-) (lb./MMBtu) x and maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. Calculate using following equation: (Natural Gas emission factor for Butadiene (1, 3-) (lb./MMBtu) x maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines)/2000 lb/ton]. [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.
24	Ethylbenzene <= 0.143 tons/yr Maximum emission rate for six turbines based on : (Natural Gas emission factor for Ethylbenzene (lb./MMBtu) x maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines)/2000 lb/ton]. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. Calculate using following equation: (Natural Gas emission factor for Ethylbenzene (lb./MMBtu) x maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines)/2000 lb/ton]. [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.
25	Formaldehyde <= 0.635 tons/yr Maximum emission rate for six turbines based on : (Natural Gas emission factor for Formaldehyde (lb./MMBtu) x oxidation catalyst efficiency x maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines)/2000 lb/ton]. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. Calculate using following equation: (Natural Gas emission factor for Formaldehyde (lb./MMBtu) x 20 percent for oxidation catalyst efficiency x maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines)/2000 lb/ton]. [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
26	Naphthalene <= 0.00581 tons/yr Maximum emission rate for six turbines based on : Natural Gas emission factor for Naphthalene (lb./MMBtu) and maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. Calculate using following equation: (Natural Gas emission factor for Naphthalene (lb./MMBtu) x maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines)/2000 lb/ton]. [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	Nitrous oxide <= 1 tons/yr Maximum emission rate for six turbines based on : Natural Gas emission factor for Nitrous Oxide (N2O) (lb./MMBtu) and maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines. Nitrous Oxide 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. Calculate using following equation: (Natural Gas emission factor for Nitrous Oxide (lb./MMBtu) x maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines)/2000 lb/ton]. [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	Propylene oxide <= 0.13 tons/yr Maximum emission rate for six turbines based on : Natural Gas emission factor for Propylene oxide (lb./MMBtu) and maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. Calculate using following equation: (Natural Gas emission factor for Propylene oxide (lb./MMBtu) x maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines)/2000 lb/ton]. [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
29	Polycyclic organic matter <= 0.00402 tons/yr Maximum emission rate for six turbines based on : Natural Gas emission factor for Polycyclic organic matter (lb./MMBtu) and maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. Calculate using following equation: (Natural Gas emission factor for Polycyclic organic matter (lb./MMBtu) x maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines)/2000 lb/ton]. [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) <= 0.00402 tons/yr Maximum emission rate for six turbines based on : Natural Gas emission factor for Polynuclear aromatic hydrocarbons (PAHs) (lb./MMBtu) and maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. Calculate using following equation: (Natural Gas emission factor for Polynuclear aromatic hydrocarbons (PAHs) (lb./MMBtu) x maximum permitted annual natural gas Heat Input (MMBtu/yr.) for all 6 turbines)/2000 lb/ton]. [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.
31	All requests, reports, applications, submittals, and other communication required by 40 CFR 60 shall be submitted in duplicate to the EPA Region II Administrator. [40 CFR 60.4(a)]	None.	None.	Submit a report: As per the approved schedule , submit reports to EPA Region II as required by 40 CFR 60. Send 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)]
32	Submit copy of all requests, reports, applications, submittals, and other communication required by 40 CFR 60 to the Northern Regional Enforcement Office of NJDEP. [40 CFR 60.4(b)]	None.	None.	Submit a report: Other : Submit reports to the Northern Regional Office as required by 40 CFR 60. Submit to: Northern Regional Office New Jersey Department of Environmental Protection 7 Ridgedale Avenue Cedar Knolls, NJ 07927. [40 CFR 60.4(b)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
33	The owner or operator subject to the provisions of 40 CFR Part 60, shall notify the Department in writing, of the date of construction or reconstruction of the 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 a report: As per the approved schedule. The permittee shall notify the Department within thirty (30) days from the date of construction. [40 CFR 60.7(a)(1)]
34	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 Northern Regional Office per 40 CFR 60.7. [40 CFR 60.7(a)(4)]
35	Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, 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 the parameters specified in 40 CFR 60.7(b) in a permanently bound log book. Upon occurrence of event. (See Applicable Requirement).[40 CFR 60.7(b)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
36	The owner or operator shall submit to the Administrator, for each pollutant monitored, an excess emissions and monitoring systems performance report and a summary report form. [40 CFR 60.7(c)]	None.	None.	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 electronically through the NJDEP online EEMPR web portal. The report shall be postmarked by the 30th day following the end of each calendar half. The report shall be submitted and be in a format as specified at 40 CFR 60.7(c) and 40 CFR 60.7(d). [40 CFR 60.7(c)]
37	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.	Recordkeeping by manual logging of parameter continuously. The parameters shall include 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. All records shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [40 CFR 60.7(f)]	None.
38	Within 60 days after achieving the maximum production rate at which the affected facility will operate, but not later than 180 days after initial startup of the facility, the owner or operator shall conduct performance test(s) and shall furnish the Administrator a written report of the results. [40 CFR 60.8(a)]	None.	None.	Submit a report: At a common schedule agreed upon by the operator and the Administrator. The owner or operator shall submit results of the performance test(s) to the Administrator. [40 CFR 60.8(a)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
39	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.
40	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 NJDEP Northern 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). [40 CFR 60.8(d)]
41	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.
42	Compliance with NSPS standards specified in this permit, other than opacity, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in NSPS. [40 CFR 60.11(a)]	None.	None.	None.
43	At all times, including periods of startup, shutdown, and malfunctions, owners and operators shall, to the extent practible, maintain and operate the facility, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing air emissions. [40 CFR 60.11(d)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
44	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.
45	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)]	Other: 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: As per the approved schedule , 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)]
46	The owner or operator shall perform calibrations and span adjustments for continuous emission monitors and continuous opacity monitors following procedures outlined in 40 CFR 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.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
47	NOx (Total) <= 25 ppmvd @ 15% O2. This limit applies to a turbine that has heat input at peak load greater than 50 MMBtu/hr (HHV) but less or equal to 850 MMBtu/hr (HHV) firing natural gas and which commenced construction after February 18, 2005. [40 CFR 60.4320(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously or stack emission test results. Test methods and procedures shall be consistent with the requirements of 40 CFR 60.4400 or, if a NOx diluent CEMS is installed, consistent with 40 CFR 60.4405. The owner or operator shall conduct an initial performance test and an annual test thereafter. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Alternatively, the testing might be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. For turbines with supplemental duct burner NOx measurements shall be taken after the duct burner, which has to be in operation during the performance test. [40 CFR 60.4400]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously or by stack emission test results. [40 CFR 60.4460]	Submit a report: As per the approved schedule. The owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.4375(b)]
48	NOx (Total) <= 1.2 lb/MW-hr of useful output. This limit applies to a turbine that has heat input at peak load greater than 50 MMBtu/hr (HHV) but less or equal to 850 MMBtu/hr (HHV) firing natural gas and commenced construction after February 18, 2005. [40 CFR 60.4320(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously or stack emission test results. Test methods and procedures shall be consistent with the requirements of 40 CFR 60.4400 or, if a NOx diluent CEMS is installed, consistent with 40 CFR 60.4405. The owner or operator shall conduct an initial performance test and an annual test thereafter. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Alternatively, the testing might be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. For turbines with supplemental duct burner NOx measurements shall be taken after the duct burner, which has to be in operation during the performance test. [40 CFR 60.4400]	Other: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously or by stack emission test results.[40 CFR 60.4460].	Submit a report: As per the approved schedule. The owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.4375(b)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
49	SO2 <= 0.06 lb/MMBTU. No owner or operator shall burn any fuel which contains total potential sulfur emissions in excess of specified limit. If the turbine simultaneously fires multiple fuels, each fuel must meet this requirement. [40 CFR 60.4330(a)(2)]	Other: The permittee shall demonstrate that the potential sulfur emissions from each type of fuel do not exceed potential sulfur emissions of 0.060 lb SO2 per MMBtu heat input using sources of information listed in 40 CFR 60.4365(a) or perform representative fuel sampling as described in 60.4365(b). [40 CFR 60.4365].	None.	None.
50	The owner or operator shall operate and maintain the subject stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown and malfunction. [40 CFR 60.4333(a)]	None.	None.	None.
51	The permittee shall install and certify a NOx diluent CEMS in accordance with appendix A to 40 CFR 75. The relative accuracy test audit (RATA) shall be performed on a lb/MMBtu basis. [40 CFR 60.4345(a)]	Monitored by continuous emission monitoring system continuously. During each full unit operating hour, both the NOx monitor and the diluent monitor must complete a minimum of one cycle of operation (Sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour, as specified in 40 CFR 60.13(e)(2). The permittee shall follow procedure described in 40 CFR 60.4345(b) for partial unit operating hours. [40 CFR 60.4345(b)]	Other: The permittee shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment. For NOx CEMS and fuel flow meters, the QA program and plan described in section 1 of appendix B to 40 CFR 75 may, with state approval, satisfy this requirement.[40 CFR 60.4345(e)].	None.
52	The permittee shall install and certify each NOx diluent CEMS in accordance with Performance Specifications 2 (PS2) as described in appendix B to 40 CFR 60. The 7 day calibration drift should be based on unit operating days, not calendar days. Upon the Bureau of Technical Services of NJDEP approval, Procedure 1 in appendix F to 40 CFR 60 is not required. The relative accuracy test audit (RATA) shall be performed on a lb/MMBtu basis. [40 CFR 60.4345(a)]	Monitored by continuous emission monitoring system continuously. During each full unit operating hour, both the NOx monitor and the diluent monitor must complete a minimum of one cycle of operation (Sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour, as specified in 40 CFR 60.13(e)(2). The permittee shall follow procedure described in 40 CFR 60.4345(b) for partial unit operating hours. [40 CFR 60.4345(b)]	Other: The permittee shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment. For NOx CEMS and fuel flow meters, the QA program and plan described in section 1 of appendix B to 40 CFR 75 may, with state approval, satisfy this requirement.[40 CFR 60.4345(e)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
53	The permittee shall install, calibrate, maintain, and operate each watt meter, steam flow meter, and each pressure or temperature measurement device in accordance with the manufacturer's instructions. [40 CFR 60.4345(d)]	Monitored by other method (provide description) continuously. The gross electrical output of the unit in megawatt-hours shall be monitored by watt meter (or (meters) and shall be installed, calibrated, maintained and operated according to the manufacturer's instructions. [40 CFR 60.4345(d)]	Other: The permittee shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment.[40 CFR 60.4345(e)].	None.
54	The owner or operator shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in 40 CFR 60.4365. The sulfur content of the fuel must be determined using total sulfur methods described in 40 CFR 60.4415 or, alternatively, as allowed in 40 CFR 60.4360. 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 60.4360]	Other: The owner or operator may develop custom schedule for determination of the total sulfur content of gaseous fuels. The custom schedule shall be substantiate with data and shall be approved by the Administrator before they can be used to comply with the Sulfur standard in fuel except for the two custom schedules set forth in 40 CFR 60.4370(c)(1)(i) through (iv) and in 40 CFR 60.4370(c)(2) which are acceptable without prior Administrator approval. [40 CFR 60.4370(c)].	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 60.4415]	Submit a report: As per the approved schedule. The permittee shall determine excess emissions and monitoring downtime as described in 40 CFR 60.4385(a) through (c) and submit an excess emissions report by the 30th day following the end of each 6-month period as prescribed in 40 CFR 60.4395. [40 CFR 60.4385]
55	The owner or operator may elect not to monitor the total sulfur content of the fuel combusted in the turbine if the fuel is demonstrated not to exceed potential sulfur emissions of 0.060 lb SO2/MMBtu heat input for units located in continental areas. [40 CFR 60.4365]	Other: The required demonstration that the total sulfur content of the fuel does not exceed potential sulfur emissions of 0.060 lb SO2/MMBtu shall be made using a current valid purchase contract, tariff sheet or transportation contract specifying that in continental areas the maximum total sulfur content for oil use is 0.05 weight percent (500ppmw) and for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet.[40 CFR 60.4365(a)].	Recordkeeping by fuel certification receipts at the approved frequency The owner or operator shall keep copies of valid purchase contracts, tariff sheets or transportation contracts specifying that in continental areas the maximum total sulfur content for oil use is 0.05 weight percent (500 ppmw) and for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
56	The owner or operator shall submit reports of excess emissions and monitor downtime in accordance with 40 CFR 60.7(c) for Nitrogen oxides. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. An excess emissions as defined in 40 CFR 60.4380(b)1 is any unit operating period in which the 4-hour (for simple cycle turbines) or 30-day rolling average NOx emission rate exceeds the applicable emission limit in 40 CFR 60.4320. A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NOx concentration, CO2 or O2 concentration, fuel flow rate, steam flow rate, steam temperature, steam pressure, or megawatts. The steam flow rate, steam temperature, and steam pressure are only required if used for compliance demonstration. [40 CFR 60.4380(b)]	Other: For the purposes of identifying excess emissions based on data from the continuous emission monitoring equipment the permittee shall follow procedures described in 40 CFR 60.4350(a), (b), (c), (e), (f), (g), and (h). If a NOx diluent CEMS meets the requirements of 40 CFR 75, the only quality assured data from the CEMS shall be used to identify excess emissions. Periods where the missing data substitution procedures in subpart D of 40 CFR 75 are applied are to be reported as monitor downtime. [40 CFR 60.4350].	None.	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. All reports required under 40 CFR 60.7(c) must be postmarked by the 30th day following the end of each 6-moth period. [40 CFR 60.4395]
57	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): As per the approved schedule Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit. [40 CFR 72]
58	The permittee shall comply with the attached 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 CSAPR attachment.[40 CFR 97].	Other: As per the CSAPR attachment.[40 CFR 97].	Other (provide description): Other. As per the CSAPR attachment. [40 CFR 97]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U13 Six simple-cycle stationary turbines used for electric power generation**

Operating Scenario: **OS1 Turbine firing Natural Gas - Module 13A, OS2 Turbine firing Natural Gas - Module 13B, OS3 Turbine firing Natural Gas - Module 13C, OS4 Turbine firing Natural Gas - Module 13D, OS5 Turbine firing Natural Gas - Module 14A, OS6 Turbine firing Natural Gas - Module 14B**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %. Smoke emissions from stationary turbine 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	Opacity <= 10 % , exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Particulate Emissions <= 49.3 lb/hr Particulate emission limit from the combustion of natural gas based on rated heat input of 493 MMBtu/hr for each turbine. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	NOx (Total) <= 1 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	NOx (Total): Monitored by continuous emission monitoring system continuously. Between May 1 and September 30, over each calendar day; From October 1 through April 30 of the following year, over the 30-day period ending on each such day. (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [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	NOx (Total) <= 2.5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [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
6	NOx (Total) <= 2.5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	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. (Please see Stack Testing Summary at U13, OS Summary for details). [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). (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
7	NOx (Total) <= 4.39 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
8	Maximum Gross Heat Input <= 493 MMBTU/hr (HHV) per turbine firing natural gas. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Other: Keep records showing maximum heat input rate for each combustion turbine.[N.J.A.C. 7:27-22.16(o)].	None.
9	NOx (Total) <= 4.39 lb/hr. [N.J.A.C. 7:27-22.16(a)]	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. (Please see Stack Testing Summary at U13, OS Summary for details). [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). (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
10	CO <= 5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see CEMS Requirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Requirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
11	CO <= 5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	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. (Please see Stack Testing Summary at U13, OS Summary for details). [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). (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]

U13 Six simple-cycle stationary turbines used for electric power generation
OS1, OS2, OS3, OS4, OS5, OS6

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	CO <= 5.44 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
13	CO <= 5.44 lb/hr. [N.J.A.C. 7:27-22.16(a)]	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. (Please see Stack Testing Summary at U13, OS Summary for details). [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). (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
14	VOC (Total) <= 4 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	VOC (Total) <= 2.37 lb/hr. These VOC emissions include Formaldehyde emissions. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	SO2 <= 0.32 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
17	TSP <= 6 lb/hr [N.J.A.C. 7:27-22.16(a)] and. [40 CFR 52.21]	None.	None.	None.
18	PM-2.5 (Total) <= 6 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (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. (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
19	PM-10 (Total) <= 6 lb/hr [N.J.A.C. 7:27-22.16(a)] and. [40 CFR 52.21]	PM-10 (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. (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	Ammonia <= 5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	Ammonia: 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. (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Ammonia: Recordkeeping by manual logging of parameter or storing data in a computer data system every 5 years (based on completion date of the last stack test). (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
21	Acetaldehyde <= 0.0196 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. . [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. Calculate by using the following equation: Acetaldehyde (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.0 E-05 lb/MMBtu)]. [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.
22	Acrolein <= 0.000627 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5, and 80 percent oxidation catalyst efficiency. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. Calculate by using the following equation: Acrolein (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (6.40 E-06 lb/MMBtu)]. [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.
23	Benzene <= 0.00588 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. Calculate by using the following equation: Benzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (5.5 E-05 lb/MMBtu)]. [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.
24	Butadiene (1,3-) <= 0.000211 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. Calculate by using the following equation: Butadiene(1,3-) (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.3 E-07 lb/MMBtu)]. . [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
25	Ethylbenzene <= 0.0157 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. Calculate by using the following equation: Ethylbenzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (3.2 E-5 lb/MMBtu)]. [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.
26	Formaldehyde <= 0.0696 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5, and 80 percent oxidation catalyst efficiency. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. Calculate by using the following equation: Foraldehyde (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (7.1 E-04 lb/MMBtu)]. [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.
27	Methane <= 1.09 lb/hr. Emission limit based maximum heat input rate in MMBtu/hr(HHV) of the turbine, and emission factor from 40CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. Calculate by using the following equation: Methane (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (0.0022 lb/MMBtu)]. [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.
28	Naphthalene <= 0.000637 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. Calculate by using the following equation: Naphthalene: [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (1.3 E-6 lb/MMBtu)]. [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.
29	Propylene oxide <= 0.0142 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. Calculate by using the following equation: Propylene oxide (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.9 E-5 lb/MMBtu)]. [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
30	Polycyclic organic matter <= 0.000441 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. Calculate by using the following equation: Polycyclic organic matter (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.20 E-06 lb/MMBtu)]. [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) <= 0.000441 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. Calculate by using the following equation: Polynuclear aromatic hydrocarbons (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.2 E-06 lb/MMBtu)]. [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	Nitrous oxide <= 0.1085 lb/hr. Emission limit based maximum heat input rate in MMBtu/hr(HHV) of the turbine, and emission factor from 40CFR 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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U13 Six simple-cycle stationary turbines used for electric power generation**

Operating Scenario: **OS7 Turbine Startup - Module 13A, OS8 Turbine Startup - Module 13B, OS9 Turbine Startup - Module 13C, OS10 Turbine Startup - Module 13D, OS11 Turbine Startup - Module 14A, OS12 Turbine Startup - Module 134B**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Start-up Period <= 30 minutes. Start-up period is defined as the period from initial firing of natural gas in the turbine until the turbine reaches a steady state operating load of 50% or higher of design capacity and the SCR and oxidation catalyst reach a steady state operation. This period shall not exceed 30 minutes. [N.J.A.C. 7:27-22.16(a)]	None.	Other: 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	Start-up and shutdown for synchronous condensing (only for Units 13A, 13B, 13C and 13D) is defined as the period from initial firing of natural gas in the turbine through the synchronization of the generator portion of the turbine to the PJM grid plus the subsequent turbine shutdown sequence until fuel flow is completely off and combustion has ceased. [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. [N.J.A.C. 7:27-22.16(o)]	None.
3	NOx (Total) <= 1 lb/MW-hr (net). [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. (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-19.15(a)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
4	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-16.23(a)1]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(c)]	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 <= 6 lb/hr [N.J.A.C. 7:27-22.16(a)] and,. [40 CFR 52.21]	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.
7	PM-10 (Total) <= 6 lb/hr [N.J.A.C. 7:27-22.16(a)] and. [40 CFR 52.21]	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.
8	PM-2.5 (Total) <= 6 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 emission limits during startup on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
9	SO2 <= 0.32 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.
10	Acetaldehyde <= 0.0196 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. . [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. Calculate by using the following equation: Acetaldehyde (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.0 E-05 lb/MMBtu)]. [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 <= 0.000627 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5, and 80 percent oxidation catalyst efficiency. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. Calculate by using the following equation: Acrolein (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (6.40 E-06 lb/MMBtu)]. [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	Benzene <= 0.00588 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. Calculate by using the following equation: Benzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (5.5 E-05 lb/MMBtu)]. [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
13	Butadiene (1,3-) <= 0.000211 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. Calculate by using the following equation: Butadiene(1,3-) (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.3 E-07 lb/MMBtu)]. . [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	Ethylbenzene <= 0.0157 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. Calculate by using the following equation: Ethylbenzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (3.2 E-5 lb/MMBtu)]. [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.
15	Formaldehyde <= 0.0696 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5, and 80 percent oxidation catalyst efficiency. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. Calculate by using the following equation: Foraldehyde (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (7.1 E-04 lb/MMBtu)]. [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	Methane <= 1.09 lb/hr. Emission limit based maximum heat input rate in MMBtu/hr(HHV) of the turbine, and emission factor from 40CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. Calculate by using the following equation: Methane (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (0.0022 lb/MMBtu)]. [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.
17	Naphthalene <= 0.000637 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. Calculate by using the following equation: Naphthalene: [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (1.3 E-6 lb/MMBtu)]. [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
18	Propylene oxide <= 0.0142 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. Calculate by using the following equation: Propylene oxide (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.9 E-5 lb/MMBtu)]. [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.
19	Polycyclic organic matter <= 0.000441 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. Calculate by using the following equation: Polycyclic organic matter (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.20 E-06 lb/MMBtu)]. [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.
20	Polynuclear aromatic hydrocarbons (PAHs) <= 0.000441 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. Calculate by using the following equation: Polynuclear aromatic hydrocarbons (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.2 E-06 lb/MMBtu)]. [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.
21	Nitrous oxide <= 0.1085 lb/hr. Emission limit based maximum heat input rate in MMBtu/hr(HHV) of the turbine, and emission factor from 40CFR 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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U13 Six simple-cycle stationary turbines used for electric power generation**

Operating Scenario: **OS13 Turbine Shutdown - Module 13A, OS14 Turbine Shutdown - Module 13B, OS15 Turbine Shutdown - Module 13C, OS16 Turbine Shutdown - Module 13D, OS17 Turbine Shutdown - Module 14A, OS18 Turbine Shutdown - Module 14B**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Shutdown Period: is defined as the period from initial lowering of combustion turbine output below 50% of base load with the intent to cease generation of electrical output until fuel flow is completely off and combustion has ceased.This period shall not exceed 10 minutes. [N.J.A.C. 7:27-22.16(a)]	None.	Other: 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	NOx (Total) <= 1 lb/MW-hr (net). [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. (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-19.15(a)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
3	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.19(b)]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-16.23(a)1]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U13, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
4	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(c)]	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.
5	TSP <= 6 lb/hr [N.J.A.C. 7:27-22.16(a)] and,. [40 CFR 52.21]	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.
6	PM-10 (Total) <= 6 lb/hr [N.J.A.C. 7:27-22.16(a)] and. [40 CFR 52.21]	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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	PM-2.5 (Total) <= 6 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 emission limits during shutdown on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
8	SO2 <= 0.32 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the SO2 emission limits during startup on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
9	Acetaldehyde <= 0.0196 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. . [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. Calculate by using the following equation: Acetaldehyde (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.0 E-05 lb/MMBtu)]. [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.
10	Acrolein <= 0.000627 lb/hr THIS LIMIT NEEDS TO BE REVISED AS IT IS BASED OB 80% CO CATALYST EFFICIENCY emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5, and 80 percent oxidation catalyst efficiency. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. Calculate by using the following equation: Acrolein (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (6.40 E-06 lb/MMBtu)]. [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.
11	Benzene <= 0.00588 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. Calculate by using the following equation: Benzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (5.5 E-05 lb/MMBtu)]. [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	Butadiene (1,3-) <= 0.000211 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. Calculate by using the following equation: Butadiene(1,3-) (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.3 E-07 lb/MMBtu)]. . [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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	Ethylbenzene <= 0.0157 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. Calculate by using the following equation: Ethylbenzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (3.2 E-5 lb/MMBtu)]. [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.
14	Formaldehyde <= 0.0696 lb/hr THIS LIMIT NEEDS TO BE REVISED AS IT IS BASED OB 80% CO CATALYST EFFICIENCY emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5, and 80 percent oxidation catalyst efficiency. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. Calculate by using the following equation: Foraldehyde (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (7.1 E-04 lb/MMBtu)]. [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.
15	Methane <= 1.09 lb/hr. Emission limit based maximum heat input rate in MMBtu/hr(HHV) of the turbine, and emission factor from 40CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. Calculate by using the following equation: Methane (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (0.0022 lb/MMBtu)]. [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.
16	Naphthalene <= 0.000637 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. Calculate by using the following equation: Naphthalene: [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (1.3 E-6 lb/MMBtu)]. [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.
17	Propylene oxide <= 0.0142 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. Calculate by using the following equation: Propylene oxide (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.9 E-5 lb/MMBtu)]. [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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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	Polycyclic organic matter <= 0.000441 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. Calculate by using the following equation: Polycyclic organic matter (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.20 E-06 lb/MMBtu)]. [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.
19	Polynuclear aromatic hydrocarbons (PAHs) <= 0.000441 lb/hr emission limit based maximum heat input rate (MMBtu/hr(HHV)) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. Calculate by using the following equation: Polynuclear aromatic hydrocarbons (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.2 E-06 lb/MMBtu)]. [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.
20	Nitrous oxide <= 0.1085 lb/hr. Emission limit based maximum heat input rate in MMBtu/hr(HHV) of the turbine, and emission factor from 40CFR 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: **U14 Four simple-cycle stationary turbine used for electric power generation**

Subject Item: **CD2 Unit 12 - 121 Water Injection, CD3 Unit 12 - 122 Water Injection, CD4 Unit 12 - 123 Water Injection, CD5 Unit 12 - 124 Water Injection**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The permittee shall operate the Water Injection System (CD2, CD2, CD4, CD5) during all periods that the gas turbine is operating, except during start-up, and shutdown. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously, based on an instantaneous determination. The permittee shall record the time and duration of the operation of both the water injection system and the gas turbine. [N.J.A.C. 7:27-22.16(a)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The permittee shall continuously record the time and duration of the operation of the gas turbine and the water injection system. [N.J.A.C. 7:27-22.16(o)]	None.
2	Water-to-Fuel Ratio >= 0.7 lb of water per pound of fuel, for both gas and oil firing. Water-to-Fuel Ratio must be maintained when NOx CEM is not collecting valid data. [N.J.A.C. 7:27-22.16(a)]	Water-to-Fuel Ratio: Monitored by water-to-fuel monitoring device continuously, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(e)]	Water-to-Fuel Ratio: Recordkeeping by strip chart, round chart or data acquisition (DAS) system / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.
3	The owner or operator shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within +/-5.0 percent and shall be approved by the Chief, Bureau of Technical Services. [N.J.A.C. 7:27-22.16(a)]	Monitored by material feed/flow monitoring continuously, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	None.	None.

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Emission Unit: **U14 Four simple-cycle stationary turbine 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 and [40 CFR 97]	None.	None.	None.

New Jersey Department of Environmental Protection
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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 5 years (see General Provisions) from the last stack test using an approved protocol to demonstrate compliance with emission limits for NOx, and CO as specified in the compliance plan for U14 OS1, OS3, OS5, OS7 (Unit No. 12) when combusting natural gas. In addition, the permittee shall conduct a stack test using an approved protocol to demostrate compliance with emission limits for NOx, CO, VOC, TSP, & PM10 as specified in the compliance plan for U14 OS2, OS4, OS6, OS8 when firing ULSD within 180 calendar days after a turbine (E35, E36, E37, or E38) reaches 200 operating hours 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 permit term The permittee shall provide EMS with the turbine load performance curve with the protocol. 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). PERMITTEES OPERATING AFTER EXPIRATION DATE OF THE OPERATING PERMIT SHALL FOLLOW THE STACK TESTING SCHEDULE SPECIFIED IN THE REF.# LINE ITEM BELOW. 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. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 380-01A, 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 stack emission testing on natural gas. 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 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. Per stack testing protocol, the test results shall be reported in lb/MMBTU (HHV), lb/hr, lb/MW-hr and ppmvd @ 15% O2. [N.J.A.C. 7:27-22.18(e)], [N.J.A.C. 7:27-22.18(h)] and. [N.J.A.C. 7:27-22.16(o)]

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3	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]
4	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.
5	Particulate Emissions <= 46.3 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)]	Particulate Emissions: Monitored by stack emission testing at the approved frequency, based on each of three Department validated stack test runs. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(a)]	Particulate Emissions: Recordkeeping by stack test results at the approved frequency. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(e)]
6	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [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)]

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7	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.19(b)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
8	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(c)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three 1-hour tests. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(e)]
9	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 showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery showing fuel sulfur content, 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.
10	The Permittee shall adjust the combustion process in accordance with the procedure set forth at N.J.A.C. 7:27-19.16, in order to optimize the emission of NOx, CO and VOC. Adjustment of the combustion process shall be carried out according to manufacturer's recommended procedures and maintenance schedules for each turbine. [N.J.A.C. 7:27-16.9(f)2, N.J.A.C. 7:27-19.5(e)2] & [N.J.A.C. 7:27-19.16(g)]	Monitored by continuous emission monitoring system upon performing combustion adjustment or Periodic Emission Monitoring. [N.J.A.C. 7:27-19.16(h)]	Recordkeeping by data acquisition system (DAS) / electronic data storage upon performing combustion adjustment or manual logging of parameter upon performing combustion adjustment. The records should be kept in a permanent form suitable for inspections. The owner or operator shall record 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 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 used since the last combustion adjustment was performed. [N.J.A.C. 7:27-19.16(h)]	None.

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11	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. 7:27-19.16(e)].	None.
12	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.
13	Methane <= 0.593 tons/yr. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). Calculate by using following equation: Methane (tons/month) = [(0.0022 (lb/MMBtu) x Maximum monthly Heat Input from Natural Gas (MMBTU/month) for all four turbines + (0.0066 x Maximum monthly Heat Input from ULSD for all four turbines (MMBTU/month))]/2000 lbs/ton. Methane tons/year = is computed by adding the Methane tons/month for a given month to the Methane in tons in the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter each month during operation. [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	SO2 <= 3.6 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). Calculate by using following equation: SO2 (tons/month) = [(Natural Gas emission rate (lb/MMBtu) x Maximum monthly Heat Input from Natural Gas (MMBTU/month) for all four turbines) + (ULSD emission rate (lb/MMBtu) x Maximum monthly Heat Input from ULSD for all four turbines (MMBTU/month)]/(2000 lbs/ton). [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
15	NOx (Total) <= 108.9 tons/yr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a consecutive 12 month period (rolling 1 month basis). (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
16	CO <= 81.7 tons/yr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by continuous emission monitoring system continuously, based on a consecutive 12 month period (rolling 1 month basis). (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [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)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	TSP <= 11.1 tons/yr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). Calculate by using following equation: (tons/month) = [(Natural Gas emission rate (lb/MMBtu) x Maximum monthly Heat Input from Natural Gas (MMBTU/month) for all four turbines) + (ULSD emission rate (lb/MMBtu) x Maximum monthly Heat Input from ULSD for all four turbines (MMBTU/month))]/2000 lb/ton. TSP tons/year = is computed by adding the TSP tons/month for a given month to the TSP in tons in the preceding 11 months. . [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
18	PM-10 (Total) <= 11.1 tons/yr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). Calculate by using following equation: PM-10 (tons/month) = [(Natural Gas emission rate (lb/MMBtu) x Maximum monthly Heat Input from Natural Gas (MMBTU/month)) for all four turbines + (ULSD emission rate (lb/MMBtu) x Maximum monthly Heat Input from ULSD for all four turbines (MMBTU/month))]/2000 lbs/ton PM-10 tons/year = is computed by adding the PM-10 tons/month for a given month to the PM-10 in tons in the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter each month during operation. [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	PM-2.5 (Total) <= 11.1 tons/yr. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). Calculate by using following equation: PM-2.5 (tons/month) = [(Natural Gas emission rate (lb/MMBtu) x Maximum monthly Heat Input from Natural Gas (MMBTU/month) for all four turbines)+ (ULSD emission rate (lb/MMBtu) x Maximum monthly Heat Input from ULSD for all four turbines (MMBTU/month))]/2000 lb/ton. PM-2.5 tons/year = is computed by adding the PM-2.5 tons/month for a given month to the PM-2.5 in tons in the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
20	VOC (Total) <= 10.8 tons/yr. These VOC emissions include Formaldehyde emissions. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). Calculate by using following equation: VOC (tons/month) = [(emission rate from the most recent stack test for firing natural gas (lb/MMBtu))*(annual heat input from natural gas (MMBTU/yr))+(emission rate from the most recent stack test for firing low sulfur distillate oil (lb/MMBtu))*(annual heat input from low sulfur distillate oil (MMBTU/yr)]/(2000 lbs/ton) VOC tons/year = is computed by adding the VOC tons/month for a given month to the VOC in tons in the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter each month during operation. [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	Acetaldehyde <= 0.0479 tons/yr Maximum emission rate for 4 combustion turbines based on: [Natural Gas Emission Factor (lb/MMBtu) and Maximum Annual Heat Input from Natural Gas for all four turbines Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Monitored by calculations once initially. Calculate by using following equation: Acetaldehyde (tons/yr) = [(Natural Gas emission factor(lb/MMBtu) x Maximum annual Heat Input from Natural Gas (MMBTU/yr) for all four turbines]/2000 lb/ton. [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. [N.J.A.C. 7:27-22.16(o)]	None.
22	Acrolein <= 0.00767 tons/yr Maximum emission rate for 4 combustion turbines based on: Natural Gas Emission Factor (lb/MMBtu) and Maximum Annual Heat Input from Natural Gas for all four turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. Calculate by using following equation: Acrolein (tons/yr) = [(Natural Gas emission factor(lb/MMBtu) x Maximum annual Heat Input from Natural Gas (MMBTU/yr) for all four turbines]/2000 lb/ton. [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.
23	Arsenic Emissions <= 0.001 tons/yr. Maximum emission rate for 4 combustion turbines based on: ULSD emission factor (lb/MMBtu) and Maximum Annual Heat Input from ULSD for all four turbines; plus Natural Gas Emission Factor (lb/MMBtu) and Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) for all four turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-4, and 3.1-5 for ULSD firing, and from NJDEP 12/11/2023 memo for natural gas firing. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by calculations once initially. Calculate by using following equation: Arsenic tons/yr = [(Natural Gas emission factor (lb/MMBtu) x Maximum Annual Heat Input from Natural Gas (MMBTU/yr) after oil for all four turbines) + (ULSD emission factor (lb/MMBtu) x Maximum Annual Heat Input from ULSD for all four turbines (MMBTU/yr))]/2000 lb/ton. [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
24	Benzene <= 0.0174 tons/yr. Maximum emission rate for 4 combustion turbines based on: ULSD emission factor (lb/MMBtu) and Maximum Annual Heat Input from ULSD for all four turbines; plus Natural Gas Emission Factor (lb/MMBtu) and Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) for all four turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-16.9(f)]	Benzene: Monitored by calculations once initially. Calculate by using following equation: Benzene tons/yr = [(Natural Gas emission factor (lb/MMBtu) x Maximum Annual Heat Input from Natural Gas (MMBTU/yr) after oil for all four turbines) + (ULSD emission factor (lb/MMBtu) x Maximum Annual Heat Input from ULSD for all four turbines (MMBTU/yr))]/2000 lb/ton. [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. 7:27-12.16(o)]	None.
25	Beryllium Emissions <= 0.0000277 tons/yr. Maximum emission rate for 4 combustion turbines based on: ULSD emission factor (lb/MMBtu) and Maximum Annual Heat Input from ULSD for all four turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Monitored by calculations once initially. Calculate by using following equation: Beryllium tons/yr = [(ULSD emission factor (lb/MMBtu) x Maximum Annual Heat Input from ULSD for all four turbines (MMBTU/yr))]/2000 lb/ton. [N.J.A.C. 7:27-22.16(a)]	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.
26	Butadiene (1,3-) <= 0.00188 tons/yr. Maximum emission rate for 4 combustion turbines based on: ULSD emission factor (lb/MMBtu) and Maximum Annual Heat Input from ULSD for all four turbines; plus Natural Gas Emission Factor (lb/MMBtu) and Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) for all four turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Monitored by calculations once initially. Calculate by using following equation: Butadiene (1, 3-) tons/yr = [(Natural Gas emission factor (lb/MMBtu) x Maximum Annual Heat Input from Natural Gas (MMBTU/yr) after oil for all four turbines) + (ULSD emission factor (lb/MMBtu) x Maximum Annual Heat Input from ULSD for all four turbines (MMBTU/yr))]/2000 lb/ton. [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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27	Cadmium Emissions <= 0.00043 tons/yr. Maximum emission rate for 4 combustion turbines based on: ULSD emission factor (lb/MMBtu) and Maximum Annual Heat Input from ULSD for all four turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Monitored by calculations once initially. Calculate by using following equation: Cadmium tons/yr = [(ULSD emission factor (lb/MMBtu) x Maximum Annual Heat Input from ULSD for all four turbines (MMBTU/yr))]/2000 lb/ton. [N.J.A.C. 7:27-22.16(a)]	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.
28	Dioxins/Furans (Total) <= 3.0E-7 tons/yr. Maximum emission rate for 4 combustion turbines based on: Natural Gas Emission Factor (lb/MMBtu) and Maximum Annual Heat Input from Natural Gas for all four turbines. Emission factor from EPRI. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (Total): Monitored by calculations once initially. Calculate by using following equation: Total Dioxin and Furans (tons/yr) = [(Natural Gas emission factor(lb/MMBtu) x Maximum annual Heat Input from Natural Gas (MMBTU/yr) for all four turbines]/2000 lb/ton. [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.
29	Ethylbenzene <= 0.0384 tons/yr. Maximum emission rate for 4 combustion turbines based on: Natural Gas Emission Factor (lb/MMBtu) and Maximum Annual Heat Input from Natural Gas for all four turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. Calculate by using following equation: Ethylbenzene (tons/yr) = [(Natural Gas emission factor(lb/MMBtu) x Maximum annual Heat Input from Natural Gas (MMBTU/yr) for all four turbines]/2000 lb/ton. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
30	Formaldehyde <= 0.851 tons/yr. Maximum emission rate for 4 combustion turbines based on: Natural Gas Emission Factor (lb/MMBtu) and Maximum Annual Heat Input from Natural Gas for all four turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. Calculate by using following equation: Formaldehyde (tons/yr) = [(Natural Gas emission factor(lb/MMBtu) x Maximum annual Heat Input from Natural Gas (MMBTU/yr) for all four turbines]/2000 lb/ton. [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
31	Pb <= 0.00179 tons/yr. Maximum emission rate for 4 combustion turbines based on: [(ULSD emission factor (lb/MMBtu) and Maximum Annual Heat Input from ULSD for all four turbines; plus Natural Gas Emission Factor (lb/MMBtu) x Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) for all four turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. Calculate by using following equation: Lead tons/yr = [(Natural Gas emission factor (lb/MMBtu) x Maximum Annual Heat Input from Natural Gas (MMBTU/yr) after oil for all four turbines) + (ULSD emission factor (lb/MMBtu) x Maximum Annual Heat Input from ULSD for all four turbines (MMBTU/yr))]/2000 lb/ton. [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.
32	Manganese Emissions <= 0.0707 tons/yr. Maximum emission rate for 4 combustion turbines based on: ULSD emission factor (lb/MMBtu) and Maximum Annual Heat Input from ULSD for all four turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(o)]	Manganese Emissions: Monitored by calculations once initially. Calculate by using following equation: Manganese tons/yr = [(ULSD emission factor (lb/MMBtu) x Maximum Annual Heat Input from ULSD for all four turbines (MMBTU/yr))]/2000 lb/ton. [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 at the approved frequency. [N.J.A.C. 7:27-22.16(o)]	None.
33	Nitrous oxide <= 0.0715 tons/yr Maximum emission rate for 4 combustion turbines based on: ULSD emission factor (lb/MMBtu) and Maximum Annual Heat Input from ULSD for all four turbines; plus Natural Gas Emission Factor (lb/MMBtu) and Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) for all four turbines. Nitrous oxide 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. Calculate by using following equation: Nitrous oxide (tons/yr) = [(Natural Gas emission factor(lb/MMBtu) x Maximum annual Heat Input from Natural Gas (MMBTU/yr) after oil for all four turbines]/2000 lb/ton + (ULSD emission factor (lb/MMBtu) x Maximum Annual Heat Input from ULSD for all four turbines (MMBTU/yr))]/2000 lb/ton. [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 at the approved frequency. [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
34	Naphthalene <= 0.00448 tons/yr. Maximum emission rate for 4 combustion turbines based on: [(ULSD emission factor (lb/MMBtu) and Maximum Annual Heat Input from ULSD for all four turbines; plus Natural Gas Emission Factor (lb/MMBtu) x and Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) for all four turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. Calculate by using following equation: Naphthalene tons/yr = [(Natural Gas emission factor (lb/MMBtu) x Maximum Annual Heat Input from Natural Gas (MMBTU/yr) after oil for all four turbines) + (ULSD emission factor (lb/MMBtu) x Maximum Annual Heat Input from ULSD for all four turbines (MMBTU/yr))]/2000 lb/ton. [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.
35	Nickel Emissions <= 0.000411 tons/yr. Maximum emission rate for 4 combustion turbines based on: ULSD emission factor (lb/MMBtu) and Maximum Annual Heat Input from ULSD for all four turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. Calculate by using following equation: Nickel Emissions tons/yr = [(ULSD emission factor (lb/MMBtu) x Maximum Annual Heat Input from ULSD for all four turbines (MMBTU/yr))]/2000 lb/ton. [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.
36	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00586 tons/yr. Maximum emission rate for 4 combustion turbines based on: [(ULSD emission factor (lb/MMBtu) and Maximum Annual Heat Input from ULSD for all four turbines; plus Natural Gas Emission Factor (lb/MMBtu) and Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) for all four turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. Calculate by using following equation: Polycyclic Aromatic Hydrocarbons (PAH) tons/yr = [(Natural Gas emission factor (lb/MMBtu) x Maximum Annual Heat Input from Natural Gas (MMBTU/yr) after oil for all four turbines) + (ULSD emission factor (lb/MMBtu) x Maximum Annual Heat Input from ULSD for all four turbines (MMBTU/yr))]/2000 lb/ton. [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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
37	Polycyclic organic matter <= 0.00586 tons/yr. Maximum emission rate for 4 combustion turbines based on: [(ULSD emission factor (lb/MMBtu) and Maximum Annual Heat Input from ULSD for all four turbines; plus Natural Gas Emission Factor (lb/MMBtu) and Maximum Annual Heat Input from Natural Gas after oil (MMBTU/yr) for all four turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. Calculate by using following equation: Polycyclic Organic Matter (lb/month) = [(Natural Gas emission factor (lb/MMBtu) x Maximum Annual Heat Input from Natural Gas (MMBTU/yr) after oil for all four turbines) + (ULSD emission factor (lb/MMBtu) x Maximum Annual Heat Input from ULSD for all four turbines (MMBTU/yr))]/2000 lb/ton. [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.
38	Propylene oxide <= 0.0348 tons/yr. Maximum emission rate for 4 combustion turbines based on: Natural Gas Emission Factor (lb/MMBtu) and Maximum Annual Heat Input from Natural Gas for all four turbines. Emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. Calculate by using following equation: Propylene oxide (lb/month) = [Natural Gas emission rate (lb/MMBtu) x Maximum Annual Heat Input from Natural Gas (MMBTU/yr) for all four turbines]/2000. [N.J.A.C. 7:27-22.16(a)]	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.
39	Fuel limited to natural gas and/or ultra low sulfur distillate oil (ULSD). [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)].	None.	None.
40	Maximum Gross Heat Input <= 463 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(e)]	None.	Other: Keep records showing maximum heat input rate for each turbine.[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
41	NOx (Total) <= 39 tons/yr for each turbine module. This NOx cap is to avoid federal PSD applicability pursuant to 40 CFR 52.21. However the total NOx from all four turbine modules of U14 (Unit No. 12) shall remain less than or equal to 108.9 tons per year as referenced elsewhere under U14, OS Summary. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on one calendar year. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage annually. PSEG shall also record an annual demonstration showing that the exchange did not result in a 'significant emissions increase' and a 'significant net emissions increase' of each of the criteria pollutants under the PSD regulations (40 CFR 52.21). Records shall be kept on site for a period of no less than 5 years, and made readily available to the Department on request. [N.J.A.C. 7:27-22.16(o)]	None.
42	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. [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)]
43	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)]

U14 Four simple-cycle stationary turbine used for electric power generation
OS Summary

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
44	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 40 CFR 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 2 and the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60.7 [40 CFR 60.7(a)(4)]
45	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 or storing data in a computer data system upon occurrence of event. The records should be kept in a permanent form suitable for inspections. [40 CFR 60.7(b)]	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 contain the information required in 40 CFR 60.7(b) and be postmarked by the 30th day following the end of each six-month period. The report shall be submitted to the EPA Region 2 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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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
46	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 2 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)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
47	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. The file shall be retained for at least two years following the dates of the record, except as prescribed in 40 CFR 60.7(f)(1) through (3). Sources subject to 40 CFR 70, are required to retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application, per 40 CFR 70.6(a)(3)(ii)(B). [40 CFR 60.7(f)].	None.
48	Performance tests shall be conducted under conditions the Administrator specifies to the plant operator based on representative performance of the affected 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 during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]	None.	None.	None.
49	The owner or operator shall provide the Administrator at least 30 days prior notice of any performance test and shall provide adequate performance testing facilities as specified in 40 CFR Part 60.8(e). [40 CFR 60.8(d)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
50	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.
51	Compliance with NSPS standards specified in this permit, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in NSPS. [40 CFR 60.11(a)]	None.	None.	None.
52	The NSPS opacity standard shall apply at all times except during periods of startup, shutdown, malfunctions and as otherwise specified in the applicable standard. [40 CFR 60.11(c)]	None.	None.	None.
53	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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
54	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.
55	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)]	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. Monitored by other method (provide description) upon occurrence of event. [40 CFR 60.13(c)]	None.	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. Submit a report: As per the approved schedule. [40 CFR 60.13(c)(2)]
56	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.
57	Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all continuous monitoring systems referenced by 40 CFR 60.13(c) 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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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
58	All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR Part 60 shall be used. [40 CFR 60.13(f)]	None.	None.	None.
59	The owner or operator of all continuous monitoring systems for measuring opacity shall reduce all data to 6-minute averages which shall be calculated from 36 or more data points equally spaced over each 6-minute period. Six -minute period is defined in 40 CFR 60.2 as any one of the 10 equal parts of a one-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. [40 CFR 60.13(h)(1)]	None.	Other: See Applicable Requirement. [40 CFR 60.13(h)].	None.
60	All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the applicable 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 subpart to specify the emission limit. [40 CFR 60.13(h)(3)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
61	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.
62	The owner or operator shall notify the Administrator of the proposed replacement of components, upon reconstruction as defined at 40 CFR 60.15. [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)]
63	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.
64	NOx (Total) <= 109 ppmvd @ 15% O2. [40 CFR 60.332(a)(1)]	NOx (Total): Monitored by stack emission testing once initially, based on any 60 minute period. Test methods and procedures shall be consistent with the requirements of 40 CFR Part 60.335. If the turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel. Performance testing is not required for any emergency fuel as defined in 40 CFR 60.331. [40 CFR 60.335]	None.	None.
65	No owner or operator shall cause to be discharged into the atmosphere, any gases which contain sulfur dioxide in excess of SO2 <= 0.015 % by volume at 15% O2, dry basis. [40 CFR 60.333(a)]	SO2: Monitored by stack emission testing once initially, based on any 60 minute period. Test methods and procedures shall be consistent with the requirements of 40 CFR Part 60.335 [40 CFR 60.335]	None.	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
66	Sulfur Content in Fuel <= 0.8 % by weight. No owner or operator subject to the provisions of this subpart shall burn any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw). [40 CFR 60.333(b)]	Other: Test methods and procedures shall be consistent with the requirements of 40 CFR Part 60.334(h) and 60.335. A minimum of three fuel samples shall be collected during the performance test. [40 CFR 60.335].	None.	None.
67	The owner or operator may, as alternative to operating the continuous monitoring system described in 40 CFR 60.334(a), install, certify, maintain operate, and quality-assure a continuous monitoring system (CEMS) consisting of NOx and O2 monitors. As an alternative, a CO2 monitor may be used to adjust the measured NOx concentrations. Each CEMS must be installed and certified according to PS 2 and 3 of 40 CFR Part 60 Appendix B. If the owner or operator has installed a NOx CEMS to meet the requirements 40 CFR Part 75 and is continuing to meet the ongoing requirements of 40 CFR Part 75, the CEMS may be used to meet the requirements of this section. If CEMS in conformance with 40 CFR Part 75 is used, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report. [40 CFR 60.334(b)]	Monitored by continuous emission monitoring system continuously. [40 CFR 60.334]	None.	None.
68	The owner or operator of a turbine that does not use steam or water injection may, for purposes of determining excess emissions, use a CEMS that meets the requirements of 40 CFR 60.334(b), or use an alternative procedure of continuously monitoring compliance with the applicable NOx limit if such procedure was previously approved by the Administrator or local permitting authority. [40 CFR 60.334(c)]	Monitored by other method (provide description) continuously. [40 CFR 60.334]	None.	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
69	The owner or operator of any new turbine that uses water or steam injection to control NOx emissions may elect to use either the continuous water or steam to fuel monitoring as described in 40 CFR 60.334(a) or may use a NOx CEMS installed, certified, maintained, operated, and quality-assured as described in 40 CFR 60.334(b). [40 CFR 60.334(d)]	Monitored by other method (provide description) continuously. [40 CFR 60.334]	None.	None.
70	The owner or operator of any new turbine that does not use water or steam injection may elect to use either a NOx CEMS installed, certified, maintained, operated, and quality-assured as described in 40 CFR 60.334(b) or may instead perform parameter monitoring as described in 40 CFR 60.334(f). [40 CFR 60.334(e)]	Monitored by other method (provide description) continuously. [40 CFR 60.334]	None.	None.
71	The owner or operator of a turbine on which the steam or water to fuel ratio or other parameters are being continuously monitored shall develop and keep on -site a parameter monitoring plan which explains the procedure used to document proper operation of the NOx emission controls. [40 CFR 60.334(g)]	None.	Recordkeeping by other recordkeeping method (provide description) once initially. The parameter monitoring plan shall include information required by 40 CFR 60.334(g). [40 CFR 60.334(g)]	None.
72	The owner or operator 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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
73	The owner or operator 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 daily. The sulfur content value of the fuel shall be determined and recorded once per unit operating day, or as specified in 40 CFR 60.334(i)(3)(i) and (ii), or as specified in a custom schedule approved by the Administrator. 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 daily. The owner or operator shall record the results of each analysis for fuel sulfur content. [40 CFR 60.334(i)]	None.
74	The owner or operator shall monitor nitrogen content of the fuel being fired in the turbine if the owner or operator claims an allowance for fuel bound nitrogen. The owner or operator shall use the methods specified in 40 CFR 60.335(b)9 or an approved alternative. 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)(2)]	Monitored by other method (provide description) daily. Any applicable nitrogen content value of the gaseous fuel or fuel oil shall be determined and recorded once per unit operating day. 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 daily. The owner or operator shall record the results of each analysis for fuel nitrogen content. [40 CFR 60.334(i)]	None.
75	The owner or operator may elect not to monitor nitrogen content of the fuel being fired in the turbine if the owner or operator does not claim an allowance for fuel bound nitrogen. [40 CFR 60.334(h)(2)]	None.	None.	Demonstrate compliance: Once initially. The owner or operator does not claim an allowance for fuel bound nitrogen. The allowable NOx emission concentration included in this permit was calculated in accordance with 40 CFR 60.332(a). In calculations, NOx emission allowance (F-value) of zero was accepted. [40 CFR 60.334(h)(2)]
76	The owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u) regardless of whether an existing custom schedule approved by the Administrator. [40 CFR 60.334(h)(3)]	None.	None.	Demonstrate compliance: Once initially. The owner or operator shall submit the required determination to the Administrator using the sources of information described in 40 CFR 60.334(h)(3)(i) or (ii) showing the maximum total sulfur content. [40 CFR 60.334(h)(3)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
77	The owner or operator shall submit reports of excess emissions and monitor downtime for Nitrogen oxides. 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)(i) or (iii) as follows: (i) for turbines using water or steam to fuel ratio monitoring - any unit operating hour for which the average steam or water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable steam or water to fuel ratio determined by the performance test (40 CFR 60.8) to demonstrate compliance with the NOx concentration limit specified in 60.332; Any unit operating hour in which no water or steam is injected shall also be considered an excess emissions; or (iii) for turbines using NOx and diluent CEMS - any unit operating hour during which the 4-hour rolling average NOx concentration exceeds the applicable NOx emission limit specified in 60.332. [40 CFR 60.334(j)(1)]	None.	None.	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. Each report shall include the average steam or water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, as applicable and, (if applicable) the nitrogen content of the fuel during each excess emission. Pursuant to 40 CFR 60.334(j)5, all reports shall be postmarked by the 30th day following the end of each 6-month period. [40 CFR 60.334(j)(1)]
78	The owner or operator shall submit reports of excess emissions and monitor downtime for Nitrogen content in fuel. 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)(ii)(A) and (B) as follows: any period during which the fuel bound nitrogen of the fuel is greater than the maximum nitrogen content allowed using the performance test required by 40 CFR 60.8. [40 CFR 60.334(j)(1)(ii)]	None.	None.	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. Pursuant to 40 CFR 60.334(j)5, all reports shall be postmarked by the 30th day following the end of each 6-month period. [40 CFR 60.334(j)(1)(ii)]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
79	The owner or operator shall submit reports of excess emissions and monitor downtime for Sulfur dioxide. 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)(2). [40 CFR 60.334(j)(2)]	None.	None.	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. Pursuant to 40 CFR 60.334(j)5, all reports shall be postmarked by the 30th day following the end of each 6-month period. [40 CFR 60.334(j)(2)]
80	The owner or operator shall report to the Administrator each period during which an exemption provided in 40 CFR Part 60.332(f) is in effect. [40 CFR 60.334(j)(3)]	None.	None.	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 contain for each period, the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. Pursuant to 40 CFR 60.334(j)5, all reports shall be postmarked by the 30th day following the end of each 6-month period. [40 CFR 60.334(j)(3)]
81	The owner or operator shall include in the report required by 40 CFR Part 60.7(c), each period during which an exemption provided in 40 CFR Part 60.332(k) is in effect. [40 CFR 60.334(j)(4)]	None.	None.	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 contain for each period, the type, reasons, and duration of the firing of the emergency fuel. Pursuant to 40 CFR 60.334(j)5, all reports shall be postmarked by the 30th day following the end of each 6-month period. [40 CFR 60.334(j)(4)]
82	PJM Black Start Testing: Module 121 and 123 (Equipment ID E35 and E37, Emission Unit U14) are designated black start units for PJM as of April 1, 2015. [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
83	During an actual blackout emergency requiring black start service, operation of the combustion turbines Module 121 and 123 (Equipment ID E35 and E37, Emission Unit U14) 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.
84	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): As per the approved schedule Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit. [40 CFR 72]
85	The permittee shall comply with the attached 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: **U14 Four simple-cycle stationary turbine used for electric power generation**

Operating Scenario: **OS1 Turbine firing Natural Gas - Module 121, OS3 Turbine firing Natural Gas - Module 122, OS5 Turbine firing Natural Gas - Module 123, OS7 Turbine firing Natural Gas - Module 124**

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. Opacity <= 20 %. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
2	NOx (Total) <= 1 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	NOx (Total): Monitored by continuous emission monitoring system continuously. Between May 1 and September 30, over each calendar day; From October 1 through April 30 of the following year, over the 30-day period ending on each such day. . (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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 . [N.J.A.C. 7:27-22.16(o)]
3	CO <= 70 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [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	CO <= 70 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
5	VOC (Total) <= 4 lb/hr. These VOC emissions include Formaldehyde emissions. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	NOx (Total) <= 42 lb/hr. [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. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [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)]
7	NOx (Total) <= 42 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. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
8	TSP <= 3 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
9	PM-10 (Total) <= 3 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
10	PM-2.5 (Total) <= 3 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.
11	SO2 <= 1 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
12	CO <= 70 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. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [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 <= 70 ppmvd @ 15% O2. [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. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U14, OS Summary for 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
14	NOx (Total) <= 25 ppmvd @ 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. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [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)]
15	NOx (Total) <= 25 ppmvd @ 15% O2. [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. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
16	NOx (Total) <= 0.091 lb/MMBTU. [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. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [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)]
17	NOx (Total) <= 0.091 lb/MMBTU. [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. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
18	Acetaldehyde <= 0.0185 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. Calculate by using the following equation: Acetaldehyde (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.0 E-05 lb/MMBtu)]. [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.

U14 Four simple-cycle stationary turbine used for electric power generation
OS1, OS3, OS5, OS7

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	Acrolein <= 0.00296 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(e)]	Acrolein: Monitored by calculations once initially. Calculate by using the following equation: Acrolein (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (6.40 E-06 lb/MMBtu)]. [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.
20	Benzene <= 0.00556 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. Calculate by using the following equation: Benzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (5.5 E-05 lb/MMBtu)]. [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.
21	Butadiene (1,3-) <= 0.000199 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. Calculate by using the following equation: Butadiene(1,3-) (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.3 E-07 lb/MMBtu)]. [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.
22	Formaldehyde <= 0.329 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. Calculate by using the following equation: Formaldehyde (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (7.10E-04 lb/MMBtu)]. [N.J.A.C. 7:27-22.16(e)]	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	Dioxins/Furans (TEQ) <= 1.2E-7 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (TEQ): Monitored by calculations once initially. Calculate by using the following equation: Total Dioxin and Furans (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.510E-10 lb/MMBtu)]. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (TEQ): Recordkeeping by 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	Ethylbenzene <= 0.0148 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. Calculate by using the following equation: Ethylbenzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (3.2 E-5 lb/MMBtu)]. [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.
25	Methane <= 1.02 lb/hr emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the 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.
26	Naphthalene <= 0.000602 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. Calculate by using the following equation: Naphthalene: [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (1.3 E-6 lb/MMBtu)]. [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	Nitrous oxide <= 0.102 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from 40CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Nitrous oxide: Monitored by calculations once initially. Calculate by using the following equation: Nitrous oxide (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (0.00022 lb/MMBtu)]. [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	Propylene oxide <= 0.0134 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. Calculate by using the following equation: Propylene oxide (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.9 E-5 lb/MMBtu)]. [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.
29	Polycyclic organic matter <= 0.00102 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. Calculate by using the following equation: Polycyclic organic matter(lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.2 E-6 lb/MMBtu)]. [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.

U14 Four simple-cycle stationary turbine used for electric power generation
OS1, OS3, OS5, OS7

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
30	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00102 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. Calculate by using the following equation: Polynuclear aromatic hydrocarbons (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.2 E-6 lb/MMBtu)]. [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.
31	Annual Gross Heat Input <= 2.40 E 12 BTU/any period of 365 consecutive days for all four gas turbines combined. [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, 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)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation. The Annual Gross Heat Input in Btu for any period of 365 consecutive days is computed by adding the gross heat input on a given day to the gross heat input for the preceding 364 days. The gross heat input for a given day shall be a total of 24 readings taken once per hour. This procedure will begin the first day following the final issuance of the Operating Permit. This accounting will not include Btu calculations or fuel used during the 365 days prior to the approval of the Operating Permit. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U14 Four simple-cycle stationary turbine used for electric power generation**

Operating Scenario: **OS2 Turbine firing Distillate Oil - Module 121, OS4 Turbine firing Distillate Oil - Module 122, OS6 Turbine firing Distillate Oil - Module 123, OS8 Turbine firing Distillate Oil - Module 124**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 1.6 lb/MW-hr. [N.J.A.C. 7:27-19.5(g)]	NOx (Total): Monitored by continuous emission monitoring system continuously Between May 1 and September 30, over each calendar day; (ii From October 1 through April 30 of the following year, over the 30-day period ending on each such day. . (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
2	NOx (Total) <= 1 lb/MW-hr. NOx RACT emission limit applies 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. 7:27-22.19(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on ozone season (May 1 to September 30). (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-19]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage at the approved frequency. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [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)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	NOx (Total) <= 0.163 lb/MMBTU. [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. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [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	NOx (Total) <= 0.163 lb/MMBTU. [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. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
5	CO <= 16 lb/hr. [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. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [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	CO <= 16 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. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
7	VOC (Total) <= 6 lb/hr. These VOC emissions include Formaldehyde emissions. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]

U14 Four simple-cycle stationary turbine used for electric power generation
OS2, OS4, OS6, OS8

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	NOx (Total) <= 73 lb/hr. [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. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [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)]
9	NOx (Total) <= 73 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. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
10	TSP <= 14 lb/hr. [N.J.A.C. 7:27-22.16(e)]	TSP: Monitored by stack emission testing at the approved frequency, based on the average of three 1-hour tests. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results at the approved frequency. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(e)]
11	PM-10 (Total) <= 14 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing at the approved frequency, based on the average of three 1-hour tests (See U14 OS Summary Ref. #2). [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results at the approved frequency (See U14 OS Summary Ref. #2). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule (See U14 OS Summary Ref. #2). [N.J.A.C. 7:27-22.16(o)]
12	PM-2.5 (Total) <= 14 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by stack emission testing at the approved frequency, based on the average of three 1-hour tests. [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 at the approved frequency. [N.J.A.C. 7:27-22.16(o)]	None.
13	SO2 <= 0.704 lb/hr. To demonstrate compliance with SO2 emission limits comply with 40 CFR 75, Appendix D. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.

U14 Four simple-cycle stationary turbine used for electric power generation
OS2, OS4, OS6, OS8

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	CO <= 15 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. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (See U14 OS Summary Ref. #1). [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. (See U14 OS Summary Ref. #1). [N.J.A.C. 7:27-22.16(o)]
15	CO <= 15 ppmvd @ 15% O2. [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. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
16	NOx (Total) <= 42 ppmvd @ 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. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [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)]
17	NOx (Total) <= 42 ppmvd @ 15% O2. [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. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see Stack Testing Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]
18	Arsenic Emissions <= 0.00509 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(e)]	Arsenic Emissions: Monitored by calculations once initially. Calculate by using the following equation: Arsenic Emissions (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (1.10E-05 lb/MMBtu))]. [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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	Benzene <= 0.0255 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(e)]	Benzene: Monitored by calculations once initially. Calculate by using the following equation: Benzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (5.5 E-05 lb/MMBtu))]. [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.
20	Beryllium Emissions <= 0.000144 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Beryllium Emissions: Monitored by calculations once initially. Calculate by using the following equation: Beryllium Emissions (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (3.1E-7 lb/MMBtu))]. [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.
21	Butadiene (1,3-) <= 0.00741 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. Calculate by using the following equation: Butadiene (1,3-): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (1.6 E-5 lb/MMBtu))]. [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.
22	Cadmium Emissions <= 0.00222 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. Calculate by using the following equation: Cadmium emissions(lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.8 E-06 lb/MMBtu)]. [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.
23	Formaldehyde <= 0.13 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. Calculate by using the following equation: Formaldehyde (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.8 E-4 lb/MMBtu))]. [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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
24	Pb <= 0.00648 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. Calculate by using the following equation: Pb (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (1.4 E-05 lb/MMBtu))]. [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 <= 0.366 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Manganese compounds: Monitored by calculations once initially. Calculate by using the following equation: Manganese compounds (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (7.9 E-4 lb/MMBtu))]. [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.
26	Naphthalene <= 0.0162 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. Calculate by using the following equation: Naphthalene: [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (3.5 E-5 lb/MMBtu))]. [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	Nickel Emissions <= 0.00213 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. Calculate by using the following equation: Nickel Emissions (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.6 E-6 lb/MMBtu)]. [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	Polycyclic organic matter <= 0.0185 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. Calculate by using the following equation: Polycylic organic matter(lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.0E-5 lb/MMBtu))]. [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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
29	Polynuclear aromatic hydrocarbons (PAHs) <= 0.0185 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. Calculate by using the following equation: Polynuclear aromatic hydrocarbons (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.0 E-5 lb/MMBtu))]. [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	Annual Gross Heat Input <= 1.80 E 11 BTU/any period of 365 consecutive days for all four gas turbines combined. [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, 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)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation. The Annual Gross Heat Input in Btu for any period of 365 consecutive days is computed by adding the gross heat input on a given day to the gross heat input for the preceding 364 days. The gross heat input for a given day shall be a total of 24 readings taken once per hour. [N.J.A.C. 7:27-22.16(o)]	None.
31	Methane <= 3.06 lb/hr emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor 0.0066 lb/MMBtu. [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.
32	Nitrous oxide <= 0.613 lb/hr emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from 40CFR 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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U14 Four simple-cycle stationary turbine used for electric power generation**

Operating Scenario: **OS9 Turbine Startup on Natural Gas - Module 121, OS10 Turbine Startup on Natural Gas - Module 122, OS11 Turbine Startup on Natural Gas- Module 123, OS12 Turbine Startup on Natural Gas - Module 124**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Start-up Period: The start-up commences with initiation of the combustion of fuel in a combustion turbine and concludes when the turbine reaches a steady state operating load of 60% or higher of the design capacity. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	NOx (Total) <= 1 lb/MW-hr (net). [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. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-19.15(a)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
3	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-16.23(a)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
4	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(c)]	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.
5	TSP <= 3 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.
6	PM-10 (Total) <= 3 lb/hr. [N.J.A.C. 7:27-22.16(a)]	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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	PM-2.5 (Total) <= 3 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 emission limits during startup on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
8	SO2 <= 1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	Acetaldehyde <= 0.0185 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. Calculate by using the following equation: Acetaldehyde (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.0 E-05 lb/MMBtu)]. [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.
10	Acrolein <= 0.00296 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(e)]	Acrolein: Monitored by calculations once initially. Calculate by using the following equation: Acrolein (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (6.40 E-06 lb/MMBtu)]. [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.
11	Benzene <= 0.00556 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. Calculate by using the following equation: Benzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (5.5 E-05 lb/MMBtu)]. [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	Butadiene (1,3-) <= 0.000199 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. Calculate by using the following equation: Butadiene(1,3-) (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.3 E-07 lb/MMBtu)]. [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.
13	Formaldehyde <= 0.329 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. Calculate by using the following equation: Formaldehyde (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (7.10E-04 lb/MMBtu)]. [N.J.A.C. 7:27-22.16(e)]	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.

U14 Four simple-cycle stationary turbine used for electric power generation
OS9, OS10, OS11, OS12

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	Dioxins/Furans (TEQ) <= 1.2E-7 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (TEQ): Monitored by calculations once initially. Calculate by using the following equation: Total Dioxin and Furans (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.510E-10 lb/MMBtu)]. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (TEQ): Recordkeeping by 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	Ethylbenzene <= 0.0148 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. Calculate by using the following equation: Ethylbenzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (3.2 E-5 lb/MMBtu)]. [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.
16	Methane <= 1.02 lb/hr emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the 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.
17	Naphthalene <= 0.000602 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. Calculate by using the following equation: Naphthalene: [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (1.3 E-6 lb/MMBtu)]. [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.
18	Nitrous oxide <= 0.102 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from 40CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Nitrous oxide: Monitored by calculations once initially. Calculate by using the following equation: Nitrous oxide (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (0.00022 lb/MMBtu)]. [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.
19	Propylene oxide <= 0.0134 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. Calculate by using the following equation: Propylene oxide (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.9 E-5 lb/MMBtu)]. [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.

U14 Four simple-cycle stationary turbine used for electric power generation
OS9, OS10, OS11, OS12

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	Polycyclic organic matter <= 0.00102 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. Calculate by using the following equation: Polycylic organic matter(lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.2 E-6 lb/MMBtu)]. [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.
21	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00102 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. Calculate by using the following equation: Polynuclear aromatic hydrocarbons (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.2 E-6 lb/MMBtu)]. [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: **U14 Four simple-cycle stationary turbine used for electric power generation**

Operating Scenario: **OS13 Turbine Shutdown on Natural Gas- Module 121, OS14 Turbine Shutdown on Natural Gas - Module 122, OS15 Turbine Shutdown on Natural Gas - Module 123, OS16 Turbine Shutdown on Natural Gas - Module 124**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Shutdown Period: Combustion turbine shut-down is defined as the period of time from the initial lowering of combustion turbine output below 60% of the base load until fuel flow is completely off and combustion has ceased. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	NOx (Total) <= 1 lb/hr (net). [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. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-19.15(a)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
3	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-16.23(a)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
4	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(c)]	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.
5	TSP <= 3 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.
6	PM-2.5 (Total) <= 3 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 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	PM-10 (Total) <= 3 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.
8	SO2 <= 1 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the SO2 emission limits during shutdown on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
9	Acetaldehyde <= 0.0185 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. Calculate by using the following equation: Acetaldehyde (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.0 E-05 lb/MMBtu)]. [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.
10	Acrolein <= 0.00296 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(e)]	Acrolein: Monitored by calculations once initially. Calculate by using the following equation: Acrolein (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (6.40 E-06 lb/MMBtu)]. [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.
11	Benzene <= 0.00556 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. Calculate by using the following equation: Benzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (5.5 E-05 lb/MMBtu)]. [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	Butadiene (1,3-) <= 0.000199 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. Calculate by using the following equation: Butadiene(1,3-) (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.3 E-07 lb/MMBtu)]. [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	Formaldehyde <= 0.329 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. Calculate by using the following equation: Formaldehyde (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (7.10E-04 lb/MMBtu)]. [N.J.A.C. 7:27-22.16(e)]	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.
14	Dioxins/Furans (TEQ) <= 1.2E-7 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (TEQ): Monitored by calculations once initially. Calculate by using the following equation: Total Dioxin and Furans (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.510E-10 lb/MMBtu)]. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (TEQ): Recordkeeping by 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	Ethylbenzene <= 0.0148 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. Calculate by using the following equation: Ethylbenzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (3.2 E-5 lb/MMBtu)]. [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.
16	Methane <= 1.02 lb/hr emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the 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.
17	Naphthalene <= 0.000602 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. Calculate by using the following equation: Naphthalene: [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (1.3 E-6 lb/MMBtu)]. [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.
18	Nitrous oxide <= 0.102 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from 40CFR 98, Subpart C, Table C-2. [N.J.A.C. 7:27-22.16(a)]	Nitrous oxide: Monitored by calculations once initially. Calculate by using the following equation: Nitrous oxide (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (0.00022 lb/MMBtu)]. [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.

U14 Four simple-cycle stationary turbine used for electric power generation
OS13, OS14, OS15, OS16

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	Propylene oxide <= 0.0134 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. Calculate by using the following equation: Propylene oxide (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.9 E-5 lb/MMBtu)]. [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.
20	Polycyclic organic matter <= 0.00102 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. Calculate by using the following equation: Polycylic organic matter(lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.2 E-6 lb/MMBtu)]. [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.
21	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00102 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. Calculate by using the following equation: Polynuclear aromatic hydrocarbons (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.2 E-6 lb/MMBtu)]. [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: **U14 Four simple-cycle stationary turbine used for electric power generation**

Operating Scenario: **OS17 Turbine Fuel transfer Natural Gas - Module 121, OS18 Turbine Fuel transfer Natural Gas - Module 122, OS19 Turbine Fuel transfer Natural Gas - Module 123, OS20 Turbine Fuel transfer Natural Gas - Module 124**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Fuel Transfer Period <= 30 minutes The fuel transfer period commences when the fuel is switched from natural gas to distillate oil and vice versa. [N.J.A.C. 7:27-22.16(a)]	None.	Fuel Transfer Period: Recordkeeping by ging 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	NOx (Total) <= 1 lb/MW-hr (net). [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. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-19.15(a)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
3	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-16.23(a)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
4	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(c)]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during fuel transfer on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP <= 3 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 on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
6	PM-10 (Total) <= 3 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 emission limits during fuel transfer on natural gas.[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
7	PM-2.5 (Total) <= 3 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 emission limits during fuel transfer on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
8	SO2 <= 1 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: **U14 Four simple-cycle stationary turbine used for electric power generation**

Operating Scenario: **OS21 Turbine Mechanical Safety Testing Natural Gas- Module 121, OS22 Turbine Mechanical Safety Testing Natural Gas- Module 122, OS23 Turbine Mechanical Safety Testing Natural Gas - Module 123, OS24 Turbine Mechanical Safety Testing Natural Gas - Module 124**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The mechanical safety testing shall not exceed 12 hours per year. The mechanical safety testing shall be defined as that period of time following mechanical servicing or repair when mechanical safety tests are conducted. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Recordkeeping by manual logging of parameter upon occurrence of event. The following shall be recorded manually for each period of mechanical safety testing: date, start time, end time, and name of person responsible for recordkeeping.[N.J.A.C. 7:27-22.16(e)].	None.
2	NOx (Total) <= 1 lb/MW-hr (net). [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. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-19.15(a)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
3	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-16.23(a)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
4	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(c)]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during mechanical safety testing on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP <= 3 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 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
6	PM-10 (Total) <= 3 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 emission limits during mechanical safety testing on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
7	PM-2.5 (Total) <= 3 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 emission limits mechanical safety testing startup on natural gas.[N.J.A.C. 7:27-22.16(o)].	None.
8	SO2 <= 1 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.

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Facility Specific Requirements

Emission Unit: **U14 Four simple-cycle stationary turbine used for electric power generation**

Operating Scenario: **OS25 Turbine Startup on ULSD - Module 121, OS26 Turbine Startup on ULSD - Module 122, OS27 Turbine Startup on ULSD - Module 123, OS28 Turbine Startup on ULSD - Module 124**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 1.6 lb/MW-hr (net). [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. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-19.15(a)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
2	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-16.23(a)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
3	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(c)]	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.
4	TSP <= 14 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.
5	PM-10 (Total) <= 14 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.
6	PM-2.5 (Total) <= 14 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 emission limits during startup on ULSD[N.J.A.C. 7:27-22.16(o)].	None.
7	SO2 <= 0.704 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	Arsenic Emissions <= 0.00509 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(e)]	Arsenic Emissions: Monitored by calculations once initially. Calculate by using the following equation: Arsenic Emissions (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (1.10E-05 lb/MMBtu))]. [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.
9	Benzene <= 0.0255 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(e)]	Benzene: Monitored by calculations once initially. Calculate by using the following equation: Benzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (5.5 E-05 lb/MMBtu))]. [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.
10	Beryllium Emissions <= 0.000144 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Beryllium Emissions: Monitored by calculations once initially. Calculate by using the following equation: Beryllium Emissions (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (3.1E-7 lb/MMBtu))]. [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.
11	Butadiene (1,3-) <= 0.00741 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. Calculate by using the following equation: Butadiene (1,3-): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (1.6 E-5 lb/MMBtu))]. [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.
12	Cadmium Emissions <= 0.00222 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. Calculate by using the following equation: Cadmium emissions(lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.8 E-06 lb/MMBtu)]. [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.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	Formaldehyde <= 0.13 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. Calculate by using the following equation: Formaldehyde (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.8 E-4 lb/MMBtu))]. [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.
14	Pb <= 0.00648 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. Calculate by using the following equation: Pb (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (1.4 E-05 lb/MMBtu))]. [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.
15	Manganese compounds <= 0.366 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Manganese compounds: Monitored by calculations once initially. Calculate by using the following equation: Manganese compounds (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (7.9 E-4 lb/MMBtu))]. [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.
16	Naphthalene <= 0.0162 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. Calculate by using the following equation: Naphthalene: [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (3.5 E-5 lb/MMBtu))]. [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.
17	Nickel Emissions <= 0.00213 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. Calculate by using the following equation: Nickel Emissions (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.6 E-6 lb/MMBtu)]. [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
18	Polycyclic organic matter <= 0.0185 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. Calculate by using the following equation: Polycylic organic matter(lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.0E-5 lb/MMBtu))]. [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.
19	Polynuclear aromatic hydrocarbons (PAHs) <= 0.0185 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. Calculate by using the following equation: Polynuclear aromatic hydrocarbons (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.0 E-5 lb/MMBtu))]. [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: **U14 Four simple-cycle stationary turbine used for electric power generation**

Operating Scenario: **OS29 Turbine Shutdown on ULSD - Module 121, OS30 Turbine Shutdown on ULSD - Module 122, OS31 Turbine Shutdown on ULSD - Module 123, OS32 Turbine Shutdown on ULSD - Module 124**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Shutdown Period: Combustion turbine shut-down is defined as the period of time from the initial lowering of combustion turbine output below 60% of the base load until fuel flow is completely off and combustion has ceased. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	NOx (Total) <= 1.6 lb/hr (net). [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. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-19.15(a)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
3	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-16.23(a)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
4	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(c)]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during shutdown[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP <= 14 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.
6	PM-2.5 (Total) <= 14 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 emission limits during shutdown[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-10 (Total) <= 14 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[N.J.A.C. 7:27-22.16(o)].	None.
8	SO2 <= 0.704 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.
9	Arsenic Emissions <= 0.00509 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(e)]	Arsenic Emissions: Monitored by calculations once initially. Calculate by using the following equation: Arsenic Emissions (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (1.10E-05 lb/MMBtu))]. [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 <= 0.0255 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(e)]	Benzene: Monitored by calculations once initially. Calculate by using the following equation: Benzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (5.5 E-05 lb/MMBtu))]. [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 <= 0.000144 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Beryllium Emissions: Monitored by calculations once initially. Calculate by using the following equation: Beryllium Emissions (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (3.1E-7 lb/MMBtu))]. [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-) <= 0.00741 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. Calculate by using the following equation: Butadiene (1,3-): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (1.6 E-5 lb/MMBtu))]. [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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	Cadmium Emissions <= 0.00222 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. Calculate by using the following equation: Cadmium emissions(lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.8 E-06 lb/MMBtu)]. [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	Formaldehyde <= 0.13 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. Calculate by using the following equation: Formaldehyde (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (2.8 E-4 lb/MMBtu))]. [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.
15	Pb <= 0.00648 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. Calculate by using the following equation: Pb (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (1.4 E-05 lb/MMBtu))]. [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.
16	Manganese compounds <= 0.366 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Manganese compounds: Monitored by calculations once initially. Calculate by using the following equation: Manganese compounds (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (7.9 E-4 lb/MMBtu))]. [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.
17	Naphthalene <= 0.0162 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. Calculate by using the following equation: Naphthalene: [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (3.5 E-5 lb/MMBtu))]. [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
18	Nickel Emissions <= 0.00213 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by calculations once initially. Calculate by using the following equation: Nickel Emissions (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.6 E-6 lb/MMBtu)]. [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.
19	Polycyclic organic matter <= 0.0185 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. Calculate by using the following equation: Polycylic organic matter(lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.0E-5 lb/MMBtu))]. [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.
20	Polynuclear aromatic hydrocarbons (PAHs) <= 0.0185 lb/hr. Emission limit based maximum heat input rate of 463.0 MMBtu/hr(HHV) of the turbine, and emission factor from AP 42, Volume I, Fifth Edition, Supplement F, April 2000, Tables 3.1-2a, 3.1-3, 3.1-4, and 3.1-5. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. Calculate by using the following equation: Polynuclear aromatic hydrocarbons (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (4.0 E-5 lb/MMBtu))]. [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: **U14 Four simple-cycle stationary turbine used for electric power generation**

Operating Scenario: **OS33 Turbine Fuel transfer Oil-ULSD - Module 121, OS34 Turbine Fuel transfer Oil-ULSD - Module 122, OS35 Turbine Fuel transfer Oil-ULSD - Module 123, OS36 Turbine Fuel transfer Oil-ULSD - Module 124**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Fuel Transfer Period <= 30 minutes The fuel transfer period commences when the fuel is switched from natural gas to distillate oil and vice versa. [N.J.A.C. 7:27-22.16(a)]	None.	Fuel Transfer Period: Recordkeeping by ging 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	NOx (Total) <= 1.6 lb/MW-hr (net). [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. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-19.15(a)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
3	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-16.23(a)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
4	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(c)]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during fuel transfer on ULSD[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP <= 14 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 on ULSD[N.J.A.C. 7:27-22.16(o)].	None.
6	PM-10 (Total) <= 14 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 emission limits during fuel transfer on ULSD[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
7	PM-2.5 (Total) <= 14 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 emission limits during fuel transfer on ULSD[N.J.A.C. 7:27-22.16(o)].	None.
8	SO2 <= 0.704 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: **U14 Four simple-cycle stationary turbine used for electric power generation**

Operating Scenario: **OS37 Turbine Mechanical Safety Testing ULSD - Module 121, OS38 Turbine Mechanical Safety Testing ULSD - Module 122, OS39 Turbine Mechanical Safety Testing ULSD - Module 123, OS40 Turbine Mechanical Safety Testing ULSD - Module 124**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The mechanical safety testing shall not exceed 12 hours per year. The mechanical safety testing shall be defined as that period of time following mechanical servicing or repair when mechanical safety tests are conducted. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Recordkeeping by manual logging of parameter upon occurrence of event. The following shall be recorded manually for each period of mechanical safety testing: date, start time, end time, and name of person responsible for recordkeeping.[N.J.A.C. 7:27-22.16(e)].	None.
2	NOx (Total) <= 1.6 lb/MW-hr (net). [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. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-19.15(a)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
3	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-16.23(a)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see CEMS Rerquirements Summary at U14, OS Summary for details). [N.J.A.C. 7:27-22.16(o)]	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. [N.J.A.C. 7:27-22.16(o)]
4	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(c)]	None.	Other: Keep turbine manufacturer's specifications showing the VOC emission limits during mechanical safety testing on ULSD[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP <= 14 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 on ULSD[N.J.A.C. 7:27-22.16(o)].	None.
6	PM-10 (Total) <= 14 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-10 emission limits during mechanical safety testing on ULSD[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
7	PM-2.5 (Total) <= 14 lb/hr. [N.J.A.C. 7:27-22.16(o)]	None.	Other: Keep turbine manufacturer's specifications showing the PM-2.5 emission limits during smechanical safety testing on ULSD[N.J.A.C. 7:27-22.16(o)].	None.
8	SO2 <= 0.704 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: **U56 Emergency Diesel Generator**
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 Subpart ZZZZ of [40 CFR 63]	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 <= 8.61 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). [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	Generator fuel limited to ULSD diesel fuel or kerosene. [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
6	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. 7:27-19.11]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	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
8	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. 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)]	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
9	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.
10	Maximum Gross Heat Input <= 29.5 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records showing maximum heat input rate for generator[N.J.A.C. 7:27-22.16(o)].	None.
11	VOC (Total) <= 0.0447 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	NOx (Total) <= 2.47 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	CO <= 0.297 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	TSP <= 0.0138 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-10 (Total) <= 0.0138 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	Methane <= 0.002 tons/yr. Annual emission limit based on the permitted hours per year of operation. [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.
17	PM-2.5 (Total) <= 0.0138 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.
18	Benzene <= 0.00114 tons/yr. Annual emission limit based on the permitted hours per year of operation 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(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	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)]
20	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)]
21	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
22	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)]
23	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.
24	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.
25	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
26	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.
27	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
28	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.
29	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.
30	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

Emission Unit: **U56 Emergency Diesel Generator**
Operating Scenario: **OS1 Emergency Diesel Generator**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Visible emissions from diesel engine no greater than 20% opacity, exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. Opacity <= 20 %. [N.J.A.C. 7:27-3.5]	None.	None.	None.
2	NOx (Total) <= 49.4 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	CO <= 5.94 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	TSP <= 0.28 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 0.28 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 0.28 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	VOC (Total) <= 0.89 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	Benzene <= 0.0229 lb/hr. Emission limit based maximum heat input rate of 29.5 MMBtu/hr(HHV) of the engine, 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(a)]	Benzene: Monitored by calculations once initially. Calculate by using the following equation: Benzene (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (7.76 E-04 lb/MMBtu)]. [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.
9	Methane <= 0.195 lb/hr. Emission limit based maximum heat input rate of 29.5 MMBtu/hr(HHV) of the engine, and emission factor from 40CFR 98, Subpart C, table C-2. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. Calculate by using the following equation: Methane (lb/hr): [Maximum Heat Input per Engine (MMBtu/hr) x (Emission Factor (0.0066 lb/MMBtu)]. [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.

KEARNY GENERATING STATION (12200)
BOP190002

New Jersey Department of Environmental Protection
Facility Profile (General)

Facility Name (AIMS): Kearny Generating Station Facility

Facility ID (AIMS): 12200

Street Address: 118 HACKENSACK AVE
KEARNY, NJ 07032

Mailing Address: 118 HACKENSACK AVE
KEARNY, NJ 07032

State Plane Coordinates:

X-Coordinate:	183,776
Y-Coordinate:	211,423
Units:	Meters
Datum:	NAD27
Source Org.:	Other/Unknown
Source Type:	Digital Image

County: Hudson

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: Rock Demarais
NJ EIN: 00824081414
Title: EHS Manager
Phone: (281) 730-2885 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: rdemarais@camsops.com
Mailing Address: 118 Hackensack Ave
Kearny
, NJ 07032

Contact Type: **BOP - Operating Permits**

Organization: Parkway Generation Operating LLC
Org. Type: LLC
Name: Rock Demarais
NJ EIN: 00824081414
Title: EHS Manager
Phone: (281) 730-2885 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: rdemarais@camsops.com
Mailing Address: 118 Hackensack Ave
Kearny
, NJ 07032

Contact Type: **Consultant**

Organization: eSPARC
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: Rock Demarais
NJ EIN: 00824081414
Title: EHS Manager
Phone: (281) 730-2885 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: rdemarais@camsops.com
Mailing Address: 118 Hackensack Ave
Kearny
, NJ 07032

Contact Type: Fees/Billing Contact

Organization: Parkway Generation Operating LLC
Org. Type: LLC
Name: Rock Demarais
NJ EIN: 00824081414
Title: EHS Manager
Phone: (281) 730-2885 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: rdemarais@camsops.com
Mailing Address: 118 Hackensack Ave
Kearny
, NJ 07032

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: Roger Clouse
NJ EIN: 00824081414
Title: Operations Manager
Phone: (973) 274-6874 x
Fax: (973) 589-4970 x
Other: ( ) - x
Type:
Email: rclouse@camsops.com
Mailing Address: 118 Hackensack Ave
Kearny, NJ 07032

Contact Type: **Operator**

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

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

KEARNY GENERATING STATION (12200)
BOP190002

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: **Responsible Official**

Organization: Parkway Generation Operating LLC
Org. Type: LLC

Name: Peter Van Den Houten
NJ EIN: 00824081414

Title: Power Plant Manager

Phone: (201) 313-7700 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: pvandenhouten@camsops.com

Mailing Address: 118 Hackensack Ave
Kearny, NJ 07032

KEARNY GENERATING STATION (12200) Date: 04/03/2025
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)
FG3	Miscellaneous Solvent Uses										
FG4	Miscellaneous pipes, flanges, fittings										
Total			3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000

KEARNY GENERATING STATION (12200)
BOP190002

Date: 4/3/2025

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 < 1 MMBtu/hr and Non-Emergency Electric Generators< 37kW	Fuel Combustion Equipment (Other)										
IS3	Wastewater Treatment Equipment<100 ppbw each TXS, and < 3,500 ppbw total VOC	Other Equipment										
IS4	Commercial Fuel Burning Equipment < 1 MMBtu/hr and Non-Emergency Electric Generators< 37kW	Other Equipment										
IS5	Surface/Parts cleaners <6 SQFT, capacity<100 gallons (No HAPS, MACT)	Other Equipment										
IS7	Applicable VOC (>0.02 psia) Satellite Accumulation Areas-Storage Tanks <2000 gallons	Other Equipment										

KEARNY GENERATING STATION (12200)
BOP190002

Date: 4/3/2025

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)
IS9	Fire protection systems < 50 lb/hr of raw material	Other Equipment										
IS10	Building sumps < 100 ppbw each TXS & <3500 ppbw total VOC	Other Equipment										
IS11	Chemical cleaning equipment < 50 lb/hr of raw material	Other Equipment										
IS13	Floor drain collection systems <100 ppbw each TXS &<3500 ppbw total VOC	Other Equipment										
IS15	Non-applicable VOC (<0.02 psia) storage tanks with capacities <10,000 gallons	Storage Vessel										
IS16	Applicable VOC (>0.02 psia) storage tanks <2000 gallons	Storage Vessel										
IS17	Welding Equipment < 12lb/calendar day of welding rod or wire	Other Equipment										
Total				5.000	1.030	0.720	0.000	0.200	0.200	0.000	0.00000000	0.000

KEARNY GENERATING STATION (12200) Date: 4/3/2025
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
E35	121	Unit No. 12, 121	Combustion Turbine	PCP000001	5/28/2001	No		
E36	122	Unit No. 12, 122	Combustion Turbine	PCP000001	5/21/2001	No		
E37	123	Unit No. 12, 123	Combustion Turbine	PCP000001	6/29/2001	No		
E38	124	Unit No. 12, 124	Combustion Turbine	PCP000001	6/27/2001	No		
E50	U13A	Unit No. 13A	Combustion Turbine	BOP100002	4/24/2012	No		
E51	U13B	Unit No. 13B	Combustion Turbine	BOP100002	5/5/2012	No		
E52	U13C	Unit No. 13C	Combustion Turbine	BOP100002	5/9/2012	No		
E53	U13D	Unit No. 13D	Combustion Turbine	BOP100002	5/14/2012	No		
E54	U14A	Unit No. 14A	Combustion Turbine	BOP100002	4/6/2012	No		
E55	U14B	Unit No. 14B	Combustion Turbine	BOP100002	4/12/2012	No		
E56	EDGen	Emergency Diesel Generator	Emergency Generator	GOP140001	5/1/2015	No		

12200 KEARNY GENERATING STATION BOP190002 E36 (Combustion Turbine)
Print Date: 4/3/2025

Make:	GE LM6000		
Manufacturer:	General Electric		
Model:	GE LM6000		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	463.00		
Type of Turbine:	Aero-Derivative		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generator	Description:	
Power Output:	45.00	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:	
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:

12200 KEARNY GENERATING STATION BOP190002 E37 (Combustion Turbine)
Print Date: 4/3/2025

Make:	GE LM6000		
Manufacturer:	General Electric		
Model:	GE LM6000		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	463.00		
Type of Turbine:	Aero-Derivative		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generator	Description:	
Power Output:	45.00	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:	
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:

12200 KEARNY GENERATING STATION BOP190002 E38 (Combustion Turbine)
Print Date: 4/3/2025

Make:	GE LM6000		
Manufacturer:	General Electric		
Model:	GE LM6000		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	463.00		
Type of Turbine:	Aero-Derivative		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generator	Description:	
Power Output:	45.00	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:	
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:

12200 KEARNY GENERATING STATION BOP190002 E50 (Combustion Turbine)
Print Date: 4/3/2025

Make:	GE LM6000		
Manufacturer:	General Electric		
Model:	LM6000PC Sprint		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	493.00		
Type of Turbine:	Aero-Derivative		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generator	Description:	
Power Output:	51.30	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:	
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:

12200 KEARNY GENERATING STATION BOP190002 E35 (Combustion Turbine)
Print Date: 4/3/2025

Make:	GE LM6000		
Manufacturer:	General Electric		
Model:	GE LM6000		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	463.00		
Type of Turbine:	Aero-Derivative		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generato	Description:	
Power Output:	45.00	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:	
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:

12200 KEARNY GENERATING STATION BOP190002 E51 (Combustion Turbine)
Print Date: 4/3/2025

Make:	GE LM6000		
Manufacturer:	General Electric		
Model:	LM6000PC Sprint		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	493.00		
Type of Turbine:	Aero-Derivative		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generato	Description:	
Power Output:	51.30	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:	
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:

12200 KEARNY GENERATING STATION BOP190002 E52 (Combustion Turbine)
Print Date: 4/3/2025

Make:	GE LM6000		
Manufacturer:	General Electric		
Model:	LM6000PC Sprint		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	493.00		
Type of Turbine:	Aero-Derivative		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generator	Description:	
Power Output:	51.30	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:	
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:

12200 KEARNY GENERATING STATION BOP190002 E53 (Combustion Turbine)
Print Date: 4/3/2025

Make:	GE LM6000		
Manufacturer:	General Electric		
Model:	LM6000PC Sprint		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	493.00		
Type of Turbine:	Aero-Derivative		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generator	Description:	
Power Output:	51.30	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:	
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:

12200 KEARNY GENERATING STATION BOP190002 E54 (Combustion Turbine)
Print Date: 4/3/2025

Make:	GE LM6000		
Manufacturer:	General Electric		
Model:	LM6000PC Sprint		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	493.00		
Type of Turbine:	Aero-Derivative		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generato	Description:	
Power Output:	51.30	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:	
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:

12200 KEARNY GENERATING STATION BOP190002 E55 (Combustion Turbine)
Print Date: 4/3/2025

Make:	GE LM6000		
Manufacturer:	General Electric		
Model:	LM6000PC Sprint		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	493.00		
Type of Turbine:	Aero-Derivative		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generator	Description:	
Power Output:	51.30	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:	
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:

12200 KEARNY GENERATING STATION BOP190002 E56 (Emergency Generator)
Print Date: 4/3/2025

Make:	
Manufacturer:	Caterpillar
Model:	C175-16
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	29.50
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:	3000 kW

KEARNY GENERATING STATION (12200) Date: 4/3/2025

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
CD2	Water Inject	Unit 12 - 121 Water Injection	Other	5/28/2001			
CD3	Water Inject	Unit 12 - 122 Water Injection	Other	5/21/2001			
CD4	Water Inject	Unit 12 - 123 Water Injection	Other	6/29/2001			
CD5	Water Inject	Unit 12 - 124 Water Injection	Other	6/27/2001			
CD6	Water Inject	Unit 13A - Water Injection	Other				
CD7	Water Inject	Unit 13B - Water Injection	Other				
CD8	Water Inject	Unit 13C - Water Injection	Other				
CD9	Water Inject	Unit 13D - Water Injection	Other				
CD10	Water Inject	Unit 14A - Water Injection	Other				
CD11	Water Inject	Unit 14B - Water Injection	Other				
CD12	13A SCR	Unit 13A - SCR	Selective Catalytic Reduction	4/24/2012			
CD13	13B SCR	Unit 13B - SCR	Selective Catalytic Reduction	5/5/2012			
CD14	13C SCR	Unit 13C - SCR	Selective Catalytic Reduction	5/9/2012			
CD15	13D SCR	Unit 13D - SCR	Selective Catalytic Reduction	5/14/2012			
CD16	14A SCR	Unit 14A - SCR	Selective Catalytic Reduction	4/6/2012			
CD17	14B SCR	Unit 14B - SCR	Selective Catalytic Reduction	4/12/2012			
CD18	13A Ox Cat	Unit 13A - Oxidation Cat	Other	4/24/2012			

KEARNY GENERATING STATION (12200) Date: 4/3/2025
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
CD19	13B Ox Cat	Unit 13B - Oxidation Cat	Other	5/5/2012			
CD20	13C Ox Cat	Unit 13C - Oxidation Cat	Other	5/9/2012			
CD21	13D Ox Cat	Unit 13D - Oxidation Cat	Other	5/14/2012			
CD22	14A Ox Cat	Unit 14A - Oxidation Cat	Other	4/6/2012			
CD23	14B Ox Cat	Unit 14B - Oxidation Cat	Other	4/12/2012			

12200 KEARNY GENERATING STATION BOP190002 CD2 (Other)
Print Date: 4/3/2025

Make:	GE LM6000
Manufacturer:	General Electric
Model:	GE LM6000
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:	For Informational purposes only.

12200 KEARNY GENERATING STATION BOP190002 CD3 (Other)
Print Date: 4/3/2025

Make:	GE LM6000
Manufacturer:	General Electric
Model:	GE LM6000
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:	For Informational purposes only.

12200 KEARNY GENERATING STATION BOP190002 CD4 (Other)
Print Date: 4/3/2025

Make:	GE LM6000
Manufacturer:	General Electric
Model:	GE LM6000
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:	For Informational purposes only.

12200 KEARNY GENERATING STATION BOP190002 CD5 (Other)
Print Date: 4/3/2025

Make:	GE LM6000
Manufacturer:	General Electric
Model:	GE LM6000
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:	For Informational purposes only.

12200 KEARNY GENERATING STATION BOP190002 CD7 (Other)
Print Date: 4/3/2025

Make:	GE LM6000
Manufacturer:	General Electric
Model:	LM6000
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:	Water injection

12200 KEARNY GENERATING STATION BOP190002 CD8 (Other)
Print Date: 4/3/2025

Make:	GE LM6000
Manufacturer:	General Electric
Model:	LM6000
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:	Water injection

12200 KEARNY GENERATING STATION BOP190002 CD9 (Other)
Print Date: 4/3/2025

Make:	GE LM6000
Manufacturer:	General Electric
Model:	LM6000
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:	Water injection

12200 KEARNY GENERATING STATION BOP190002 CD10 (Other)
Print Date: 4/3/2025

Make:	GE LM6000
Manufacturer:	General Electric
Model:	LM6000
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:	Water injection

12200 KEARNY GENERATING STATION BOP190002 CD11 (Other)
Print Date: 4/3/2025

Make:	GE LM6000
Manufacturer:	General Electric
Model:	LM6000
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:	Water injection

12200 KEARNY GENERATING STATION BOP190002 CD12 (Selective Catalytic Reduction)
Print Date: 4/3/2025

Make:	Haldor Topsoe
Manufacturer:	Haldor Topsoe
Model:	DNX-920
Minimum Temperature at Catalyst Bed (°F):	550
Maximum Temperature at Catalyst Bed (°F):	850
Minimum Temperature at Reagent Injection Point (°F):	550
Maximum Temperature at Reagent Injection Point (°F):	850
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH4OH
Minimum Reagent Charge Rate (gpm):	0.1
Maximum Reagent Charge Rate (gpm):	0.4
Minimum Concentration of Reagent in Solution (% Volume):	19
Minimum NOx to Reagent Mole Ratio:	0.7
Maximum NOx to Reagent Mole Ratio:	0.8
Maximum Anticipated Ammonia Slip (ppm):	5
Type of Catalyst:	Vanadium/Titanium
Volume of Catalyst (ft^3):	1130
Form of Catalyst:	Honeycomb
Anticipated Life of Catalyst:	15000
Units:	hours
Have you attached a catalyst replacement schedule?	○ Yes ● No
Method of Determining Breakthrough:	NOx CEMS and catalyst coupon testing
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:	NOx CEM Data
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

12200 KEARNY GENERATING STATION BOP190002 CD12 (Selective Catalytic Reduction)
Print Date: 4/3/2025

Comments:

12200 KEARNY GENERATING STATION BOP190002 CD14 (Selective Catalytic Reduction)
Print Date: 4/3/2025

Make:	Haldor Topsoe
Manufacturer:	Haldor Topsoe
Model:	DNX-920
Minimum Temperature at Catalyst Bed (°F):	550
Maximum Temperature at Catalyst Bed (°F):	850
Minimum Temperature at Reagent Injection Point (°F):	550
Maximum Temperature at Reagent Injection Point (°F):	850
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH4OH
Minimum Reagent Charge Rate (gpm):	0.1
Maximum Reagent Charge Rate (gpm):	0.4
Minimum Concentration of Reagent in Solution (% Volume):	19
Minimum NOx to Reagent Mole Ratio:	0.7
Maximum NOx to Reagent Mole Ratio:	0.8
Maximum Anticipated Ammonia Slip (ppm):	5
Type of Catalyst:	Vanadium/Titanium
Volume of Catalyst (ft^3):	1130
Form of Catalyst:	Honeycomb
Anticipated Life of Catalyst:	15000
Units:	hours
Have you attached a catalyst replacement schedule?	○ Yes ● No
Method of Determining Breakthrough:	NOx CEMS and catalyst coupon testing
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:	NOx CEM Data
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

12200 KEARNY GENERATING STATION BOP190002 CD14 (Selective Catalytic Reduction)
Print Date: 4/3/2025

Comments:

12200 KEARNY GENERATING STATION BOP190002 CD15 (Selective Catalytic Reduction)
Print Date: 4/3/2025

Make:	Haldor Topsoe
Manufacturer:	Haldor Topsoe
Model:	DNX-920
Minimum Temperature at Catalyst Bed (°F):	550
Maximum Temperature at Catalyst Bed (°F):	850
Minimum Temperature at Reagent Injection Point (°F):	550
Maximum Temperature at Reagent Injection Point (°F):	850
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH4OH
Minimum Reagent Charge Rate (gpm):	0.1
Maximum Reagent Charge Rate (gpm):	0.4
Minimum Concentration of Reagent in Solution (% Volume):	19
Minimum NOx to Reagent Mole Ratio:	0.7
Maximum NOx to Reagent Mole Ratio:	0.8
Maximum Anticipated Ammonia Slip (ppm):	5
Type of Catalyst:	Vanadium/Titanium
Volume of Catalyst (ft^3):	1130
Form of Catalyst:	Honeycomb
Anticipated Life of Catalyst:	15000
Units:	hours
Have you attached a catalyst replacement schedule?	○ Yes ● No
Method of Determining Breakthrough:	NOx CEMS and catalyst coupon testing
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:	NOx CEM Data
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

12200 KEARNY GENERATING STATION BOP190002 CD15 (Selective Catalytic Reduction)
Print Date: 4/3/2025

Comments:

12200 KEARNY GENERATING STATION BOP190002 CD16 (Selective Catalytic Reduction)
Print Date: 4/3/2025

Make:	Haldor Topsoe
Manufacturer:	Haldor Topsoe
Model:	DNX-920
Minimum Temperature at Catalyst Bed (°F):	550
Maximum Temperature at Catalyst Bed (°F):	850
Minimum Temperature at Reagent Injection Point (°F):	550
Maximum Temperature at Reagent Injection Point (°F):	850
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH4OH
Minimum Reagent Charge Rate (gpm):	0.1
Maximum Reagent Charge Rate (gpm):	0.4
Minimum Concentration of Reagent in Solution (% Volume):	19
Minimum NOx to Reagent Mole Ratio:	0.7
Maximum NOx to Reagent Mole Ratio:	0.8
Maximum Anticipated Ammonia Slip (ppm):	5
Type of Catalyst:	Vanadium/Titanium
Volume of Catalyst (ft^3):	1130
Form of Catalyst:	Honeycomb
Anticipated Life of Catalyst:	15000
Units:	hours
Have you attached a catalyst replacement schedule?	○ Yes ● No
Method of Determining Breakthrough:	NOx CEMS and catalyst coupon testing
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:	NOx CEM Data
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

12200 KEARNY GENERATING STATION BOP190002 CD16 (Selective Catalytic Reduction)
Print Date: 4/3/2025

Comments:

12200 KEARNY GENERATING STATION BOP190002 CD17 (Selective Catalytic Reduction)
Print Date: 4/3/2025

Make:	Haldor Topsoe
Manufacturer:	Haldor Topsoe
Model:	DNX-920
Minimum Temperature at Catalyst Bed (°F):	550
Maximum Temperature at Catalyst Bed (°F):	850
Minimum Temperature at Reagent Injection Point (°F):	550
Maximum Temperature at Reagent Injection Point (°F):	850
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH4OH
Minimum Reagent Charge Rate (gpm):	0.1
Maximum Reagent Charge Rate (gpm):	0.4
Minimum Concentration of Reagent in Solution (% Volume):	19
Minimum NOx to Reagent Mole Ratio:	0.7
Maximum NOx to Reagent Mole Ratio:	0.8
Maximum Anticipated Ammonia Slip (ppm):	5
Type of Catalyst:	Vanadium/Titanium
Volume of Catalyst (ft^3):	1130
Form of Catalyst:	Honeycomb
Anticipated Life of Catalyst:	15000
Units:	hours
Have you attached a catalyst replacement schedule?	○ Yes ● No
Method of Determining Breakthrough:	NOx CEMS and catalyst coupon testing
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:	NOx CEM Data
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

12200 KEARNY GENERATING STATION BOP190002 CD17 (Selective Catalytic Reduction)
Print Date: 4/3/2025

Comments:

12200 KEARNY GENERATING STATION BOP190002 CD18 (Other)
Print Date: 4/3/2025

Make:	Advanced Catalyst Systems
Manufacturer:	Advanced Catalyst Systems
Model:	ADVOCAT
Maximum Air Flow Rate to Control Device (acfm):	614000
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	600
Minimum Moisture Content of Vapor Stream to Control Device (%):	5
Minimum Pressure Drop Across Control Device (in. H20):	1.2
Maximum Pressure Drop Across Control Device (in. H20):	2.5
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:	CO CEM Da
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:	Maximum Temperature of Vapor Stream to Control Device = 1200 degree F Oxidation Catalyst for CO/VOC Control

12200 KEARNY GENERATING STATION BOP190002 CD19 (Other)
Print Date: 4/3/2025

Make:	Advanced Catalyst Systems
Manufacturer:	Advanced Catalyst Systems
Model:	ADVOCAT
Maximum Air Flow Rate to Control Device (acfm):	614000
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	600
Minimum Moisture Content of Vapor Stream to Control Device (%):	5
Minimum Pressure Drop Across Control Device (in. H20):	1.2
Maximum Pressure Drop Across Control Device (in. H20):	2.5
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:	CO CEM Da
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:	Maximum Temperature of Vapor Stream to Control Device = 1200 degree F Oxidation Catalyst for CO/VOC Control

12200 KEARNY GENERATING STATION BOP190002 CD20 (Other)
Print Date: 4/3/2025

Make:	Advanced Catalyst Systems
Manufacturer:	Advanced Catalyst Systems
Model:	ADVOCAT
Maximum Air Flow Rate to Control Device (acfm):	614000
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	600
Minimum Moisture Content of Vapor Stream to Control Device (%):	5
Minimum Pressure Drop Across Control Device (in. H20):	1.2
Maximum Pressure Drop Across Control Device (in. H20):	2.5
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:	CO CEM Da
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:	Maximum Temperature of Vapor Stream to Control Device = 1200 degree F Oxidation Catalyst for CO/VOC Control

12200 KEARNY GENERATING STATION BOP190002 CD21 (Other)
Print Date: 4/3/2025

Make:	Advanced Catalyst Systems
Manufacturer:	Advanced Catalyst Systems
Model:	ADVOCAT
Maximum Air Flow Rate to Control Device (acfm):	614000
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	600
Minimum Moisture Content of Vapor Stream to Control Device (%):	5
Minimum Pressure Drop Across Control Device (in. H20):	1.2
Maximum Pressure Drop Across Control Device (in. H20):	2.5
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:	CO CEM Da
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:	Maximum Temperature of Vapor Stream to Control Device = 1200 degree F Oxidation Catalyst for CO/VOC Control

12200 KEARNY GENERATING STATION BOP190002 CD22 (Other)
Print Date: 4/3/2025

Make:	Advanced Catalyst Systems
Manufacturer:	Advanced Catalyst Systems
Model:	ADVOCAT
Maximum Air Flow Rate to Control Device (acfm):	614000
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	600
Minimum Moisture Content of Vapor Stream to Control Device (%):	5
Minimum Pressure Drop Across Control Device (in. H20):	1.2
Maximum Pressure Drop Across Control Device (in. H20):	2.5
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:	CO CEM Da
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:	Maximum Temperature of Vapor Stream to Control Device = 1200 degree F Oxidation Catalyst for CO/VOC Control

12200 KEARNY GENERATING STATION BOP190002 CD23 (Other)
Print Date: 4/3/2025

Make:	Advanced Catalyst Systems
Manufacturer:	Advanced Catalyst Systems
Model:	ADVOCAT
Maximum Air Flow Rate to Control Device (acfm):	614000
Maximum Temperature of Vapor Stream to Control Device (°F):	
Minimum Temperature of Vapor Stream to Control Device (°F):	600
Minimum Moisture Content of Vapor Stream to Control Device (%):	5
Minimum Pressure Drop Across Control Device (in. H20):	1.2
Maximum Pressure Drop Across Control Device (in. H20):	2.5
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:	CO CEM Da
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:	Maximum Temperature of Vapor Stream to Control Device = 1200 degree F Oxidation Catalyst for CO/VOC Control

KEARNY GENERATING STATION (12200)
BOP190002

Date: 4/3/2025

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.		
PT25	12, 121	Unit No. 12, 121	Rectangle	106	100	150	820.0	750.0	840.0	570,000.0	500,000.0	600,000.0	Up	
PT26	12, 122	Unit No. 12, 122	Rectangle	106	100	225	820.0	750.0	840.0	570,000.0	500,000.0	600,000.0	Up	
PT27	12,123	Unit No. 12, 123	Rectangle	106	100	280	820.0	750.0	840.0	570,000.0	500,000.0	600,000.0	Up	
PT28	12,124	Unit No. 12, 124	Rectangle	106	100	280	820.0	750.0	840.0	570,000.0	500,000.0	600,000.0	Up	
PT50	13A	Unit No. 13A Stack	Round	135	150	265	837.0	624.0	840.0	598,300.0	385,800.0	614,400.0	Up	
PT51	13B	Unit No. 13B Stack	Round	135	150	225	837.0	624.0	840.0	598,300.0	385,800.0	614,400.0	Up	
PT52	13C	Unit No. 13C Stack	Round	135	150	190	837.0	624.0	840.0	598,300.0	385,800.0	614,400.0	Up	
PT53	13D	Unit No. 13D Stack	Round	135	150	155	837.0	624.0	840.0	598,300.0	385,800.0	614,400.0	Up	
PT54	14A	Unit No. 14A Stack	Round	135	150	445	837.0	624.0	840.0	598,300.0	385,800.0	614,400.0	Up	
PT55	14B	Unit No. 14B Stack	Round	135	150	430	837.0	624.0	840.0	598,300.0	385,800.0	614,400.0	Up	
PT56	EDGGen	Emergency Diesel Generator	Round	10	11	280	855.0	700.0	879.0	19,755.0	7,740.0	20,134.0	Up	

KEARNY GENERATING STATION (12200)
BOP190002

Date: 4/3/2025

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

U 13 Unit 13/14 Six simple-cycle stationary 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	Unit 13A	Turbine firing Natural Gas - Module 13A	Normal - Steady State	E50	CD12 (S) CD18 (T) CD6 (P)	PT50	2-01-002-01	0.0	8,760.0		385,800.0	614,400.0	624.0	840.0
OS2	Unit 13B	Turbine firing Natural Gas - Module 13B	Normal - Steady State	E51	CD13 (S) CD19 (T) CD7 (P)	PT51	2-01-002-01	0.0	8,760.0		385,800.0	614,400.0	624.0	840.0
OS3	Unit 13C	Turbine firing Natural Gas - Module 13C	Normal - Steady State	E52	CD14 (S) CD20 (T) CD8 (P)	PT52	2-01-002-01	0.0	8,760.0		385,800.0	614,400.0	624.0	840.0
OS4	Unit 13D	Turbine firing Natural Gas - Module 13D	Normal - Steady State	E53	CD15 (S) CD21 (T) CD9 (P)	PT53	2-01-002-01	0.0	8,760.0		385,800.0	614,400.0	624.0	840.0
OS5	Unit 14A	Turbine firing Natural Gas - Module 14A	Normal - Steady State	E54	CD10 (P) CD16 (S) CD22 (T)	PT54	2-01-002-01	0.0	8,760.0		385,800.0	614,400.0	624.0	840.0
OS6	Unit 14B	Turbine firing Natural Gas - Module 14B	Normal - Steady State	E55	CD11 (P) CD17 (S) CD23 (T)	PT55	2-01-002-01	0.0	8,760.0		385,800.0	614,400.0	624.0	840.0
OS7	Unit 13A-SU	Turbine Startup - Module 13A	Startup	E50	CD6 (P)	PT50								
OS8	Unit 13B-SU	Turbine Startup - Module 13B	Startup	E51	CD7 (P)	PT51								
OS9	Unit 13C-SU	Turbine Startup - Module 13C	Startup	E52	CD8 (P)	PT52								
OS10	Unit 13D-SU	Turbine Startup - Module 13D	Startup	E53	CD9 (P)	PT53								

KEARNY GENERATING STATION (12200)
BOP190002

Date: 4/3/2025

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

U 13 Unit 13/14 Six simple-cycle stationary 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.
OS11	Unit 14A-SU	Turbine Startup - Module 14A	Startup	E54	CD10 (P)	PT54								
OS12	Unit 14B-SU	Turbine Startup - Module 134B	Startup	E55	CD11 (P)	PT55								
OS13	Unit 13A-SD	Turbine Shutdown - Module 13A	Shutdown	E50		PT50								
OS14	Unit 13B-SD	Turbine Shutdown - Module 13B	Shutdown	E51		PT51								
OS15	Unit 13C-SD	Turbine Shutdown - Module 13C	Shutdown	E52		PT52								
OS16	Unit 13D-SD	Turbine Shutdown - Module 13D	Shutdown	E53		PT53								
OS17	Unit 14A-SD	Turbine Shutdown - Module 14A	Shutdown	E54		PT54								
OS18	Unit 14B-SD	Turbine Shutdown - Module 14B	Shutdown	E55		PT55								

U 14 Unit No. 12 Four simple-cycle stationary turbine 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	Unit 121 NG	Turbine firing Natural Gas - Module 121	Normal - Steady State	E35	CD2 (P)	PT25								

KEARNY GENERATING STATION (12200)
BOP190002

Date: 4/3/2025

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

U 14 Unit No. 12 Four simple-cycle stationary turbine 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.
OS2	Unit 121 Oil	Turbine firing Distillate Oil - Module 121	Normal - Steady State	E35	CD2 (P)	PT25								
OS3	Unit 122 NG	Turbine firing Natural Gas - Module 122	Normal - Steady State	E36	CD3 (P)	PT26								
OS4	Unit 122 Oil	Turbine firing Distillate Oil - Module 122	Normal - Steady State	E36	CD3 (P)	PT26								
OS5	Unit 123 NG	Turbine firing Natural Gas - Module 123	Normal - Steady State	E37	CD4 (P)	PT27								
OS6	Unit 123 Oil	Turbine firing Distillate Oil - Module 123	Normal - Steady State	E37	CD4 (P)	PT27								
OS7	Unit 124 NG	Turbine firing Natural Gas - Module 124	Normal - Steady State	E38	CD5 (P)	PT28								
OS8	Unit 124 Oil	Turbine firing Distillate Oil - Module 124	Normal - Steady State	E38	CD5 (P)	PT28								
OS9	Unit 121 SUG	Turbine Startup on Natural Gas - Module 121	Startup	E35	CD2 (P)	PT25								
OS10	Unit 122 SUG	Turbine Startup on Natural Gas - Module 122	Startup	E36	CD3 (P)	PT26								
OS11	Unit 123 SUG	Turbine Startup on Natural Gas- Module 123	Startup	E37	CD4 (P)	PT27								
OS12	Unit 124 SUG	Turbine Startup on Natural Gas - Module 124	Startup	E38	CD5 (P)	PT28								
OS13	Unit 121 SDG	Turbine Shutdown on Natural Gas- Module 121	Shutdown	E35		PT25								
OS14	Unit 122 SDG	Turbine Shutdown on Natural Gas - Module 122	Shutdown	E36		PT26								
OS15	Unit 123 SDG	Turbine Shutdown on Natural Gas - Module 123	Shutdown	E37		PT27								
OS16	Unit 124 SDG	Turbine Shutdown on Natural Gas - Module 124	Shutdown	E38		PT28								

KEARNY GENERATING STATION (12200)
BOP190002

Date: 4/3/2025

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

U 14 Unit No. 12 Four simple-cycle stationary turbine 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.
OS17	Unit 121 FTG	Turbine Fuel transfer Natural Gas - Module 121	Startup	E35		PT25								
OS18	Unit 122 FTG	Turbine Fuel transfer Natural Gas - Module 122	Startup	E36		PT26								
OS19	Unit 123 FTG	Turbine Fuel transfer Natural Gas - Module 123	Startup	E37		PT27								
OS20	Unit 124 FTG	Turbine Fuel transfer Natural Gas - Module 124	Startup	E38		PT28								
OS21	Unit 121MSTG	Turbine Mechanical Safety Testing Natural Gas- Module 121	Startup	E35		PT25								
OS22	Unit 122MSTG	Turbine Mechanical Safety Testing Natural Gas- Module 122	Startup	E36		PT26								
OS23	Unit 123MSTG	Turbine Mechanical Safety Testing Natural Gas - Module 123	Startup	E37		PT27								
OS24	Unit 124MSTG	Turbine Mechanical Safety Testing Natural Gas - Module 124	Startup	E38		PT28								
OS25	Unit 121 SUO	Turbine Startup on ULSD - Module 121	Startup	E35		PT25								
OS26	Unit 122 SUO	Turbine Startup on ULSD - Module 122	Startup	E36		PT26								
OS27	Unit 123 SUO	Turbine Startup on ULSD - Module 123	Startup	E37		PT27								
OS28	Unit 124 SUO	Turbine Startup on ULSD - Module 124	Startup	E38		PT28								
OS29	Unit 121 SDO	Turbine Shutdown on ULSD - Module 121	Shutdown	E35		PT25								
OS30	Unit 122 SDO	Turbine Shutdown on ULSD - Module 122	Shutdown	E36		PT26								

KEARNY GENERATING STATION (12200)
BOP190002

Date: 4/3/2025

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

U 14 Unit No. 12 Four simple-cycle stationary turbine 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.
OS31	Unit 123 SDO	Turbine Shutdown on ULSD - Module 123	Shutdown	E37		PT27								
OS32	Unit 124 SDO	Turbine Shutdown on ULSD - Module 124	Shutdown	E38		PT28								
OS33	Unit 121 FTO	Turbine Fuel transfer Oil-ULSD - Module 121	Startup	E35		PT25								
OS34	Unit 122 FTO	Turbine Fuel transfer Oil-ULSD - Module 122	Startup	E36		PT26								
OS35	Unit 123 FTO	Turbine Fuel transfer Oil-ULSD - Module 123	Startup	E37		PT27								
OS36	Unit 124 FTO	Turbine Fuel transfer Oil-ULSD - Module 124	Startup	E38		PT28								
OS37	Unit 121MSTO	Turbine Mechanical Safety Testing ULSD - Module 121	Startup	E35		PT25								
OS38	Unit 122MSTO	Turbine Mechanical Safety Testing ULSD - Module 122	Startup	E36		PT26								
OS39	Unit 123MSTO	Turbine Mechanical Safety Testing ULSD - Module 123	Startup	E37		PT27								
OS40	Unit 124MSTO	Turbine Mechanical Safety Testing ULSD - Module 124	Startup	E38		PT28								

KEARNY GENERATING STATION (12200)
BOP190002

Date: 4/3/2025

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

U 56 EDGen Emergency Diesel Generator

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	EDGen	Emergency Diesel Generator	Normal - Steady State	E56		PT56			100.0			20,134.0		879.0

Date: 4/3/2025

New Jersey Department of Environmental Protection
Subject Item Group Inventory

Group NJID: GR1 GE LM6000 TE

Members:

Type	ID	OS	Step
U	U 13	OS0 Summary	
U	U 14	OS0 Summary	

Formal Reason(s) for Group/Cap:

☑ Other

Other (explain): Requirements for Exchange of GE LM6000 Turbines between PSEG Kearny and PSEG Burlington

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: GR2 RGGI

Members:

Type	ID	OS	Step
U	U 13	OS0 Summary	
U	U 14	OS0 Summary	

Formal Reason(s) for Group/Cap:

☑ Other

Other (explain): RGGI Requirements for Combustion Turbines

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: GR3 NJAC 7:27F

Members:

Type	ID	OS	Step
U	U 13	OS0 Summary	
U	U 14	OS0 Summary	

Formal Reason(s) for Group/Cap:

☑ Other

Other (explain): NJ PACT NJAC7:27F 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 L. WAY
Lt. Governor

SHAWN M. LATOURETTE
Commissioner

DRAFT
PHASE II ACID RAIN PERMIT

Issued to: Kearny Generating Station
118 Hackensack Ave,
Kearny, NJ 07032.

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: 2404

Effective: To coincide with the Operating Permit Dates (**Expires --------)**

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
Supervisor,
Bureau of Stationary Sources
Division of Air Quality

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 12/31/2021

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.

Kearny Generating Station	NJ	2404
Facility (Source) Name	State	Plant Code

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)
121	Yes
122	Yes
123	Yes
124	Yes
131 (13A)	Yes
132 (13B)	Yes
133 (13C)	Yes
134 (13D)	Yes
141 (14A)	Yes
142 (14B)	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

Kearny Generating Station
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.

Kearny Generating Station
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.

Kearny Generating Station
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,

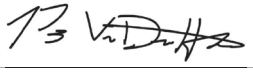
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

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 Peter Van Den Houten	
Signature 	Date 12/12/2024

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 Clean Air Markets 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.