State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
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Lt. Governor

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PAUL BALDAUF
Asst. Commissioner

Air Pollution Control Operating Permit
Renewal

Permit Activity Number: BOP200001 **Program Interest Number: 17884**

Mailing Address	Plant Location
MARK A. GOUVEIA SENIOR VP GENON HOLDINGS INC 1360 POST OAK BLVD - STE 2000 HOUSTON, TX 77056	SAYREVILLE GENERATING STATION 7702 River Rd Sayreville Boro Middlesex County

Initial Operating Permit Approval Date: February 20, 2002

Operating Permit Approval Date: Draft

Operating Permit Expiration Date: To be determined

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 compliace 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: http://www.nj.gov/dep/aqpp. 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 http://www.nj.gov/dep/aqpp.

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://www.state.nj.us/dep/aqpp/applying.html.

If you have any questions regarding this permit approval, please call Thaddeus Soley at (609) 940-4463.

Approved by:

_____
Shafi Ahmed

Enclosure

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

Facility Name: SAYREVILLE GENERATING STATION
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Section A

Facility Name: SAYREVILLE GENERATING STATION
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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	32	468	144	45.6	41.3	40.4	40.4	NA	1.68	
Batch Process Summary	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Group Summary	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total Emissions	32	468	144	45.6	41.3	40.4	40.4	NA	1.68	630,575

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	0.716	NA	NA	NA	NA	NA	NA	NA	NA
Non-Source Fugitive Emissions[3]	0.5	NA	NA	NA	NA	NA	NA	NA	NA

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 that includes all Significant Source Operations (emission units, batch process, group) and Insignificant Source Operations.
[3] Non-Source Fugitive Emissions are defined at N.J.A.C. 7:27-22.1 and are included if the facility falls into one or more categories listed at N.J.A.C. 7:27-22.2(a)2.

Section A

Facility Name: SAYREVILLE GENERATING STATION
Program Interest Number: 17884
Permit Activity Number: BOP200001

POLLUTANT EMISSIONS SUMMARY

Table 3: Summary of Hazardous Air Pollutants (HAP) Emissions from Significant Source Operations [4]:

HAP	TPY
Acrolein	0.0285
Benzene	0.1
1,3-Butadiene	0.0156
Acetaldehyde	0.178
Arsenic	0.00124
Beryllium	0.000333
Cadmium	0.00200
Chromium VI	0. 0000644
Ethylbenzene	0.142
Formaldehyde	0.639
Manganese	0.0632
Naphthalene	0.0356
Nickel	0.299
PAH/POM	0.0439
Propylene Oxide	0.129

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

Other Air Contaminant	TPY
Ammonia	135
Methane	11.7
Nitrous Oxide	1.17

[4] 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: SAYREVILLE GENERATING STATION
Program Interest Number: 17884
Permit Activity Number: BOP200001

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 the affirmative defense afforded by N.J.A.C. 7:27-22.16(l), 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, consistent with N.J.A.C. 7:27-22.16(l). [N.J.A.C. 7:27-22.19(g)]

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. a. For emergencies (as defined at 40 CFR 70.6(g)(1)) that result in non-compliance with any promulgated federal technology-based standard such as NSPS, NESHAPS, or MACT, a federal affirmative defense is available, pursuant to 40 CFR 70. To assert a federal affirmative defense, the permittee must use the procedures set forth in 40 CFR 70. The affirmative defense provisions described below may not be applied to any situation that caused the Facility to exceed any federally delegated regulation, including but not limited to NSPS, NESHAP, or MACT.

    b. For situations other than those covered above, an affirmative defense is available for a violation of a provision or condition of the operating permit only if:

        i. The violation occurred as a result of an equipment malfunction, an equipment startup or shutdown, or during the performance of necessary equipment maintenance; and

        ii. The affirmative defense is asserted and established as required by N.J.S.A. 26:2C-19.1 through 19.5 and any implementing rules. [N.J.A.C. 7:27-22.16(l)]

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 http://www.nj.gov/dep/aqpp/applying.html (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: http://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]

Section C

Facility Name: SAYREVILLE GENERATING STATION
Program Interest Number: 17884
Permit Activity Number: BOP200001

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	---	13b	---
D	FC	---	3
D	FC	---	9
D	GR	1	1 - 13

Section D

Facility Name: SAYREVILLE GENERATING STATION
Program Interest Number: 17884
Permit Activity Number: BOP200001

FACILITY SPECIFIC REQUIREMENTS AND INVENTORIES

FACILITY SPECIFIC REQUIREMENTS PAGE INDEX

SAYREVILLE GENERATING STATION (17884)
BOP200001

Date: 1/24/2023

New Jersey Department of Environmental Protection
Reason for Application

Permit Being Modified

Permit Class: BOP **Number:** 190002

Description of Modifications: This application is to renew the Title V Operating Permit for the Sayreville Generating Station facility in Sayreville, Middlesex County, New Jersey.

Please see the application package for additional details.

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.

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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 during the expired permit term, 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 Tanks < 10,000 gallons and vapor pressure <0.02 psia**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Sulfur Content in Fuel <= 15 ppmw (0.0015 % by weight). Maximum allowable sulfur content in No. 2 and lighter fuel oil. [N.J.A.C. 7:27- 9.2(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
2	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the effective date of the applicable standard in 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 Two Insignificant Liquid Storage Tanks or Vessels (1,386,000 gal and 714,000 gal)**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	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 effective date of the applicable standard in 1B. [N.J.A.C. 7:27- 9.2(b)]	None.	None.	None.
2	Sulfur Content in Fuel <= 15 ppmw (0.0015 % by weight). Maximum allowable sulfur content in No. 2 and lighter fuel oil. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
3	Fuel Oil Usage <= 26.292 MMgal/yr. Permittee's annual throughput limit from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	Fuel Oil Usage: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Fuel Oil Usage: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing amount of fuel delivered. [N.J.A.C. 7:27-22.16(o)]	None.
4	Tank content limited to No. 2 Fuel Oil [N.J.A.C. 7:27-22.16(e)]	Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing amount of fuel delivered. [N.J.A.C. 7:27-22.16(o)]	None.
5	The operating temperature of the tank shall not be greater than 350 degrees F. [N.J.A.C. 7:27-22.1]	None.	None.	None.
6	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.
7	The tank or vessel shall have no visible emissions, exclusive of water vapor, to the outdoor atmosphere. [N.J.A.C. 7:27-22.1]	None.	None.	None.
8	The tank or vessel shall not emit any air contaminants which may cause an odor detectable outside the property boundaries of the facility. [N.J.A.C. 7:27-22.1]	None.	None.	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	The tank or vessel shall not be subject to any NESHAPS, MACT, or NSPS air pollution control standards. [N.J.A.C. 7:27-22.1]	None.	None.	None.
10	The tank's or vessel's potential to emit each TXS and each HAP shall not exceed the reporting thresholds at N.J.A.C. 7:27-17.9(a). [N.J.A.C. 7:27-22.1]	None.	None.	None.
11	The percentage by weight of all HAPs collectively in the raw material stored in the tank, or mixed or blended in the vessel, shall be less than 1.0 percent. [N.J.A.C. 7:27-22.1]	None.	None.	None.
12	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 or vessel meets the above applicable requirements and (3) attests that the tank or vessel is in compliance with all other applicable State or federal air pollution requirements. [N.J.A.C. 7:27-22.1]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS3 Spray operations <0.5 gal/hr and <2.5 gal/day**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum allowable emission rate for particulates 0.5 lb/hr. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
2	Opacity may be no greater than 20% exclusive of visible condensed water, except for a period of not longer than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] & [N.J.A.C. 7:27- 6.2(e)]	Other: Periodic visual inspections. [N.J.A.C.7:27-6.2(d)] &[N.J.A.C. 7:27-6.2(e)].	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS5 Misc. combustion <1 MMBTU/hr**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Smoke emissions from stationary internal combustion engines no greater than 20% opacity, exclusive of visible, condensed water vapor, for more than 10 consecutive seconds. [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). Maximum allowable sulfur content in No. 2 and lighter fuel oil. [N.J.A.C. 7:27- 9.2(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **GR1 RGGI Rules for 4 Simple Cycle Turbines**

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. 7:27-8.5(c)]

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

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

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

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

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

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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]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	Net electric output and net thermal output. [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)]

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Subject Item: **GR2 Alternate Emission Monitoring Plan for Peaking Turbines**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The Alternative Emission Monitoring Plan for NRG Peaking Units shall apply to all "Peaking Units" in accordance with the definitions at 40 CFR 72.2 (see also Ref. titled as CAPACITY FACTOR). A peaking generating unit is a combination of one or more simple-cycle combustion turbine engines (coupled to one or more electric generators), designed to provide power primarily during "peak demand periods" (like the extreme heat of summer or severe cold of winter). [N.J.A.C. 7:27-22.16(a)]	Other: The permittee shall monitor and record the capacity factor of each "peaking generating unit" annually, to ensure that they qualify for the "peaking unit" status as defined by 40CFR 72.2.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping by manual logging of parameter or storing data in a computer system, each calendar year.[N.J.A.C. 7:27-22.16(o)].	Submit a report: Annually to Chief, REO and to Chief, EMS, within 45 days following the end of each calendar year beginning with 2008, giving the details of each engine that qualifies as peaking unit in the approved format to identify facility name, emission unit, test date, and operating hours. [N.J.A.C. 7:27-22.16(o)]
2	CAPACITY FACTOR: A peaking unit, as defined at 40 CFR 72.2 is a unit that: 1) has an average capacity factor of no more than 10% during the previous 3 calendar years; and 2) has a capacity factor of no more than 20% in each of those calendar years. Any combustion turbine that exceeds the above capacity factor limits and therefore becomes a non-peaking unit shall: 1) Install a Continuous Emission Monitor which measures NOx, CO, and O2; and 2) Submit a permit modification application to request that emission monitoring requirements be updated for that emission unit. 3) Perform all stack testing required by this permit for non peaking units. [N.J.A.C. 7:27-22.16(a)]	Other: Installation and operation of a continuous emission monitor on the turbine is required if operation of the unit exceeds the peaking unit thresholds set forth at 40 CFR 72.2.[N.J.A.C. 7:27-22.16(o)].	None.	If operation of the combustion turbine exceeds the peaking turbine thresholds set forth at 40 CFR 72.2, submit a monitoring protocol, pursuant to N.J.A.C.7:27-22.18(a), to the Emission Measurement Section, within 90 days of exceeding the threshold. Installation and certification testing of the monitor is required within 180 days of exceeding the threshold. Refer to N.J.A.C.7:27-22.18 and 19 for other applicable requirements. Also submit a permit modification application requesting to have emissions monitoring requirements updated in the permit. If CEMS is installed, after NJDEP approval of certification testing, Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	PERIODIC EMISSION MONITORING TESTING: Emission testing shall be performed annually on each turbine using a periodic emission monitoring device to measure the concentrations of NOx, CO and O2, in accordance with Technical Manual 1005, unless the unit qualifies for one of the 2 exemptions listed below. The tests may be conducted during "in market operation" of the unit as long as all non-exempt turbines are tested each year. Exemptions: 1) Any turbine that is equipped with a CEMS unit which continuously monitors NOx, CO and O2, during all operation of the turbine, need not perform the annual periodic emission monitoring described above. 2) Any turbine that is reference method stack tested during a given year need not perform the annual periodic emission monitoring described above during that year. If initial stack testing for each required pollutant has been performed and the turbine is operated as a "Peaking Unit" in accordance with the definitons at 40 CFR 72.2 (see also Ref. titled as CAPACITY FACTOR), periodic emission monitoring of NOx, CO, and O2 shall be permitted in lieu of stack test requirements at Ref. titled as REFERENCE METHOD (RM) STACK TESTING FOR GASEOUS POLLUTANTS (see Ref. titled as EXEMPTION FROM REFERENCE METHOD (RM) STACK TESTING REQUREMENTS). Dual Fuel Engines: For engines permitted to combust either natural gas or fuel oil, emission testing shall be required on the fuel fired at the time of the test. [N.J.A.C. 7:27-22.16(a)]	Monitored by periodic emission monitoring annually for NOx, CO and O2 for each turbine; or continuous emission monitoring of NOx, CO and O2 for each turbine. All periodic emission monitoring shall be done in accordance with Technical Manual 1005. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Annually The permittee shall notify Enforcement and EMS at least 24 hours prior to performing periodic emission testing. Periodic emission testing for NOx, CO and O2 shall be performed annually in accordance with Technical Manual 1005 or by another method/procedure approved by EMS. Test reports shall be submitted to Chief, REO and Chief, EMS within 45 days following the end of each calendar year (starting with 2008) in the approved format to identify the facility name, emission unit, test date, and operating hours. Emissions of NOx and CO shall be reported in ppmdv @ 15% O2 and lb/MMBtu (HHV). The test results must be certified by a licensed professional engineer or by a certified industrial hygienist. [N.J.A.C. 7:27-22.16(o)]

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	the test. [N.J.A.C. 7:27-22.16(a)]			
Ref.#	PERIODIC EMISSION TESTING FAILURE PROTOCOL: Any turbine failing emission tests using a periodic emission monitoring device shall be removed from service, repaired and tested again with the periodic emission monitoring device, while combusting the same fuel. If the turbine fails a second time, it shall be Reference Method stack tested for NOx, CO, VOC, TSP and PM-10 (while combusting ULSD (or ULSD mix as permitted), if that is the fuel used during initial periodic emission monitoring) or for NOx, CO and PM-10 (while combusting natural gas, if that is the fuel used during initial periodic emission monitoring). The Reference Method stack testing shall be conducted within 180 days of the date that the turbine fails periodic emission monitoring for the second time. Turbines that pass the RM test shall be put back into service. Permittee should make sure that the periodic emission monitoring device is working properly before using it for testing. [N.J.A.C. 7:27-22.16(a)]	Other: Any turbine failing emission tests using periodic emission monitoring devices shall be removed from service, repaired and re-tested with periodic emission monitoring. If it fails a second time, it shall be tested with full reference method (RM) testing.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Annually to Chief REO and Chief, EMS, within 45 days following the end of each calendar year (beginning with 2008), in the approved format to identify facility name, emission unit, test date, and operating hours of the effected units. See submittal/action requirement for Ref. titled as PERIODIC EMISSION MONITORING TESTING, REFERENCE METHOD (RM) STACK TESTING FOR GASEOUS POLLUTANTS, and REPRESENTATIVE REFERENCE METHOD (RM) STACK TESTING FOR PARTICULATES. An exceedence identified during periodic emission testing, in accordance with this condition shall not be a violation of the applicable requirement. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	REFERENCE METHOD (RM) STACK TESTING FOR GASEOUS POLLUTANTS: Conduct comprehensive stack tests on each of these units once every 10 years (in accordance with Appendix III). Testing shall demonstrate compliance with the NOx, CO, VOC and NH3 emission limits (when combusting ULSD (or ULSD mix as permitted)) and with the NOx, CO and NH3 emission limits (when combusting natural gas). Three tests shall be conducted at maximum base load achievable on the day of testing (as determined by a base load temperature control curve) under the corresponding test conditions, such as ambient (relative humidity and temperature) conditions for that day, with regard to meeting the applicable emission standards, but without creating an unsafe condition. The permittee shall submit to EMS the Base Load Temperature Control Curve with the protocol and shall submit all data necessary to substantiate the ambient conditions with the test report. The testing shall be conducted in accordance with a protocol approved by Chief, EMS. [N.J.A.C. 7:27-22.16(a)]	Monitored by stack emission testing at the approved frequency. Unless otherwise approved in the stack test protocol or by the Department, each test run shall be 60 minutes in sampling duration. Compliance period shall be as specified in the monitoring requirement for each applicable emission limit. Stack tests shall be conducted for NOx, CO and VOC emissions (when combusting ULSD (or ULSD mix as permitted)) and for NOx and CO emissions (when combusting natural gas). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule to Chief EMS, in the approved format to identify facility name, emission unit, test date, and total hours of operation during the past 3 calendar years. A protocol to conduct stack emission testing shall be submitted to the Emission Measurement section (EMS), at Mail Code: 09-01, P.O. Box 420, Trenton, NJ 08625, for approval within 60 days from the date of the approval of this renewal operating permit. Thereafter, a protocol shall be submitted to EMS for approval once per permit term, within 60 days of renewal permit approval. Each protocol shall include all units that are to be stack testing during that permit term. The Permittee shall confirm their intent to use the approved protocol or submit revisions as necessary, for EMS approval, at least 90 days prior to the intended test date. Permittee shall contact EMS at (609) 984-3443 to schedule a mutually acceptable stack test window, at least 30 days prior to the proposed stack test window. This stack test window shall be a 1 week period during which stack testing is proposed to be performed. Permittee shall notify EMS 7 days prior to actually performing the stack testing, of the actual test date(s). Stack test reports shall be submitted to EMS no later than 45 days after completion of stack emission testing. All test results shall be reported in ppmdv @ 15% O2, lb/MMBtu (HHV), and lb/hr. The test results must be certified by a licensed professional engineer or by a certified industrial hygienist. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	REPRESENTATIVE REFERENCE METHOD (RM) STACK TESTING FOR PARTICULATES: Conduct comprehensive stack tests on one representative unit in each group, once every 10 years (in accordance with Appendix IV). See eligibility requirements at 40 CFR 75.19 for representative testing in groups of identical units. The representative unit shall be chosen by the Department. Testing shall demonstrate compliance with TSP and PM-10 emission limits (when combusting ULSD (or ULSD mix as permitted)) and with PM-10 emission limits (when combusting natural gas). Three tests shall be conducted at the maximum base load achievable on the day of testing (as determined by a base load temperature control curve) under the corresponding test conditions, such as ambient (relative humidity and temperature) conditions for the day, with regard to meeting the applicable emission standards, but without creating an unsafe condition. The permittee shall submit to EMS the Base Load Temperature Control Curve with the protocol and shall submit all data necessary to substantiate the ambient conditions with the test report. The testing shall be conducted in accordance with a protocol approved by Chief, EMS. [N.J.A.C. 7:27-22.16(a)]	Monitored by stack emission testing at the approved frequency. Unless otherwise approved in the stack test protocol or by the Department, each test run shall be 60 minutes in sampling duration. Compliance period shall be as specified in the monitoring requirement for each applicable emission limit. Stack tests shall be conducted for TSP and PM-10 emissions (when combusting ULSD (or ULSD mix as permitted)) and for PM-10 emissions (when combusting natural gas). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule to Chief EMS, in the approved format to identify facility name, emission unit, test date, and total hours of operation during the past 3 calendar years. A protocol to conduct stack emission testing shall be submitted to the Emission Measurement Secction (EMS), at Mail Code:09-01, PO Box 420, Trenton, NJ 08625, for approval within 60 days from the date of the approval of this renewal operating permit. Thereafter, a protocol shall be submitted to EMS for approval once per permit term (if PM testing is required during that permit term), within 60 days of renewal permit approval. Each protocol shall include all units that are to be stack testing during that permit term. The Permittee shall confirm thier intent to use the approved protocol or submit revisions as necessary, for EMS approval, at least 90 days prior to the intended test date. Permittee shall contact EMS at (609) 984-3443 to schedule a mutually acceptable stack test window, at least 30 days prior to the proposed stack test window. This stack test window shall be a 1 week period during which stack testing is proposed to be performed. Permittee shall notify EMS 7 days prior to actually performing the stack testing, of the actual test date(s). Stack test reports shall be submitted to EMS no later than 45 days after completion of stack emission testing. All test results shall be reported in lb/hr. The test results must be certified by a licensed professional engineer or by a certified industrial hygienist. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	REPRESENTATIVE REFERENCE METHOD (RM) STACK RESTING FOR PARTICULATES - RETESTING: If a representative unit stack test, performed in accordance with Ref. titled REPRESENTATIVE REFERENCE METHOD (RM) STACK TESTING FOR PARTICULATES, results in emissions which exceed 80% of the TSP or PM-10 emission rate allowed by the permit, another representative unit, chosen by the Department, from that group of turbines shall be stack tested, in accordance with that reference, within 180 days of the Department's reciept of the stack test report. Stack testing of additional turbines shall continue in this format until a representative unit stack test results in emissions which do not exceed 80% of the applicable permit limit or until all turbines in the group have been stack tested. [N.J.A.C. 7:27-22.16(a)]	Monitored by stack emission testing at the approved frequency. Unless otherwise approved in the stack test protocol or by the Department, each test run shall be 60 minutes in sampling duration. Compliance period shall be as specified in the monitoring requirement for each applicable emission limit. Stack tests shall be conducted for TSP and PM-10 emissions (when combusting ULSD (or ULSD mix as permitted)) and for PM-10 emissions (when combusting natural gas). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule to Chief EMS, in the approved format to identify facility name, emission unit, test date, and total hours of operation during the past 3 calendar years. A protocol to conduct stack emission testing shall be submitted to the Emission Measurement Section (EMS), at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625, for approval within 60 days from the date of the approval of this renewal operating permit. Thereafter, a protocol shall be submitted to EMS for approval once per permit term (if PM testing is required during that permit term), within 60 days of renewal permit approval. Each protocol shall include all units that are to be stack testing during that permit term. The Permittee shall confirm thier intent to use the approved protocol or submit revisions as necessary, for EMS approval, at least 90 days prior to the intended test date. Permittee shall contact EMS at (609) 984-3443 to schedule a mutually acceptable stack test window, at least 30 days prior to the proposed stack test window. This stack test window shall be a 1 week period during which stack testing is proposed to be performed. Permittee shall notify EMS 7 days prior to actually performing the stack testing, of the actual test date(s). Stack test reports shall be submitted to EMS no later than 45 days after completion of stack emission testing. All test results shall be reported in lb/hr. The test results must be certified by a licensed professional engineer or by a certified industrial hygienist. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	OVER 250 HR/YR ULSD COMBUSTION PROTOCOL: If any unit in a given group of turbines combusts ULSD (or ULSD mix as permitted) for more than 250 hours in a given calendar year, the unit shall be Reference Method stack tested within 180 days of the exceedence. Testing shall demonstrate compliance with the TSP and PM-10 emission limits (when combusting ULSD (or ULSD mix as permitted)). Three tests shall be conducted at maximum base load achievable on the day of testing (as determined by a base load temperature control curve) under the corresponding test conditions, such as ambient (relative humidity and temperature) conditions for that day, with regard to meeting the applicable emission standards, but without creating an unsafe condition. The permittee shall submit to EMS the Base Load Temperature Control Curve with the protocol and shall submit all data necessary to substantiate the ambient conditions with the test report. The testing shall be conducted in accordance with a protocol approved by Chief, EMS. [N.J.A.C. 7:27-22.16(a)]	Monitored by stack emission testing at the approved frequency. Unless otherwise approved in the stack test protocol or by the Department, each test run shall be 60 minutes in sampling duration. Compliance period shall be as specified in the monitoring requirement for each applicable emission limit. Stack tests shall be conducted for TSP and PM-10 emissions (when combusting ULSD (or ULSD mix as permitted)). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule to Chief EMS, in the approved format to identify facility name, emission unit, test date, and total hours of operation during the past 3 calendar years. Submit a stack test protocol to the Emission Measurement Section (EMS), at Mail Code: 09-01, P.O. Box 420, Trenton, NJ 08625, for approval within 30 days of exceeding the 250 hr/yr ULSD consumption limit. Permittee shall contact EMS at (609) 984-3443 to schedule a mutually acceptable stack test window, at least 30 days prior to the proposed stack test window. This stack test window shall be a 1 week period during which stack testing is proposed to be performed. Permittee shall notify EMS 7 days prior to actually performing the stack testing, of the actual test date(s). Stack test reports shall be submitted to EMS no later than 45 days after completion of stack emission testing. All test results shall be reported in lb/hr. The test results must be certified by a licensed professional engineer or by a certified industrial hygienist. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	OPACITY FAILURE PROTOCOL: If the opacity visual determination (performed in accordance with N.J.A.C.7:27B-2) results in non-compliant results, the unit shall be reference method stack tested within 180 days of the failure. Testing shall demonstrate compliance with the TSP and PM-10 emission limits (when combusting ULSD (or ULSD mix as permitted)). Three tests shall be conducted at maximum base load achievable on the day of testing (as determined by a base load temperature control curve) under the corresponding test conditions, such as ambient (relative humidity and temperature) conditions for that day, with regard to meeting the applicable emission standards, but without creating an unsafe condition. The permittee shall submit to EMS the Base Load Temperature Control Curve with the protocol and shall submit all data necessary to substantiate the ambient conditions with the test report. The testing shall be conducted in accordance with a protocol approved by Chief, EMS. [N.J.A.C. 7:27-22.16(a)]	Monitored by stack emission testing at the approved frequency. Unless otherwise approved in the stack test protocol or by the Department, each test run shall be 60 minutes in sampling duration. Compliance period shall be as specified in the monitoring requirement for each applicable emission limit. Stack tests shall be conducted for TSP and PM-10 emissions (when combusting ULSD). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule to Chief EMS, in the approved format to identify facility name, emission unit, test date, and total hours of operation during the past 3 calendar years. Submit a stack test protocol to the Emission Measurement Section (EMS), at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625, for approval within 30 days of failing the opacity visual determination. Permittee shall contact EMS at (609) 984-3443 to schedule a mutually acceptable stack test window, at least 30 days prior to the proposed stack test window. This stack test window shall be a 1 week period during which stack testing is proposed to be performed. Permittee shall notify EMS 7 days prior to actually performing the stack testing, of the actual test date(s). Stack test reports shall be submitted to EMS no later than 45 days after completion of stack emission testing. All test results shall be reported in lb/hr. The test results must be certified by a licensed professional engineer or by a certified industrial hygienist. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	EXEMPTION FROM REFERENCE METHOD (RM) STACK TESTING REQUREMENTS: If initial stack testing has already been performed for each required pollutant from a given turbine and that turbine is operated as a "Peaking Unit" as defined at 40 CFR 72.2 (see also Ref. titled as CAPACITY FACTOR), periodic emission monitoring, pursuant to Ref. titled as PERIODIC EMISSION MONITORING TESTING, may be permitted in lieu of stack tests required at Ref. titled as REFERENCE METHOD (RM) STACK TESTING FOR GASEOUS POLLUTANTS. If a turbine is exempt from Ref. titled as REFERENCE METHOD (RM) STACK TESTING FOR GASEOUS POLLUTANTS and the turbine exceeds the allowable capacity factor for a "peaking unit" (see Ref. titled as CAPACITY FACTOR) prior to the next scheduled stack test, the permittee shall conduct stack testing, on the exempt unit within 180 days of the capacity factor excedence. Testing shall be performed pursuant to Ref. titled as REFERENCE METHOD (RM) STACK TESTING FOR GASEOUS POLLUTANTS and the schedule in Appendix III Retesting shall not be required if any of these pollutants were already tested at the last scheduled interval (see Appendix III). [N.J.A.C. 7:27-22.16(a)]	Monitored by stack emission testing at the approved frequency. Unless otherwise approved in the stack test protocol or by the Department, each test run shall be 60 minutes in sampling duration. Compliance period shall be as specified in the monitoring requirement for each applicable emission limit. Stack tests shall be conducted for TSP and PM-10 emissions (when combusting ULSD (or ULSD mix as permitted)) and for PM-10 emissions (when combusting natural gas). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule to Chief EMS, in the approved format to identify facility name, emission unit, test date, and total hours of operation during the past 3 calendar years. Submit a stack test protocol to the Emission Measurement Section (EMS), at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625, for approval within 30 days of exceeding the capacity factor. Permittee shall contact EMS at (609) 984-3443 to schedule a mutually acceptable stack test window, at least 30 days prior to the proposed stack test window. This stack test window shall be a 1 week period during which stack testing is proposed to be performed. Permittee shall notify EMS 7 days prior to actually performing the stack testing, of the actual test date(s). Stack test reports shall be submitted to EMS no later than 45 days after completion of stack emission testing. All test results shall be reported in ppmdv @ 15% O2, lb/MMBtu (HHV), and lb/hr. The test results must be certified by a licensed professional engineer or by a certified industrial hygienist. [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
11	For the purpose of reporting annual emissions in accordance with N.J.A.C 7:27-21, in lieu of providing actual test data for each individual CT, when more than one representative turbine is required to be stack tested due to test results exceeding 80% of the permit limit, the highest average of three runs for TSP and PM-10 from all stack tests performed within a group of turbines shall be used. If only one representative unit is stack tested, there will only be one average of three test runs for each pollutant. See Ref titled as REPRESENTATIVE REFERENCE METHOD STACK TESTING FOR PARTICULATES. To determine the reportable TSP and PM-10 emissions pursuant to N.J.A.C 7:27-21: 1) For each turbine that was stack tested, the average of the three test runs for TSP and PM-10 shall be multiplied by the number of hours that the turbine was operated during the year to determine reportable annual TSP and PM-10 emissions for that year. 2) For each turbine that was not stack tested, the highest average, calculated above for TSP and PM-10 shall be multiplied by 1.2 and then by the number of hours that the turbine was operated during the year to determine reportable annual TSP and PM-10 emissions for that year. The TSP and PM-10 averages derived by the above method shall be used for future year emission statement reports until the next Reference Method TSP or PM-10 tests are performed on a representative turbine from that group of turbines at which time a new average will be be calculated. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system annually. Calculation of applicable three run TSP and PM-10 emission test results and calculation of annual emissions, based on the applicable three run average shall be maintained. [N.J.A.C. 7:27-22.16(o)]	Submit an Annual Emission Statement: Annually. [N.J.A.C. 7:27-21]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U1 Emergency Fire Pump, 164 kW**
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 40 CFR 63 Subpart A 40 CFR 63 Subpart ZZZZ. [40 CFR Federal Rules Summary]	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 <= 0.95 lb/hr from the combustion of fuel based on the rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	Maximum allowable sulfur content in fuel oil by fuel type/viscosity and geographical zone. [N.J.A.C. 7:27- 9.2(b)]	Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	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	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). [N.J.A.C. 7:27-9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
6	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27- 9.2(b)]	None.	None.	None.
7	NOx (Total) <= 0.066 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.
8	CO <= 0.022 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
9	Generator fuel limited to No. 2 fuel oil, 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
10	Each emergency generator shall be located at the facility and produce mechanical or thermal energy, or electrical power exclusively for use at the facility. This emergency generator shall be operated only: 1. During the performance of normal testing and maintenance procedures, including other fire protection equipment, as recommended in writing by the fire pump or fire protection system manufacturer and/or as required in writing by a Federal or State law or regulation, 2. When there is power outage or the primary source of mechanical or thermal energy fails because of an emergency, or 3. When there is a voltage reduction issued by PJM and posted on the PJM internet website (www.pjm.com) under the "emergency procedures" menu, or 4. To provide power to pump water for fire suppression or protection, or in case of flood, even if there is no power outage and primary source of mechanical energy has not failed. [N.J.A.C. 7:27-22.16(a)] and [N.J.A.C. 7:27-19.1]	Monitored by hour/time monitor continuously. In addition, the owner or operator shall monitor, once per month, the total operating time from the generator's hour meter; hours of operation for emergency use; hours of operation for testing and maintenance; and the total fuel usage calculated by the following: Fuel Usage (Gallons per month) = (Hours of operation per month) x (Maximum emergency generator fuel usage rate in gallons per hour). Hours of operation for emergency use (per month) = (The monthly total operating time from the generator's hour meter) - (The monthly total operating time for testing or maintenance) [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. The owner or operator shall maintain on site and record the following information: 1. Once per month, the total operating time from the generator's hour meter, the fuel usage (gallons per month) and the hours of operation for emergency use (per month). Document if the emergency use was due to internal or external loss of primary source of energy, or due to a fire or flood. If internal loss at the facility, document the emergency that occurred, the damages to the primary source of energy and the amount of time needed for repairs. 2. For each time the emergency generator is specifically operated for testing or maintenance: i. The reason for its operation; ii. The date(s) of operation and the start up and shut down time; iii. The total operating time for testing or maintenance based on the generator's hour meter; and iv. The name of the operator; and 3. If a voltage reduction is the reason for the use of the emergency generator, a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction. The owner or operator of an emergency generator shall maintain the above records for a period no less than 5 years after the record was made and shall make the records readily available to the Department or the EPA upon request. [N.J.A.C. 7:27-22.16(o)] and [N.J.A.C. 7:27-19.11]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	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 http://www.state.nj.us/dep/aqpp/aqforecast; and 2. As a source of energy or power after the primary energy or power source has become operable again. If the primary energy or power source is under the control of the owner or operator of the emergency generator, the owner or operator shall make a reasonable, timely effort to repair the primary energy or power source. [N.J.A.C. 7:27-19.2(d)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	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. 7:27-16.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.
13	Maximum Gross Heat Input <= 1.59 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	Other: Engine rated capacity.[N.J.A.C. 7:27-22.16(o)].	None.	None.
14	The owner or operator shall keep records of engine manufacturer data for the life of the equipment showing the rated Maximum Gross Heat Input, Maximum Rated Power Output, Model Year and Displacement. [N.J.A.C. 7:27-22.16(a)]	None.	Other: The owner or operator shall keep records of engine manufacturer data for the life of the equipment showing the rated Maximum Gross Heat Input, Maximum Rated Power Output, Model Year and Displacement.[N.J.A.C. 7:27-22.16(o)].	None.
15	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, Air Waste Management Division, USEPA, Federal Office Building, 26 Federal Plaza (Foley Square), New York, NY 10278 (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)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	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.
17	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.
18	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)]
19	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)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	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 1090.305 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.
21	The owner or operator of a fire pump engine with a displacement of less than 30 liters per cylinder must comply with the emissions standards in table 4 to NSPS IIII for the same model year and nameplate engine power as follows: NMHC + NOx <= 4 g/kW-hr, CO <= 3.5 g/kW-hr, PM <= 0.2 g/kW-hr, weighted average emissions as defined in 40 CFR 89.404. (NSPS Subpart IIII). [40 CFR 60.4205(c)]	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.
22	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.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
23	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.
24	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
25	The owner or operator of a fire pump engine that was manufactured starting with or after the model year that applies to the engine power rating and a rated speed in table 3 to NSPS IIII and must comply with the emission standards in 40 CFR 60.4205(c), must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b), or 40 CFR 60.4205(b) or (c), as applicable, 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.
26	No owner or operator subject to the provisions of 40 CFR 63 may operate any affected source in violation of the requirements of 40 CFR 63. No owner or operator subject to the provisions of 40 CFR 63 shall fail to keep records, notify, report, or revise reports as required under 40 CFR 63. [40 CFR 63.4(a)]	None.	None.	None.
27	For equipment subject to MACT, no owner or operator subject to the provisions of MACT Subpart A in 40 CFR 63 shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to: (1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere; and (2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions. [40 CFR 63.4(b)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
28	The owner and operator must not use fragmentation or phasing of reconstruction activities (i.e., intentionally dividing reconstruction into multiple parts for purposes of avoiding new source requirements) to avoid becoming subject to new source requirements. [40 CFR 63.4(c)]	None.	None.	None.
29	The owner or operator must operate and maintain any affected source at all times, including periods of startup, shutdown, and malfunction, including associated APC equipment and monitoring equipment for minimizing emissions to the levels required by the relevant standards, i.e., meet the emission standard or comply with the startup, shutdown, and malfunction plan. [40 CFR 63.6(e)(1)(i)]	None.	None.	None.
30	Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices. [40 CFR 63.6(e)(1)(ii)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
31	The owner or operator of an affected source must develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard. This plan must be developed by the owner or operator by the source's compliance date for that relevant standard. [40 CFR 63.6(e)(3)(i)]	None.	Other: The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and make the plan available upon request for inspection after the initial start-up of the enclosed flare. In addition, the owner or operator must maintain each previous version of the plan for a period of 5 years after the revision of the plan.[40 CFR 63.6(e)(3)(v)].	None.
32	During periods of startup, shutdown, and malfunction, the owner or operator of an affected source must operate and maintain such source, including APC and monitoring equipment, in accordance with the procedures specified in the startup, shutdown and malfunction plan developed under paragraph 40 CFR 63.6(e)(3)(i). [40 CFR 63.6(e)(3)(ii)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
33	When actions taken by the owner or operator during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan and describes the actions taken for that event. In addition, the owner or operator must keep records of these events as specified in 40 CFR 63.10(b), including records of the occurrence and duration of each startup or shutdown (if the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in 40 CFR 63.10(d)(5). [40 CFR 63.6(e)(3)(iii)]	None.	Other: Maintain readily accessible records, pursuant to 40 CFR 63.10(b) after the initial start-up of the enclosed flare.[40 CFR 63.10(b)].	Submit a report: As per the approved schedule , pursuant to 40 CFR 63.10(d)(5). [40 CFR 63.10(d)(5)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
34	If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with 40 CFR 63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator). [40 CFR 63.6(e)(3)(iv)]	None.	Recordkeeping by other recordkeeping method (provide description) annually Maintain readily accessible records, pursuant to 40 CFR 63.10(b).. [40 CFR 63.6(e)(3)(iv)]	Submit a report: As per the approved schedule , pursuant to 40 CFR 63.10(d)(5). [40 CFR 63.10(d)(5)]
35	The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator, pursuant to 40 CFR 63.6(e)(3)(v). [40 CFR 63.6(e)(3)(v)]	None.	Other: Maintain readily accessible records, pursuant to 40 CFR 63.6(e)(3)(v) after the initial start-up of the enclosed flare.[40 CFR 63.6(e)(3)(v)].	None.
36	The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this part or to reflect changes in equipment or procedures at the affected source, pursuant to 40 CFR 63.6(e)(3)(viii). [40 CFR 63.6(e)(3)(viii)]	None.	None.	Submit a report: Upon occurrence of event. Each startup, shutdown, and malfunction plan revision must be reported,pursuant to 40 CFR 63.10(d)(5). [40 CFR 63.6(e)(3)(viii)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
37	The non-opacity emission standards set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the non-opacity emission standards set forth in this part, then that emission point must still be required to comply with the non-opacity emission standards and other applicable requirements. [40 CFR 63.6(f)(1)]	None.	None.	None.
38	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: **U1 Emergency Fire Pump, 164 kW**
Operating Scenario: **OS1 1.59 MMBtu/hr (HHV) Fire Pump (164 kW), #2 fuel oil, 100 hrs/yr**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 1.31 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	CO <= 0.437 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U4318 Combustion turbine - simple cycle, CT-1, U4319 Combustion turbine - simple cycle, CT-2, U4320 Combustion turbine - simple cycle, CT-3, U4321 Combustion turbine - simple cycle, CT-4**

Operating Scenario: **OS Summary**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR 97: Cross-State Air Pollution Rule (CSAPR). [40 CFR Federal Rules Summary]	None.	None.	None.
2	Sulfur Content in Fuel <= 15 ppmw (0.0015 % by weight). Maximum allowable sulfur content in No. 2 and lighter fuel oil. [N.J.A.C. 7:27- 9.2(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
3	VOC (Total) <= 50 ppmvd @ 15% O2. Do not exceed 50 ppmvd @ 15 percent oxygen. [N.J.A.C. 7:27-16.9(c)]	VOC (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-16.9(c)]	VOC (Total): Recordkeeping by stack test results at the approved frequency. See GR2 for details. [N.J.A.C. 7:27-16.9(c)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See GR2 for details. [N.J.A.C. 7:27-16.9(c)]
4	CO <= 250 ppmvd @ 15% O2. Do not exceed 250 ppmdv @ 15 percent oxygen. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-16.9(b)]	CO: Recordkeeping by stack test results at the approved frequency. See GR2 for details. [N.J.A.C. 7:27-16.9(b)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See GR2 for details. [N.J.A.C. 7:27-16.9(b)]
5	VOC (Total) <= 8 tons/yr. Annual emission limit based on preconstruction permit. This limit includes formaldehyde emissions. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	CO <= 36 tons/yr. Annual emission limit based on preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	NOx (Total) <= 117 tons/yr. Annual emission limit based on SCR installation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	TSP <= 10.32 tons/yr. Annual emisssion limit based on SCR installation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	PM-10 (Total) <= 10.1 tons/yr for each unit based on stack test results. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	SO2 <= 11.4 tons/yr. Annual emission limit is based on the sulfur content of the fuel oil. This emission limit applies until the fuel oil reaches to 15 ppm sulfur. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	SO2 <= 1 tons/yr. Annual emission limit based on 15 ppm ULSD. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	Ammonia <= 33.8 tons/yr. Annual emission limit based on SCR installation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	Ammonia Slip <= 10 ppmvd. [N.J.A.C. 7:27-22.16(a)]	Ammonia Slip: Monitored by stack emission testing once initially, based on each of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Ammonia Slip: Recordkeeping by stack test results once initially. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. [N.J.A.C. 7:27-22.16(o)]
14	Methane <= 2.92 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	Nitrous oxide <= 0.292 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	HAPs (Total) <= 0.42 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
17	Butadiene (1,3-) <= 0.00389 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
18	Acetaldehyde <= 0.0445 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
19	Acrolein <= 0.00712 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
20	Arsenic Emissions <= 0.00031 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
21	Benzene <= 0.025 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
22	Beryllium Emissions <= 0.0000833 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
23	Cadmium Emissions <= 0.000499 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
24	Chromium (Hexavalent) Emissions <= 0.0000166 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
25	Ethylbenzene <= 0.0356 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
26	Formaldehyde <= 0.16 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
27	Manganese Emissions <= 0.0158 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
28	Naphthalene <= 0.00891 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
29	Nickel Emissions <= 0.0748 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
30	Polycyclic organic matter <= 0.0011 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
31	Polynuclear aromatic hydrocarbons (PAHs) <= 0.0011 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
32	Propylene oxide <= 0.0322 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
33	Maximum number of operating hours based on preconstruction permit. Hours of Operation <= 3,000 hr/yr. [N.J.A.C. 7:27-22.16(e)]	Hours of Operation: Monitored by hour/time monitor continuously, based on one calendar year. [N.J.A.C. 7:27-22.16(o)]	Hours of Operation: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.
34	Combustion turbine fuel limited to natural gas and distillate fuel oil based on the preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing materials delivered. [N.J.A.C. 7:27-22.16(o)]	None.
35	This turbine shall comply with all applicable requirements at N.J.A.C.7:27-19.5, including, but not limited to all applicable emission limitations. [N.J.A.C. 7:27-19.5]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
36	Annual heat input based on annual fuel use is 2,609,380 MMBTU/any consecutive 365 days. Total annual heat input during any consecutive 365-day period shall be calculated by adding the total heat input for a given day to the total heat input during the preceding 364-day period. Daily MMBTU fuel use shall be calculated using the following formula: MMBTU/day = [(Y BTU/scf x scf of natural gas consumed by the turbine per day) + (Y' BTU/gal x gallons of #2 fuel oil consumed by the turbine per day)] /1,000,000 where Y = Heating Value of natural gas @ 1020 BTU/scf Y' = Heating Value of #2 fuel oil @ 139,000 BTU/gal This procedure will begin the first day following the issuance of the Operating Permit. This accounting wil not include heat input for the days prior to the Operating Permit approval. [N.J.A.C. 7:27-22.16(a)] & [N.J.A.C. 7:27-22.16(e)]	Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis) and calculations. [N.J.A.C. 7:27-22.16(a)] &. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Compliance shall be determined based on a 365 consecutive day period computed with daily sums. Maintain manual records on a daily basis until the monitoring and recording equipment is reconfigured. [N.J.A.C 7:27-22.16(a)] &. [N.J.A.C. 7:27-22.16(o)]	Comply with the requirement: Within 180 days from the date of the approved permit , reconfigure the recordkeeping system to continuously record fuel flow/firing rate (based on a consecutive 365-day period, rolling 1 day basis). [N.J.A.C. 7:27-22.16(a)] &. [N.J.A.C. 7:27-22.16(o)]
37	Ammonia Injection Curve and Algorithm: 1. Permittee will document NH3 slip compliance via curve and initial compliance testing requirement. 2. Permittee will continue to demonstrate compliance, by demonstrating actual ammonia flow is within the operating curve as defined above. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by Ammonia flow metering device continuously, based on a block-hour average basis (minimum 30 minutes of valid data required for each valid block hour average). The permitee shall monitor the required ammonia injection rate, as calculated by the algorithm, and the actual ammonia injection rate.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Permittee shall keep a record of date, time, fuel flow rate, ambient temperature, specific humidity, ammonia injection rate calculated by the algorithm, and actual ammonia injection rate. [N.J.A.C. 7:27-22.16(o)]	Other (provide description): Other Submit with the Semi-annual Monitoring and Deviation Report electronically, the details of any hour, during the reporting period, when the actual ammonia injection rate was less than the ammonia injection rate calculated by the Ammonia Injection Algorithm. This will include the date, time, fuel flow rate, ambient temperature, specific humidity, ammonia injection rate calculated by the algorithm, and actual ammonia injection rate. Also the permittee shall submit a permit modification within 180 days of performing initial SCR test to finalize the Ammonia Injection Curve and Algorithm.. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
38	Conduct Periodic Emission Monitoring and Reference Method Stack Testing as per the requirements in GR2 and monitoring schedules in Appendix III and Appendix IV. [N.J.A.C. 7:27-22.16(a)]	Other: See GR2 for requirements.[N.J.A.C. 7:27-22.16(o)].	Other: See GR2 for requirements.[N.J.A.C. 7:27-22.16(o)].	Other (provide description): Other See GR2 for requirements. [N.J.A.C. 7:27-22.16(o)]
39	This turbine shall only be operated at peak load under the following conditions: 1) The annual PJM required summer and winter load verification tests. 2) During a MEG alert, which is a period of time during which one or more electric generating units are operated at emergency capacity at the direction of the load dispatcher, PJM, in order to prevent or mitigate voltage reductions or interruptions in electric service, or both. 3) During initial start-up and shakedown period, testing, and commissioning of the turbine after SCR Emission Control Retrofit installtion. During all other periods of operation, this turbine must be operated at a load no greater than maximum base load (as determined by a base load temperature control curve). Stack testing shall be performed at maximum base load as well (See GR2). [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously. The permittee shall monitor the duration of time that the turbine is operated at peak load. [N.J.A.C. 7:27-22.16(o)]	Each time this turbine is operated at peak load, the Permittee shall record the following: 1)The time at which the unit starting operating at a load greater than base load 2)The time at which the unit load dropped back to base load (or lower) 3)The duration of peak load operation 4)The reason for operating at peak load* *The Permittee must maintain a record of the reason for operating at peak load (for example a notice from PJM that requires the turbine to be operated at that specific time) Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
40	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 use over the 12 months prior to the adjustment. [N.J.A.C. 7:27-19.16(h)]	None.
41	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.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
42	The permittee shall operate water injection during all periods that the turbine is operating except during the period of start-up and shut-down. Start-up, as defined below, shall not exceed 60 minutes. Shut-down, as defined below, shall not exceed 60 minutes. [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. A record of start-up and shut-down periods shall be maintained for at least 5 years. [N.J.A.C. 7:27-22.16(o)]	None.
43	Start-up Period <= 60 minutes. Startup is the period of time from ignition until the unit, along with associated emission and operation controls, achieves steady state at 80 to 100% load conditions. Startup shall not exceed 60 minutes. [N.J.A.C. 7:27-22.16(e)]	Other: Hour/Time Monitor. Continuously.[N.J.A.C. 7:27-22.16(o)].	Other: Data Acquisition System (DAS)/Electronic Data Storage. Continuously.[N.J.A.C. 7:27-22.16(o)].	None.
44	Shutdown Period <= 60 minutes. Shutdown is defined as the period of time from the initial lowering of combustion turbine output to the cessation of combustion turbine operation. Shutdown shall not exceed 60 minutes. [N.J.A.C. 7:27-22.16(e)]	Other: Hour/Time Monitor. Continuously.[N.J.A.C. 7:27-22.16(o)].	Other: Data Acquisition System (DAS)/Electronic Data Storage. Per Occurrence.[N.J.A.C. 7:27-22.16(o)].	None.
45	The Selective Catalytic Reduction system shall be used to reduce 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.	Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. 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.
46	The SCR shall be operated and reagent shall be injected at all times that the turbine is operating, except during periods of start-up and shutdown. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously. The permittee shall continuously monitor the time and duration of any operation of the combustion turbine and the SCR system. [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 any operation of the combustion turbine and the SCR system. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
47	Temperature upstream of SCR >= 500 degrees Fahrenheit, except during startups or shutdowns. [N.J.A.C. 7:27-22.16(a)]	Monitored by temperature instrument continuously, based on a 1 hour block average basis (minimum 30 minutes of valid data required for each valid block hour average). The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.
48	The SCR catalyst shall be maintained and replaced in accordance with good engineering practices and based on NOx emission levels indicated through stack testing. [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.
49	Ammonia Flow Rate to SCR > 250 and Ammonia Flow Rate to SCR < 1,040 lb/hr (19% ammonium hydroxide solution in water). [N.J.A.C. 7:27-22.16(a)]	Ammonia Flow Rate to SCR: Monitored by material feed/flow monitoring continuously. [N.J.A.C. 7:27-22.16(o)]	Ammonia Flow Rate to SCR: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously . [N.J.A.C. 7:27-22.16(o)]	None.
50	The permittee shall comply with all applicable requirements of Cross-State Air Pollution Rule (CSAPR) for the CSAPR NOx Annual Trading Program, CSAPR NOx Ozone Season Trading Program, and CSAPR SO2 Trading Program applicable to this affected unit. [40 CFR 97]	Other: As per 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]

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Emission Unit: **U4318 Combustion turbine - simple cycle, CT-1**
Operating Scenario: **OS1 Combustion turbine, simple cycle - natural gas firing (primary fuel)**

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	Particulate Emissions <= 114.8 lb/hr. Particulate emission limit from the combustion of fuel based on rated maximum heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Maximum Gross Heat Input <= 1,148 MMBTU/hr (HHV). Maximum heat input from operating permit application. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by fuel flow/firing rate instrument and electrical output meter. Continuously. If the turbine no longer qualifies as a low mass emission unit as defined in 40 CFR 75.19, the permittee will be required to install, certify and operate a fuel flow meter and data acquisition system/electronic data storage to monitor fuel use continuously and record data hourly. The deadline to monitor and record fuel use will be no later than December 31 of the calendar year following the year that the turbine is no longer considered a low emission unit.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping by manual logging fuel use daily, and electrical output hourly. Recordkeeping of fuel use on an hourly basis is not required as long as the turbine qualifies as a low mass emission unit as defined in 40 CFR 75.19. Hourly heat inut shall be calculated using long term fuel flow heat input method under 40 CFR 75.19 (c)(3)(ii).[N.J.A.C. 7:27-22.16(o)].	Other (provide description): As per the approved schedule. If the turbine no longer qualifies as a low mass emission unit as defined in 40 CFR 75.19, the permittee will be required to install, certify and operate a fuel flow meter and data acquisition system/electronic data storage to monitor fuel use continuously and record data hourly. The deadline to monitor and record fuel use will be no later than December 31 of the calendar year following the year that the turbine is no longer considered a low emission unit. Monitoring and recordkeeping to determine compliance with the heat input limit will continue to be a requirement until the date that a fuel flow meter and data acquisition system/electronic data storage is used to monitor and record fuel use. [N.J.A.C. 7:27-22.16(o)]
4	CO <= 250 lb/hr. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs See GR2 for details. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 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
5	VOC (Total) <= 27 lb/hr. Maximum emission rate from preconstruction permit. This limit includes formaldehyde emissions. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	TSP <= 12 lb/hr. Maximum emission rate from the preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	VOC (Total) <= 0.031 lb/MMBTU. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	VOC (Total) <= 20 ppmvd @ 15% O2. Maximum emission rate based on the preconstruction permit. This limit includes formaldehyde emissions. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	CO <= 130 ppmvd @ 15% O2. Maximum emission rate based on preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]
10	SO2 <= 0.5 lb/hr. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
11	CO <= 0.29 lb/MMBTU. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	Natural Gas Usage <= 2,180 MMft^3/yr. Annual natural gas use limit based on preconstruction permit is 2,180 MM cubic feet/any consecutive 365-days. Cubic feet of natural gas consumed during any consecutive 365-day period shall be calculated by adding the natural gas consumption for a given day to the cubic feet of natural gas consumed during the preceding 364 day period. This procedure will begin the first day following the issuance of the Operating Permit. This accounting shall not include natural gas consumption for the days prior to the Operating Permit approval. [N.J.A.C. 7:27-22.16(e)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Compliance shall be based on 365 consecutive day period computed with daily sums. Records of cumulative fuel consumption and fuel flow rate of natural gas to turbine shall be maintained separately. [N.J.A.C. 7:27-22.16(o)]	None.
13	NOx (Total) <= 53 ppmvd @ 15% O2. Maximum emission rate based on the preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]
14	PM-10 (Total) <= 2.64 lb/hr based on stack test results. [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 Department validated stack test runs. See GR2 and Appendix IV for details. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results at the approved frequency. See GR2 and Appendix IV 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. See GR2 and Appendix IV for details. [N.J.A.C. 7:27-22.16(o)]
15	Opacity <= 10 %. Smoke emissions from stationary turbine engines no greater than 10% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
16	NOx (Total) <= 0.2 lb/MMBTU. Maximum emission rate based on preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]
17	NOx (Total) <= 1 lb/MW-hr. NOx RACT emission limit applies during all periods of natural gas combustion during which net useful energy is being produced by the turbine. [N.J.A.C. 7:27-19.5(g)1]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-19.15(a)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]

U4318 Combustion turbine - simple cycle, CT-1
OS1

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	NOx (Total) <= 93 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]
19	TSP <= 12.2 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
20	Ammonia <= 21.3 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
21	Methane <= 1.115 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
22	Nitrous oxide <= 0.115 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
23	HAPs (Total) <= 0.782 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
24	Butadiene (1,3-) <= 0.000494 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
25	Acetaldehyde <= 0.0459 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
26	Acrolein <= 0.0074 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
27	Arsenic Emissions <= 0.00159 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
28	Benzene <= 0.014 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
29	Beryllium Emissions <= 0.000427 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
30	Cadmium Emissions <= 0.00256 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
31	Chromium (Hexavalent) Emissions <= 0.0000849 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
32	Ethylbenzene <= 0.0367 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
33	Formaldehyde <= 0.103 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
34	Manganese Emissions <= 0.081 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U4318 Combustion turbine - simple cycle, CT-1
OS1

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
35	Naphthalene <= 0.00149 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
36	Nickel Emissions <= 0.384 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
37	Polycyclic organic matter <= 0.00253 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
38	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00253 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
39	Propylene oxide <= 0.0333 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
40	Water Injection Algorithm for gas-firing: During gas-fired operation, water is continuously injected into each of the 16 combustion baskets. The rate of water injection shall be calculated by the following algorithm: Water Injection Rate (lb/sec) = K(FF-B) + FF((T(DB-59)) - (H(SH-0.0063))) + MIN When the fuel flow rate to the turbine is less than 10 lb/sec, the following constants are defined: K = 0.8 Water Slope Constant for CT-1 = 0.55 Water Slope Constant for CT-2, CT-3 = 0.55 Water Slope Constant for CT-4 B = 6.0 Fuel Offset Constant T = 0.003 Temperature Constant H = 10.4 Humidity Constant MIN = 1.0 Minimum Water Flow Rate (lb/sec) When the fuel flow rate to the turbine is 10 lb/sec or more, the following constants are defined: K = 1.10 Water Slope Constant B = 10.0 Fuel Offset Constant T = 0.003 Temperature Constant H = 10.4 Humidity Constant MIN = 3.0 Minimum Water Flow Rate (lb/sec) Regardless of the fuel flow rate, the following variables are defined: FF = Fuel Flow Rate (lb/sec) DB = Ambient Temperature (Dry Bulb, degrees F) SH = Specific Humidity. The actual rate of water injected must be no less than the injection rate calculated by the applicable algorithm above. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by water metering device continuously, based on a block-hour average basis (minimum 30 minutes of valid data required for each valid block hour average). The permitee shall monitor the required water injection rate, as calculated by the algorithm, and the actual water injection rate.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Permittee shall keep a record of date, time, fuel flow rate, ambient temperature, specific humidity, water injection rate calculated by the algorithm, and actual water injection rate. [N.J.A.C. 7:27-22.16(o)]	Other (provide description): Other Submit with the Semi-annual Monitoring and Deviation Report electronically, the details of any hour, during the reporting period, when the actual water injection rate was less than the water injection rate calculated by the Water Injection Algorithm. This will include the date, time, fuel flow rate, ambient temperature, specific humidity, water injection rate calculated by the algorithm, and actual water injection rate. [N.J.A.C. 7:27-22.16(o)]

U4318 Combustion turbine - simple cycle, CT-1
OS1

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Facility Specific Requirements

Ref.#				
4	Water Injection Algorithm Changes: If, due to a combustion adjustment, it becomes necessary for the water injection algorithm constants (K, B, T, H, and MIN) defined in REF #23, to be redefined (revised), in order to maintain compliance with the NOx and CO emission limits in this permit, the Permittee shall submit a written notice to the Department, within 3 business days of determination of the revised values. The notice shall explain the need for the change and identify the revised value and the current value for each constant. The notice shall include actual emission data corresponding to each set of constant values. The emission data corresponding to the revised values shall be based on operation after the combustion adjustment. The emission data corresponding to the current values shall be based on operation prior to the combustion adjustment, but within the past 12 months. The permittee may operate in compliance with the revised values which will become effective immediately upon determination. The permittee shall request that the revised values be included in the operating permit during the next modification or renewal that is submitted to the Department. The permittee shall maintain, on site, as an attachment to the current permit, a copy of any such notice submitted to the Department. The Department reserves the right to require further justification for this change once it recieves this notice. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Permittee shall maintain revised and currently approved water injection algorithm constant values as well as emission data corresponding to each set of constants and shall make this information available to the Department upon request. Permittee shall also maintain, as an attachment to the current operating permit, and make available to the Department upon request, a copy of any notice submitted to the Department in accordance with this applicable requirement.[N.J.A.C. 7:27-22.16(o)].	Submit a report: Upon occurrence of event. Permittee shall submit a written notice to the Department, within 3 business days of the revision of the water injection algorithm constants. The submittal shall be addressed to the Bureau or Air Permits as well as the Central Regional Enforcement Office. The notice shall explain the need for the change and identify the revised value and the currently approved value for each constant. The notice shall also be accompanied by actual emission data corresponding to each set of constant values (revised values and currently approved values). The emission data corresponding to the revised values shall be based on operation after the combustion adjustment. The emission data corresponding to the currently approved values shall be based on operation prior to the combustion adjustment, but within the past 12 months. [N.J.A.C. 7:27-22.16(o)]

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Facility Specific Requirements

Emission Unit: **U4318 Combustion turbine - simple cycle, CT-1**
Operating Scenario: **OS2 Combustion turbine, simple cycle - #2FO firing (secondary fuel)**

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, except for a period of not longer than 10 consecutive seconds. Monitoring and recordkeeping may occur at a lesser frequency if circumstances prohibit conducting a visual determination (e.g., nighttime operation, weather conditions, unplanned dispatching, etc.) within the 100 hour timeframe. However, in no case shall the interval between visual determinations exceed 125 hours of oil firing operation. If the visual observation occurs at a lesser frequency than every 100 hours of oil firing operation, the reason for monitoring at the lesser frequency shall also be recorded. Opacity <= 20 %. [N.J.A.C. 7:27- 3.5]	Other: Visual determination in accordance with N.J.A.C. 7:27B-2, every 100 hours of oil firing operation. (See Applicable Requirement).[N.J.A.C. 7:27-22.16(o)].	Other: Manual logging of parameter (permanently bound), every 100 hours of oil firing operation. (See Applicable Requirement).[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 109.3 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)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	Maximum Gross Heat Input <= 1,093 MMBTU/hr (HHV). Maximum heat input from operating permit application. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by fuel flow/firing rate instrument and electrical output meter. Continuously. If the turbine no longer qualifies as a low mass emission unit as defined in 40 CFR 75.19, the permittee will be required to install, certify and operate a fuel flow meter and data acquisition system/electronic data storage to monitor fuel use continuously and record data hourly. The deadline to monitor and record fuel use will be no later than December 31 of the calendar year following the year that the turbine is no longer considered a low emission unit.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping by manual logging fuel use daily, and electrical output hourly. Recordkeeping of fuel use on an hourly basis is not required as long as the turbine qualifies as a low mass emission unit as defined in 40 CFR 75.19. Hourly heat inut shall be calculated using long term fuel flow heat input method under 40 CFR 75.19 (c)(3)(ii).[N.J.A.C. 7:27-22.16(o)].	Other (provide description): As per the approved schedule. If the turbine no longer qualifies as a low mass emission unit as defined in 40 CFR 75.19, the permittee will be required to install, certify and operate a fuel flow meter and data acquisition system/electronic data storage to monitor fuel use continuously and record data hourly. The deadline to monitor and record fuel use will be no later than December 31 of the calendar year following the year that the turbine is no longer considered a low emission unit. Monitoring and recordkeeping to determine compliance with the heat input limit will continue to be a requirement until the date that a fuel flow meter and data acquisition system/electronic data storage is used to monitor and record fuel use. [N.J.A.C. 7:27-22.16(o)]
4	VOC (Total) <= 0.038 lb/MMBTU. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 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
5	At all times the combustion turbine is operating, except during start-up and shutdown, visible emissions, exclusive of condensed water vapor, shall not exceed 10% opacity for a period of more than 10 consecutive seconds. Monitoring and recordkeeping may occur at a lesser frequency if circumstances prohibit conducting a visual determination (e.g., nighttime operations, weather conditions, unplanned dispatching, etc.) within the 100 hour timeframe. However, in no case shall the interval between visual determinations exceed 125 hours of oil firing operation. If the visual observation occurs at a lesser frequency than every 100 hours of oil firing operation, the reason for monitoring at the lesser frequency shall also be recorded. Opacity <= 10 %. [N.J.A.C. 7:27-22.16(e)]	Other: Visual determination in accordance with N.J.A.C. 7:27B-2, every 100 hours of oil firing operation. (See Applicable Requirement).[N.J.A.C. 7:27-22.16(o)].	Other: Manual logging of parameter (permanently bound), every 100 hours of oil firing operation. (See Applicable Requirement).[N.J.A.C. 7:27-22.16(o)].	None.
6	TSP <= 30 lb/hr. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	VOC (Total) <= 32 lb/hr. Maximum emission rate from preconstruction permit. This limit includes formaldehyde emissions. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]
8	CO <= 250 lb/hr. Maximum emission rate based on preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]
9	CO <= 0.3 lb/MMBTU. Maximum emission rate based on preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 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
10	VOC (Total) <= 25 ppmvd @ 15% O2. Maximum emission rate from preconstruction permit. This limit includes formaldehyde emissions. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]
11	NOx (Total) <= 105 ppmvd @ 15% O2. Maximum emission rate from preconstruction permit,. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]
12	Hours of Operation While Firing Fuel Oil <= 1,000 hr/yr. [N.J.A.C. 7:27-22.16(e)]	Hours of Operation While Firing Fuel Oil: Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Hours of Operation While Firing Fuel Oil: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.
13	PM-10 (Total) <= 50.5 lb/hr based on stack test results. [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 Department validated stack test runs. See GR2 and Appendix IV for details. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results at the approved frequency. See GR2 and Appendix IV 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. See GR2 and Appendix IV for details. [N.J.A.C. 7:27-22.16(o)]
14	NOx (Total) <= 0.4 lb/MMBTU. Maximum emisson rate based on preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]
15	Fuel Oil Usage <= 3,067 Mgals. Annual distillate fuel oil limit based on preconstruction permit is 3,067,000 gallons/any consecutive 365 days. Gallons of distillate fuel oil consumed during any consecutive 365-day period shall be calculated by adding the oil consumption for a given day to the gallons of oil consumed during the preceding 364-day period. This procedure will begin the first day following the issuance of the Operating Permit. This accounting will not include oil consumption for the days prior to the Operating Permit approval. [N.J.A.C. 7:27-22.16(e)]	Fuel Oil Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C. 7:27-22.16(o)]	Fuel Oil Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Compliance shall be determined based on 365-day period computed with daily sums. Records of cumulative fuel consumption and fuel flow rate of #2 fuel oil to turbine shall be maintained. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	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 effective date of the applicable standard in 1B. [N.J.A.C. 7:27- 9.2(b)]	None.	None.	None.
17	Sulfur Content in Fuel <= 15 ppmw (0.0015 % by weight). Maximum allowable sulfur content in No. 2 and lighter fuel oil. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
18	Sulfur Content in Fuel <= 0.0015 % by weight. Maximum allowable sulfur content in ultra low sulfur distillate fuel oil (ULSD). On and after June 10, 2009, no delivery of fuel that does not meet the ASTM D975-08ae1 Standard Specification for Diesel Fuel Oils/Grade No. 1-D S15, or Grade No. 2-D S15 (ultra low sulfur distillate fuel oil (ULSD)) may be accepted. Any non - ULSD fuel oil remaining in fuel oil storage tanks may be used up after this date. [N.J.A.C. 7:27-22.16(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
19	TSP <= 30.66 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
20	NOx (Total) <= 1.6 lb/MW-hr. NOx RACT emission limit applies during all periods of distillate fuel oil combustion during which net useful energy is being produced by the turbine. [N.J.A.C. 7:27-19.5(g)1]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-19.15(a)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 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
21	NOx (Total) <= 1 lb/MW-hr. NOx RACT emission limit applies during all periods of turbine operation on High Electric Demand Days (as defined below), during which net useful energy is being produced by the turbine This emission limit applies regardless of the fuel combusted, unless combusting natural gas is not possible due to gas curtailment. "High electric demand day" or "HEDD" means the day following a day in which the next day forecast load is estimated to have a peak value of 52,000 megawatts or higher as predicted by the PJM Interconnection 0815 update to its Mid Atlantic Region Hour Ending Integrated Forecast Load, available from PJM Interconnection at http://oasis.pjm.com/doc/projload.txt. [N.J.A.C. 7:27-19.5(g)2]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-19.15(a)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]
22	CO <= 130 ppmvd @ 15% O2. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]
23	NOx (Total) <= 142 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See GR2 for details. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. See GR2 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. See GR2 for details. [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
24	Sulfur Content in Fuel: Since the Permittee will continue to combust any higher sulfur distillate fuel oil that remains in the fuel storage tank after June 10, 2009 and this remaining fuel may mix with the ULSD fuel, creating a fuel mixture with an aggregate sulfur content higher than that of the lower sulfur fuel, the permittee shall conduct composite sampling of each storage tank after reciept of every fuel lot delivered to the facility. A fuel lot is defined as a shipment or delivery (ship, barge, a group of trucks, discrete purchase of diesel fuel through a pipeline). Sampling shall continue until the aggregate sulfur content of the fuel in tanks 5 and 6 (IS2) is 0.00015% or less. Once sampling of the storage tanks demonstrates that the aggregate sulfur content of the fuel oil stored in tanks 5 and 6 (insignificant source IS2) has dropped to 0.05%, the applicable hourly SO2 emission limit for any turbine at this facility shall be based on 0.05% sulfur fuel oil instead of 0.2% sulfur fuel oil. See Ref #29. Continue to the next page. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by a sample from each oil tank after each additional fuel lot is delivered. Sample according to the single tank composite sampling procedure or all levels sampling procedure in ASTM D4057-95, Standard Practice for Manual Sampling of Petroleum and Petroleum Products. Once the applicable requirement of this condition is satisfied, fuel oil sampling shall be in accordance with 40 CFR 75, Appendix D, Section 2.2, for purposes of demonstrating compliance with the applicable CSAPR rules for reporting SO2 and NOx mass emissions. [40 CFR 75, Appendix D, Section 2.2] and[N.J.A.C. 7:27-22.16(o)].	Sulfur Content in Fuel: Recordkeeping by certified lab analysis results per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
25	Continuation from last page: Once sampling of the storage tanks demonstrates that the aggregate sulfur content of the fuel oil stored in tanks 5 and 6 (insignificant source IS2) has dropped to 0.0015%, the applicable hourly SO2 emission limit for any turbine at this facility shall be based on 0.0015% sulfur fuel oil (ULSD) instead of 0.05% sulfur fuel oil. See Ref #27 and #28. [40 CFR 75, Appendix D, 2.2] [N.J.A.C. 7:27-22.16(a)]	Other: See Monitoring requirement in Ref. # 25.[N.J.A.C. 7:27-22.16(o)].	Other: See Recordkeeeping requirement in Ref. # 25.[N.J.A.C. 7:27-22.16(o)].	None.
26	Ammonia <= 20.6 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U4318 Combustion turbine - simple cycle, CT-1
OS2

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
27	Methane <= 3.44 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
28	Nitrous oxide <= 0.69 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
29	SO2 <= 56.25 lb/hr. Maximum emission rate based on combustion of 0.05% sulfur fuel oil. Since the Permittee will continue to combust any higher sulfur distillate fuel oil that remains in the fuel storage tank on June 10, 2009 and this remaining fuel may mix with the ULSD fuel, creating a fuel mixture with an aggregate sulfur content higher than 0.05%, this requirement does not apply until fuel tank sampling (see Ref #24) demonstrates that the aggregate sulfur content of the fuel in the two fuel tanks is no more than 0.05%. Once fuel tank sampling demonstrates that the aggregate sulfur content of the fuel oil stored in tanks 5 and 6 (insignificant source IS2) has dropped to 0.05%, then this permit requirement applies as the effective SO2 hourly emission limit for all turbines at this facility. [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
30	SO2 <= 1.69 lb/hr. Maximum emission rate based on combustion of 0.0015% sulfur fuel oil (ULSD). Since the Permittee will continue to combust any higher sulfur distillate fuel oil that remains in the fuel storage tank on June 10, 2009 and this remaining fuel may mix with the ULSD fuel, creating a fuel mixture with an aggregate sulfur content higher than 0.0015%, this requirement does not apply until fuel tank sampling (see Ref #24) demonstrates that the aggregate sulfur content of the fuel in both of the fuel tanks is no more than 0.0015%. Once fuel tank sampling demonstrates that the aggregate sulfur content of the fuel oil stored in tanks 5 and 6 (insignificant source IS2) has dropped to 0.0015%, this permit requirement replaces Ref #29 (the 0.05% sulfur distillate fuel based SO2 emission limit) as the effective SO2 hourly emission limit for all turbines at this facility. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
31	HAPs (Total) <= 1.12 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
32	Butadiene (1,3-) <= 0.0175 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
33	Acetaldehyde <= 0.0459 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
34	Acrolein <= 0.0735 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
35	Arsenic Emissions <= 0.00159 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
36	Benzene <= 0.06 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
37	Beryllium Emissions <= 0.000427 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
38	Cadmium Emissions <= 0.00256 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
39	Chromium (Hexavalent) Emissions <= 0.0000849 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
40	Ethylbenzene <= 0.0367 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
41	Formaldehyde <= 0.306 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
42	Manganese Emissions <= 0.081 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
43	Naphthalene <= 0.0383 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
44	Nickel Emissions <= 0.384 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
45	Polycyclic organic matter <= 0.0437 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
46	Polynuclear aromatic hydrocarbons (PAHs) <= 0.0437 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
47	Propylene oxide <= 0.0333 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
48	Water Injection Algorithm: During oil fired operation, water is continuously injected into each of the 16 combustion baskets. The rate of water injection shall be calculated by the following algorithm: Water Injection Rate (lb/sec) = K(FF-B) + FF((T(DB-59)) - (H(SH-0.0063))) + MIN When the fuel flow rate to the turbine is less than 12.5 lb/sec, the following constants are defined: K = 1.5 Water Slope Constant B = 8.8 Fuel Offset Constant T = 0.003 Temperature Constant H = 13.1 Humidity Constant MIN = 1.0 Minimum Water Flow Rate (lb/sec) When the fuel flow rate to the turbine is 12.5 lb/sec or more, the following constants are defined: K = 0.986 Water Slope Constant B = 12.5 Fuel Offset Constant T = 0.003 Temperature Constant H = 13.1 Humidity Constant MIN = 4.6 Minimum Water Flow Rate (lb/sec) Regardless of the fuel flow rate, the following variables are defined: FF = Fuel Flow Rate (lb/sec) DB = Ambient Temperature (Dry Bulb, degrees F) SH = Specific Humidity The actual rate of water injected must be no less than the injection rate calculated by the applicable algorithm above. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by water metering device continuously, based on a block-hour average basis (minimum 30 minutes of valid data required for each valid block hour average). The permitee shall monitor the required water injection rate, as calculated by the algorithm, and the actual water injection rate.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Permittee shall keep a record of date, time, fuel flow rate, ambient temperature, specific humidity, water injection rate calculated by the algorithm, and actual water injection rate. [N.J.A.C. 7:27-22.16(o)]	Other (provide description): Other Submit with the Semi-annual Monitoring and Deviation Report electronically, the details of any hour, during the reporting period, when the actual water injection rate was less than the water injection rate calculated by the Water Injection Algorithm. This will include the date, time, fuel flow rate, ambient temperature, specific humidity, water injection rate calculated by the algorithm, and actual water injection rate. [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
49	Water Injection Algorithm Changes: If, due to a combustion adjustment, it becomes necessary for the water injection algorithm constants (K, B, T, H, and MIN) defined in REF #42, to be redefined (revised), in order to maintain compliance with the NOx and CO emission limits in this permit, the Permittee shall submit a written notice to the Department, within 3 business days of determination of the revised values. The notice shall explain the need for the change and identify the revised value and the current value for each constant. The notice shall include actual emission data corresponding to each set of constant values. The emission data corresponding to the revised values shall be based on operation after the combustion adjustment. The emission data corresponding to the current values shall be based on operation prior to the combustion adjustment, but within the past 12 months. The permittee may operate in compliance with the revised values which will become effective immediately upon determination. The permittee shall request that the revised values be included in the operating permit during the next modification or renewal that is submitted to the Department. The permittee shall maintain, on site, as an attachment to the current permit, a copy of any such notice submitted to the Department. The Department reserves the right to require further justification for this change once it recieves this notice. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Permittee shall maintain revised and currently approved water injection algorithm constant values as well as emission data corresponding to each set of constants and shall make this information available to the Department upon request. Permittee shall also maintain, as an attachment to the current operating permit, and make available to the Department upon request, a copy of any notice submitted to the Department in accordance with this applicable requirement.[N.J.A.C. 7:27-22.16(o)].	Submit a report: Upon occurrence of event. Permittee shall submit a written notice to the Department, within 3 business days of the revision of the water injection algorithm constants. The submittal shall be addressed to the Bureau or Air Permits as well as the Central Regional Enforcement Office. The notice shall explain the need for the change and identify the revised value and the currently approved value for each constant. The notice shall also be accompanied by actual emission data corresponding to each set of constant values (revised values and currently approved values). The emission data corresponding to the revised values shall be based on operation after the combustion adjustment. The emission data corresponding to the currently approved values shall be based on operation prior to the combustion adjustment, but within the past 12 months. [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U4319 Combustion turbine - simple cycle, CT-2**

Operating Scenario: **OS1 Combustion turbine, simple cycle - natural gas firing (primary fuel)**

The requirements for this item are identical to those for: U4318 OS1

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U4319 Combustion turbine - simple cycle, CT-2**

Operating Scenario: **OS2 Combustion turbine, simple cycle - #2FO firing (secondary fuel)**

The requirements for this item are identical to those for: U4318 OS2

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U4320 Combustion turbine - simple cycle, CT-3**

Operating Scenario: **OS1 Combustion turbine, simple cycle - natural gas firing (primary fuel)**

The requirements for this item are identical to those for: U4318 OS1

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U4320 Combustion turbine - simple cycle, CT-3**

Operating Scenario: **OS2 Combustion turbine, simple cycle - #2FO firing (secondary fuel)**

The requirements for this item are identical to those for: U4318 OS2

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U4321 Combustion turbine - simple cycle, CT-4**

Operating Scenario: **OS1 Combustion turbine, simple cycle - natural gas firing (primary fuel)**

The requirements for this item are identical to those for: U4318 OS1

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U4321 Combustion turbine - simple cycle, CT-4**

Operating Scenario: **OS2 Combustion turbine, simple cycle - #2FO firing (secondary fuel)**

The requirements for this item are identical to those for: U4318 OS2

SAYREVILLE GENERATING STATION (17884)
BOP200001

New Jersey Department of Environmental Protection
Facility Profile (General)

Facility Name (AIMS): Sayreville Generating Station

Facility ID (AIMS): 17884

Street Address:
SAYREVILLE POWER LLC
SAYREVILLE GENERATING STA
7702 RIVER RD
SAYREVILLE BORO, NJ 08872

Mailing Address:
SAYREVILLE POWER LLC
GILBERT GENERATING STA
315 RIEGELSVILLE RD
MILFORD, NJ 08848

State Plane Coordinates:

X-Coordinate:	40
Y-Coordinate:	74
Units:	Long/Lat
Datum:	Unknown
Source Org.:	Address Match
Source Type:	Approx. Addr. Match

County: Middlesex

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: GenOn Holdings, Inc.
Org. Type: Private
Name: David S. Cramer
NJ EIN: 00000000000
Title: Director, Environmental
Phone: (202) 359-5361 x
Fax: ( ) - x
Other: (202) 359-5361 x
Type: Mobile
Email: david.cramer@genon.com
Mailing Address: Gilbert Generating Station
315 Riegelsville Rd.
Milford, NJ 08848

Contact Type: BOP - Operating Permits

Organization: GenOn Holdings, Inc.
Org. Type: Private
Name: David S. Cramer
NJ EIN: 00000000000
Title: Director, Environmental
Phone: (202) 359-5361 x
Fax: ( ) - x
Other: (202) 359-5361 x
Type: Mobile
Email: david.cramer@genon.com
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315 Riegelsville Rd.
Milford, NJ 08848

Contact Type: Consultant

Organization: Environmental Resources Management
Org. Type: Corporation
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NJ EIN:
Title: Principal Consultant, Engineering
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Suite #160
Ewing, NJ 08628

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Delegated Authority

Organization: Sayreville Power LLC
Name: Neil C. MacIntosh
Title: Plant Manager
Phone: (908) 995-6922 x
Fax: (908) 995-6990 x
Other: (732) 539-3150 x
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Email: neil.macintosh@GenOn.com

Org. Type: LLC
NJ EIN: 00000000000

Mailing Address:
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Milford, NJ 08848

Contact Type: Emission Statements

Organization: Sayreville Power LLC
Name: Kevin R. Shumaker
Title: Air Quality Specialist
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Fax: (724) 597-8870 x
Other: (724) 809-3400 x
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Email: kevin.shumaker@GenOn.com

Org. Type: LLC
NJ EIN: 00000000000

Mailing Address:
Gilbert Generating Station
315 Riegelsville Rd
Milford, NJ 08848

Contact Type: Environmental Officer

Organization: GenOn Holdings, Inc.
Name: Mark A. Gouveia
Title: Senior Vice President
Phone: (301) 843-4555 x
Fax: (202) 585-3806 x
Other: (202) 246-1020 x
Type: Mobile
Email: Mark.Gouveia@genon.com

Org. Type: Private
NJ EIN: 00000000000

Mailing Address:
GenOn Holdings, Inc.
1360 Post Oak Blvd.
Suite 2000
Houston, TX 77056

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Fees/Billing Contact

Organization: Sayreville Power LLC
Name: Neil C. MacIntosh
Title: Plant Manager
Phone: (908) 995-6922 x
Fax: (908) 995-6990 x
Other: (732) 539-3150 x
Type: Mobile
Email: neil.macintosh@GenOn.com

Org. Type: LLC
NJ EIN:

Mailing Address: Gilbert Generating Station
315 Riegelsville Rd
Milford, NJ 08848

Contact Type: General Contact

Organization: Sayreville Power LLC
Name: Neil C. MacIntosh
Title: Plant Manager
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Fax: (908) 995-6990 x
Other: (732) 539-3150 x
Type: Mobile
Email: Neil.MacIntosh@genon.com

Org. Type: LLC
NJ EIN: 00000000000

Mailing Address: Gilbert Generating Station
315 Riegelsville Rd.
Milford, NJ 08848

Contact Type: On-Site Manager

Organization: Sayreville Power LLC
Name: Neil C. MacIntosh
Title: Plant Manager
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Fax: (908) 995-6990 x
Other: (732) 539-3150 x
Type: Mobile
Email: Neil.MacIntosh@genon.com

Org. Type: LLC
NJ EIN: 00000000000

Mailing Address: Gilbert Generating Station
315 Riegelsville Rd.
Milford, NJ 08848

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Operator

Organization: Sayreville Power LLC
Org. Type: LLC
Name: Sayreville Power LLC
NJ EIN: 00000000000
Title: Owner/Operator
Phone: (301) 843-4555 x
Fax: (301) 843-4552 x
Other: (202) 580-5611 x
Type: Mobile
Email: Mark.Gouveia@genon.com

Mailing Address:
GenOn Holdings, Inc.
1360 Post Oak Blvd.
Suite 2000
Houston, TX 77056

Contact Type: Owner (Current Primary)

Organization: Sayreville Power LLC
Org. Type: LLC
Name: Sayreville Power LLC
NJ EIN: 00000000000
Title: Owner/Operator
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Fax: (301) 843-4552 x
Other: (202) 580-5611 x
Type: Mobile
Email: Mark.Gouveia@genon.com

Mailing Address:
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1360 Post Oak Blvd.
Suite 2000
Houston, TX 77056

Contact Type: Responsible Official

Organization: GenOn Holdings, Inc
Org. Type: Private
Name: Mark A. Gouveia
NJ EIN: 00000000000
Title: Vice President
Phone: (301) 847-7706 x
Fax: (301) 843-4552 x
Other: (202) 580-5611 x
Type: Mobile
Email: mark.gouveia@GenOn.com

Mailing Address:
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Suite 2000
Houston, TX 77056

SAYREVILLE GENERATING STATION (17884) Date: 01/24/2023
BOP200001

New Jersey Department of Environmental Protection
Non-Source Fugitive Emissions

FG NJID	Description of Activity Causing Emission	Location Description	Reasonable Estimate of Emissions (tpy)								
			VOC (Total)	NOx	CO	SO	TSP (Total)	PM-10	Pb	HAPS (Total)	Other (Total)
FG1	Flanges		0.150	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
FG2	Valves		0.150	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
FG3	Pumps		0.150	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
FG4	Paints,solvents,cleaners		0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
Total			0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000

SAYREVILLE GENERATING STATION (17884)
BOP200001

Date: 1/24/2023

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	Tanks < 10,000 gallons and vapor pressure <0.02 psia	Storage Vessel		0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS2	Two Insignificant Liquid Storage Tanks or Vessels (1,386,000 gal and 714,000 gal)	Storage Vessel		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS3	Spray operations <0.5 gal/hr and <2.5 gal/day	Other Equipment		0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS5	Misc. combustion <1 MMBTU/hr	Fuel Combustion Equipment (Other)		0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS6	4,000 gallons capacity fuel additive tank	Storage Vessel										
IS7	995 gallon capactiy gasoline Tank	Storage Vessel		0.490	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS8	700 gallons capacity fire foam tank	Storage Vessel		0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS9	1,000 gallons capacity fuel addtive tank	Storage Vessel		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS10	10,630 gallons aqueous ammonia tank	Storage Vessel		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
Total				0.716	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000

SAYREVILLE GENERATING STATION (17884) Date: 1/24/2023

BOP200001

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
E1	Fire Pump	1.59 MMBtu/hr (HHV) Fire Pump (164 kW)	Emergency Fire Pump		8/1/2014	No		
E18	SCT-1	Combustion turbine, simple cycle	Combustion Turbine	128679 Log #941771A		No	5/1/2015	
E19	SCT-2	Combustion turbine, simple cycle	Combustion Turbine	128680 Log #941772A		No	5/1/2015	
E20	SCT-3	Combustion turbine, simple cycle	Combustion Turbine	128681 Log #941773A		No	5/1/2015	
E21	SCT-4	Combustion turbine, simple cycle	Combustion Turbine	128682 Log #941800A		No	5/1/2015	

17884 SAYREVILLE GENERATING STATION BOP200001 E18 (Combustion Turbine)
Print Date: 1/3/2023

Make:			
Manufacturer:	Westinghouse		
Model:	501AA		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1,148.00		
Type of Turbine:	Industrial		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generato	Description:	
Power Output:	58.00	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:	Primary fuel - natural gas, Secondary fuel - #2 fuel oil		

17884 SAYREVILLE GENERATING STATION BOP200001 E19 (Combustion Turbine)
Print Date: 1/3/2023

Make:	
Manufacturer:	Westinghouse
Model:	501AA
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1,148.00
Type of Turbine:	Industrial
Type of Cycle:	Simple-Cycle — Description:
Industrial Application:	Electrical Generator — Description:
Power Output:	58.00 — 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: Primary fuel - natural gas, Secondary fuel - #2 fuel oil

17884 SAYREVILLE GENERATING STATION BOP200001 E20 (Combustion Turbine)
Print Date: 1/3/2023

Make:			
Manufacturer:	Westinghouse		
Model:	501AA		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1,148.00		
Type of Turbine:	Industrial		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generato	Description:	
Power Output:	58.00	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:	Primary fuel - natural gas, Secondary fuel - #2 fuel oil		

17884 SAYREVILLE GENERATING STATION BOP200001 E21 (Combustion Turbine)
Print Date: 1/3/2023

Make:			
Manufacturer:	Westinghouse		
Model:	501AA		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1,148.00		
Type of Turbine:	Industrial		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Electrical Generato	Description:	
Power Output:	58.00	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:	Primary fuel - natural gas, Secondary fuel - #2 fuel oil		

SAYREVILLE GENERATING STATION (17884) Date: 1/24/2023

BOP200001

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
CD1	SCR for CT1	SCR NOX Control Device for E18 (these conditions will be applicable on and after May 1, 2015, when SCR is commissioned and operational)	Selective Catalytic Reduction	5/1/2015	No		
CD2	SCR for CT2	SCR NOX Control Device for E19 (these conditions will be applicable on and after May 1, 2015, when SCR is commissioned and operational)	Selective Catalytic Reduction	5/1/2015	No		
CD3	SCR for CT3	SCR NOx Control Device for E20 (these conditions will be applicable on and after May 1, 2015, when SCR is commissioned and operational)	Selective Catalytic Reduction	5/1/2015	No		
CD4	SCR for CT4	SCR NOx Control Device for E21 (these conditions will be applicable on and after May 1, 2015, when SCR is commissioned and operational)	Selective Catalytic Reduction	5/1/2015	No		

17884 SAYREVILLE GENERATING STATION BOP200001 CD1 (Selective Catalytic Reduction)
Print Date: 1/3/2023

Make:	
Manufacturer:	Haldor Topsoe
Model:	GT-301
Minimum Temperature at Catalyst Bed (°F):	500
Maximum Temperature at Catalyst Bed (°F):	850
Minimum Temperature at Reagent Injection Point (°F):	500
Maximum Temperature at Reagent Injection Point (°F):	850
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH4OH
Minimum Reagent Charge Rate (gpm):	0.5
Maximum Reagent Charge Rate (gpm):	2.2
Minimum Concentration of Reagent in Solution (% Volume):	19
Minimum NOx to Reagent Mole Ratio:	1.1
Maximum NOx to Reagent Mole Ratio:	1.38
Maximum Anticipated Ammonia Slip (ppm):	10
Type of Catalyst:	Corrugated Plate
Volume of Catalyst (ft^3):	1306
Form of Catalyst:	Modules
Anticipated Life of Catalyst:	3000
Units:	hours
Have you attached a catalyst replacement schedule?	○ Yes ● No
Method of Determining Breakthrough:	Higher than expected ammonia slip
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 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

17884 SAYREVILLE GENERATING STATION BOP200001 CD1 (Selective Catalytic Reduction)
Print Date: 1/3/2023

Comments:

17884 SAYREVILLE GENERATING STATION BOP200001 CD2 (Selective Catalytic Reduction)
Print Date: 1/3/2023

Make:	
Manufacturer:	Haldor Topsoe
Model:	GT-301
Minimum Temperature at Catalyst Bed (°F):	500
Maximum Temperature at Catalyst Bed (°F):	850
Minimum Temperature at Reagent Injection Point (°F):	500
Maximum Temperature at Reagent Injection Point (°F):	850
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH4OH
Minimum Reagent Charge Rate (gpm):	0.5
Maximum Reagent Charge Rate (gpm):	2.2
Minimum Concentration of Reagent in Solution (% Volume):	19
Minimum NOx to Reagent Mole Ratio:	1.1
Maximum NOx to Reagent Mole Ratio:	1.38
Maximum Anticipated Ammonia Slip (ppm):	10
Type of Catalyst:	Corrugated Plate
Volume of Catalyst (ft^3):	1306
Form of Catalyst:	Modules
Anticipated Life of Catalyst:	3000
Units:	hours
Have you attached a catalyst replacement schedule?	○ Yes ● No
Method of Determining Breakthrough:	Higher than expected ammonia slip
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 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:

17884 SAYREVILLE GENERATING STATION BOP200001 CD3 (Selective Catalytic Reduction)
Print Date: 1/3/2023

Make:	
Manufacturer:	Haldor Topsoe
Model:	GT-301
Minimum Temperature at Catalyst Bed (°F):	500
Maximum Temperature at Catalyst Bed (°F):	850
Minimum Temperature at Reagent Injection Point (°F):	500
Maximum Temperature at Reagent Injection Point (°F):	850
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH4OH
Minimum Reagent Charge Rate (gpm):	0.5
Maximum Reagent Charge Rate (gpm):	2.2
Minimum Concentration of Reagent in Solution (% Volume):	19
Minimum NOx to Reagent Mole Ratio:	1.1
Maximum NOx to Reagent Mole Ratio:	1.38
Maximum Anticipated Ammonia Slip (ppm):	10
Type of Catalyst:	Corrugated Plate
Volume of Catalyst (ft^3):	1306
Form of Catalyst:	Modules
Anticipated Life of Catalyst:	3000
Units:	hours
Have you attached a catalyst replacement schedule?	○ Yes ● No
Method of Determining Breakthrough:	Higher than expected ammonia slip
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 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

17884 SAYREVILLE GENERATING STATION BOP200001 CD3 (Selective Catalytic Reduction)
Print Date: 1/3/2023

Comments:

17884 SAYREVILLE GENERATING STATION BOP200001 CD4 (Selective Catalytic Reduction)
Print Date: 1/3/2023

Make:	
Manufacturer:	Haldor Topsoe
Model:	GT-301
Minimum Temperature at Catalyst Bed (°F):	500
Maximum Temperature at Catalyst Bed (°F):	850
Minimum Temperature at Reagent Injection Point (°F):	500
Maximum Temperature at Reagent Injection Point (°F):	850
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH4OH
Minimum Reagent Charge Rate (gpm):	0.5
Maximum Reagent Charge Rate (gpm):	2.2
Minimum Concentration of Reagent in Solution (% Volume):	19
Minimum NOx to Reagent Mole Ratio:	1.1
Maximum NOx to Reagent Mole Ratio:	1.38
Maximum Anticipated Ammonia Slip (ppm):	10
Type of Catalyst:	Corrugated Plate
Volume of Catalyst (ft^3):	1306
Form of Catalyst:	Modules
Anticipated Life of Catalyst:	3000
Units:	hours
Have you attached a catalyst replacement schedule?	○ Yes ● No
Method of Determining Breakthrough:	Higher than expected ammonia slip
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 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

17884 SAYREVILLE GENERATING STATION BOP200001 CD4 (Selective Catalytic Reduction)
Print Date: 1/3/2023

Comments:

SAYREVILLE GENERATING STATION (17884)
BOP200001

Date: 1/24/2023

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.		
PT1	Fire Pump	Fire Pump E1 Stack	Round	7	16	657			986.0			1,189.0	Up	
PT18	SCT- 1	Combustion turbine - simple cycle	Rectangle	156	120	606	820.0	781.0	858.0	1,100,000.0	590,000.0	1,610,000.0	Up	
PT19	SCT- 2	Combustion turbine - simple cycle	Rectangle	156	120	525	820.0	781.0	858.0	1,100,000.0	590,000.0	1,610,000.0	Up	
PT20	SCT- 3	Combustion turbine - simple cycle	Rectangle	156	120	444	820.0	781.0	858.0	1,100,000.0	590,000.0	1,610,000.0	Up	
PT21	SCT- 4	Combustion turbine - simple cycle	Rectangle	156	120	400	820.0	781.0	858.0	1,100,000.0	590,000.0	1,610,000.0	Up	

SAYREVILLE GENERATING STATION (17884)
BOP200001

Date: 1/24/2023

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

U 1 Fire Pump Emergency Fire Pump, 164 kW

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	Fire Pump	1.59 MMBtu/hr (HHV) Fire Pump (164 kW), #2 fuel oil, 100 hrs/yr	Normal - Steady State	E1		PT1								

U 4318 SCT-1 Combustion turbine - simple cycle, CT-1

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	SCT-1	Combustion turbine, simple cycle - natural gas firing (primary fuel)	Normal - Steady State	E18	CD1 (P)	PT18	2-01-002-01 2-03-001-01	0.0	3,000.0		650,000.0	1,340,000.0	749.0	900.0
OS2	SCT-1	Combustion turbine, simple cycle - #2FO firing (secondary fuel)	Normal - Steady State	E18	CD1 (P)	PT18	2-03-001-01 2-01-001-01	0.0	3,000.0		650,000.0	1,340,000.0	749.0	900.0

SAYREVILLE GENERATING STATION (17884)
BOP200001

Date: 1/24/2023

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

U 4319 SCT-2 Combustion turbine - simple cycle, CT-2

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	SCT-2	Combustion turbine, simple cycle - natural gas firing (primary fuel)	Normal - Steady State	E19	CD2 (P)	PT19	2-01-002-01 2-03-001-01	0.0	3,000.0		650,000.0	1,340,000.0	749.0	900.0
OS2	SCT-2	Combustion turbine, simple cycle - #2FO firing (secondary fuel)	Normal - Steady State	E19	CD2 (P)	PT19	2-01-001-01 2-03-001-01	0.0	3,000.0		650,000.0	1,340,000.0	749.0	900.0

U 4320 SCT-3 Combustion turbine - simple cycle, CT-3

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	SCT-3	Combustion turbine, simple cycle - natural gas firing (primary fuel)	Normal - Steady State	E20	CD3 (P)	PT20	2-01-002-01 2-03-001-01	0.0	3,000.0		650,000.0	1,340,000.0	749.0	900.0
OS2	SCT-3	Combustion turbine, simple cycle - #2FO firing (secondary fuel)	Normal - Steady State	E20	CD3 (P)	PT20	2-03-001-01 2-01-002-01	0.0	3,000.0		650,000.0	1,340,000.0	749.0	900.0

SAYREVILLE GENERATING STATION (17884)
BOP200001

Date: 1/24/2023

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

U 4321 SCT-4 Combustion turbine - simple cycle, CT-4

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	SCT-4	Combustion turbine, simple cycle - natural gas firing (primary fuel)	Normal - Steady State	E21	CD4 (P)	PT21	2-01-002-01 2-03-001-01	0.0	3,000.0		650,000.0	1,340,000.0	749.0	900.0
OS2	SCT-4	Combustion turbine, simple cycle - #2FO firing (secondary fuel)	Normal - Steady State	E21	CD4 (P)	PT21	2-01-001-01 2-03-001-01	0.0	3,000.0		650,000.0	1,340,000.0	749.0	900.0

Date: 1/24/2023

New Jersey Department of Environmental Protection
Subject Item Group Inventory

Group NJID: GR1 4 SC Turbine

Members:

Type	ID	OS	Step
U	U 4318	OS0 Summary	
U	U 4319	OS0 Summary	
U	U 4320	OS0 Summary	
U	U 4321	OS0 Summary	

Formal Reason(s) for Group/Cap:

☑ Other

Other (explain):

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 Turbine Test

Members:

Type	ID	OS	Step
U	U 4318	OS0 Summary	
U	U 4319	OS0 Summary	
U	U 4320	OS0 Summary	
U	U 4321	OS0 Summary	

Formal Reason(s) for Group/Cap:

☑ Other

Other (explain): Alternate Emission Monitoring Plan

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

Requirement to stack test each turbine every 5 years will no longer apply as long as the turbine is operated in accordance with the definition of "peaking turbine" at 40 CFR 72.2 - instead NOx and CO emissions from each turbine must be tested with a periodic emission monitoring device every year and reference method stack testing must be conducted for NOx, CO and VOC (when combusting ULSD (or ULSD mix as permitted)) and for NOx and CO (when combusting natural gas) every 10 years (see schedule in appendix III). Reference method stack testing must also be conducted on a representative unit for TSP and PM-10 (when combusting ULSD (or ULSD mix as permitted)) and for PM-10 (when combusting natural gas) every 10 years (see schedule in appendix IV).

Operating Circumstances:

Emission Testing

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

State of New Jersey
DEPARTMENT of ENVIRONMENTAL PROTECTION

Division of Air Quality
Bureau of Air Permits
401 E. State Street, 2nd floor, P.O. Box 420, Mail Code 401-02
Trenton, NJ 08625-0420

BOB MARTIN
Commissioner

Appendix I

PHASE II ACID RAIN RETIRED UNIT EXEMPTION

Issued to: Sayreville Generating Station
River Road
Sayreville, New Jersey 08872

Boiler ID#: Unit No. 07 and 08

Owned by: GenOn REMA, LLC
NRG Energy, Inc.
8301 Professional Place, Suite 230
Landover, MD 20785

Operated by: GenOn REMA, LLC
NRG Energy, Inc.
8301 Professional Place, Suite 230
Landover, MD 20785

ORIS Code: 2390

Effective: February 15, 2004

This Acid Rain Retired Unit Exemption 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 the affected unit referenced by this approval shall comply with all of the requirements established herein.

Pursuant to 40 CFR 72.8(d)(2), this above-referenced unit shall not resume operation unless the Designated Representative of this facility submits a complete Acid Rain permit application meeting the requirements of 40 CFR 72.31 not less than 24 months prior to the later of January 1, 2000 or the date on which the unit is first to resume operation.

Approved by:

Yogesh Doshi
Supervisor, Bureau of Air Permits

RETIRED UNIT EXEMPTION CONTENTS

1. Statutory and Regulatory Authority

In accordance with N.J.A.C. 7:27 et seq. and Title IV of the Clean Air Act, the Department exempts this unit from the Phase II permitting requirements of 40 CFR 72, except for the requirements specified in 40 CFR 72.2 through 72.6, 72.8, 72.10 through 72.13, and Subpart B of 40 CFR 73. In addition, this unit is exempted from the 40 CFR 75 Phase II monitoring requirements.

2. Conditions, Notes, and Justifications that Apply to this Unit

This unit shall not emit any sulfur dioxide or oxides of nitrogen starting on the date the units are exempted. The owners and operators of the unit will be allocated allowances in accordance with Subpart B of 40 CFR 73.

The owners and operators, and to the extent practicable, the designated representative, shall comply with the requirements of the Acid Rain Program concerning all periods for which the units are not exempted. This exemption shall not be a defense against any violation of such requirements of the acid rain program whether the violation occurs before or after the exemption takes effect.

For any period for which this unit is exempt, the unit is not an affected unit under the Acid Rain Program and 40 CFR Parts 70 and 71, and is not eligible to be an opt-in source under 40 CFR Part 74. As an unaffected unit, this unit shall continue to be subject to any other applicable requirements under 40 CFR Parts 70 and 71.

For a period of 5 years from the date the records are created, the owners and operators of this unit shall retain such records at the source, including records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Administrator or the permitting authority. The owners and operators bear the burden of proof that the unit is permanently retired.

Loss of exemption

On the earlier of the following dates, this exempted unit shall lose its exemption and become an affected unit under the Acid Rain Program and 40 CFR Parts 70 and 71:

> The date on which the designated representative submits an Acid Rain permit application under 40 CFR 72.8(d)(2); or
>
> The date on which the designated representative is required under 40 CFR 72.8(d)(2) to submit an Acid Rain permit application.

For the purpose of applying monitoring requirements under 40 CFR Part 75, a unit that loses its exemption in accordance with the above, shall be treated as a new unit that commenced commercial operation on the first date on which the unit resumes operation.

3. Retired Unit Exemption Application

The owners and operators shall comply with all of the special provisions set forth on the attached Retired Unit Exemption application for this unit.

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Retired Unit Exemption

For more information, see instructions and refer to 40 CFR 72.8

This submission is: [X] New [ ] Revised

STEP 1
Identify the unit by plant name, State, ORIS Code, and unit ID#.

Plant Name Sayreville	State NJ	002390 ORIS Code	07 Unit ID#

STEP 2
Identify the date on which the unit was (or will be) permanently retired.

February 15, 2004.

STEP 3
Identify the first full calendar year in which the unit meets (or will meet) the requirements of 40 CFR 72.8(d).

January 1, 2005.

STEP 4
Read the special provisions.

Special Provisions

(1) A unit exempt under 40 CFR 72.8 shall not emit any sulfur dioxide and nitrogen oxides starting on the date that the exemption takes effect. The owners and operators of the unit will be allocated allowances in accordance with 40 CFR part 73 subpart B. If the unit is a Phase I unit, for each calendar year in Phase I, the designated representative of the unit shall submit a Phase I permit application in accordance with 40 CFR part 72 subparts C and D and an annual certification report in accordance with 40 CFR 72.90 through 72.92 and is subject to 40 CFR 72.95 and 72.96.
(2) A unit exempt under 40 CFR 72.8 shall not resume operation unless the designated representative of the source that includes the unit submits a complete Acid Rain permit application under 40 CFR 72.31 for the unit not less than 24 months prior to the later of January 1, 2000 or the date on which the unit is first to resume operation.
(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under 40 CFR 72.8 shall comply with the requirements of the Acid Rain Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.
(4) For any period for which a unit is exempt under 40 CFR 72.8, the unit is not an affected unit under the Acid Rain Program and 40 CFR parts 70 and 71 and is not eligible to be an opt-in source under 40 CFR part 74. As an unaffected unit, the unit shall continue to be subject to any other applicable requirements under 40 CFR parts 70 and 71.
(5) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under 40 CFR 72.8 shall retain at the source that includes the unit records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Administrator or the permitting authority. The owners and operators bear the burden of proof that the unit is permanently retired.
(6) On the earlier of the following dates, a unit exempt under paragraph 40 CFR 72.8(b) or (c) shall lose its exemption and become an affected unit under the Acid Rain Program and 40 CFR parts 70 and 71: (i) the date on which the designated representative submits an Acid Rain permit application under paragraph (2); or (ii) the date on which the designated representative is required under paragraph (2) to submit an Acid Rain permit application. For the purpose of applying monitoring requirements under 40 CFR part 75, a unit that loses its exemption under 40 CFR 72.8 shall be treated as a new unit that commenced commercial operation on the first date on which the unit resumes operation.

Plant Name (from Step 1) Sayreville	Retired Unit Exemption Page 2

STEP 5
Read the appropriate certification and sign and date.

Certification (for designated representatives only)

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 Stephen S. Davies	
Signature Stephen S. Davies	Date 3/3/04

Certification (for certifying officials only)

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	Title
Company Owner Name	
Phone	Email Address
Signature	Date

Certification (for additional certifying officials, if applicable)

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	Title
Company Owner Name	
Phone	Email Address
Signature	Date

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Retired Unit Exemption

For more information, see instructions and refer to 40 CFR 72.8

This submission is: [X] New [ ] Revised

STEP 1
Identify the unit by plant name, State, ORIS Code, and unit ID#.

Plant Name	State	ORIS Code	Unit ID#
Sayreville	NJ	002390	08

STEP 2
Identify the date on which the unit was (or will be) permanently retired.

February 15, 2004

STEP 3
Identify the first full calendar year in which the unit meets (or will meet) the requirements of 40 CFR 72.8(d).

January 1, 2004

STEP 4
Read the special provisions.

Special Provisions

(1) A unit exempt under 40 CFR 72.8 shall not emit any sulfur dioxide and nitrogen oxides starting on the date that the exemption takes effect. The owners and operators of the unit will be allocated allowances in accordance with 40 CFR part 73 subpart B. If the unit is a Phase I unit, for each calendar year in Phase I, the designated representative of the unit shall submit a Phase I permit application in accordance with 40 CFR part 72 subparts C and D and an annual certification report in accordance with 40 CFR 72.90 through 72.92 and is subject to 40 CFR 72.95 and 72.96.
(2) A unit exempt under 40 CFR 72.8 shall not resume operation unless the designated representative of the source that includes the unit submits a complete Acid Rain permit application under 40 CFR 72.31 for the unit not less than 24 months prior to the later of January 1, 2000 or the date on which the unit is first to resume operation.
(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under 40 CFR 72.8 shall comply with the requirements of the Acid Rain Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.
(4) For any period for which a unit is exempt under 40 CFR 72.8, the unit is not an affected unit under the Acid Rain Program and 40 CFR parts 70 and 71 and is not eligible to be an opt-in source under 40 CFR part 74. As an unaffected unit, the unit shall continue to be subject to any other applicable requirements under 40 CFR parts 70 and 71.
(5) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under 40 CFR 72.8 shall retain at the source that includes the unit records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Administrator or the permitting authority. The owners and operators bear the burden of proof that the unit is permanently retired.
(6) On the earlier of the following dates, a unit exempt under paragraph 40 CFR 72.8(b) or (c) shall lose its exemption and become an affected unit under the Acid Rain Program and 40 CFR parts 70 and 71: (i) the date on which the designated representative submits an Acid Rain permit application under paragraph (2); or (ii) the date on which the designated representative is required under paragraph (2) to submit an Acid Rain permit application. For the purpose of applying monitoring requirements under 40 CFR part 75, a unit that loses its exemption under 40 CFR 72.8 shall be treated as a new unit that commenced commercial operation on the first date on which the unit resumes operation.

Plant Name (from Step 1) Sayreville	Retired Unit Exemption Page 2

STEP 5
Read the appropriate certification and sign and date.

Certification (for designated representatives only)

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 Stephen S. Davies	
Signature Stephen S. Davies	Date 3/3/04

Certification (for certifying officials only)

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	Title
Company Owner Name	
Phone	Email Address
Signature	Date

Certification (for additional certifying officials, if applicable)

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	Title
Company Owner Name	
Phone	Email Address
Signature	Date

Appendix II

Cross-State Air Pollution Rule (CSAPR) Title V requirements for

- **CSAPR NOx Annual Trading Program,**
- **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.

APPENDIX III

Facility Name: SAYREVILLE GENERATING STATION
Program Interest Number: 1 7 8 84

Alternative Emission Monitoring Plan

For

Gaseous Pollutant

Of

Peaking Turbines

Appendix III:
Alternative Emission Testing Schedule for Gaseous Pollutants

Unit ID	EU ID	Svc. Hrs./ Yr - 5-Yr Avg	1998	1999	2000	2001	2002	2003	2004	*2005*	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Gilbert C/C Stag 4 GT	U2210	655.77							Aug-04			CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	C - VOC	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS
Gilbert C/C Stag 5 GT	U2211	670.90							Aug-04			CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	C - VOC	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS
Gilbert C/C Stag 6 GT	U2212	631.72							Aug-04			CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	C - VOC	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS
Gilbert C/C Stag 7 GT	U2213	651.05							Aug-04			CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	C - VOC	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS
Gilbert CT9	U2323	169.35									Aug-06	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	C	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS	CEMS
Sayreville Turbine (CT-1)	U4318	91.37	Apr-99					Sep-03						P	C	P	P	P	P	C	P	P	P	P	P	P	P	P	C
Sayreville Turbine (CT-2)	U4319	149.97						Sep-03						P	C	P	P	P	P	C	P	P	P	P	P	P	P	P	C
Sayreville Turbine (CT-3)	U4320	137.76	Apr-99											P	P	P	P		P	C	P	P	P	P	P	P	P	C	P
Sayreville Turbine (CT-4)	U4321	156.39	Apr-99					Sep-03						P	P	P	P		P	C	P	P	P	P	P	P	P	C	P

Key	Term of Operating Permit
	- Term of 1st. Operating
	- Term of 2nd. Operating
	- Term of 3rd. Operating
	- Term of 4th. Operating
Testing	
C	*- Compliance Test NOx, CO (on natural gas) / NOx, CO, VOC (on oil)*
C-VOC	- Compliance Test VOC (on oil only)
P	*- Periodic Emission Monitoring Testing for NOx, CO, and O2*
CEMS	*- Use of Certified CEMS - Gilbert CEMS were certified by NJDEP on the following dates:*
	Stag 4 – 08/18/95; Stag 5 – 06/28/95; Stag 6 – 06/28/95; Stag 7 – 06/28/95; CT-9 –

Notes

1. Compliance and Periodic Emission Monitoring Testing may be performed when the units are operating
2. *Advance notice to the NJDEP of Periodic Emission Monitoring Testing will be made as far in advance as possible (at least 24 hours*
3. *Advance notice to the NJDEP of Reference Method Stack Testing will be made as far in advance as possible (at least 7 days notice required; one week stack testing window must be scheduled with EMS at least 30 days in*

Note: In the event that the NJDEP is unavailable to witness the test, NRG shall be allowed to procced per schedule notification to minimize

4. Certified CEMS systems will be used in lieu of Periodic Emission Monitoring Testing
5. *Periodic Emission Monitoring Testing shall be performed annually. In addition, Combustion Adjustments shall be performed according to the manufacturer's recommended schedule (as required by the operating permit). Annual testing may be performed at time of*
6. Svc. Hrs./ Yr - 5-Yr Avg based on 2001 - 2005 operations.
7. *Testing may be scheduled prior to the year listed on this schedule, provided the necessary approvals of the test protocols and scheduling of mutually acceptable test dates with EMS*
8. EMS approved CEMS monitoring of CO and NOx emissions in leu of stack testing for these pollutants for Gilbert Stag 4, 5, 6

APPENDIX IV

Facility Name: SAYREVILLE GENERATING STATION
Program Interest Number: 17884

Alternative Emission Monitoring Plan

For

Particulate

Of

Peaking Turbines

Alternate Emission Monitoring Plan For Particulates

Unit ID	EU	Svc Hrs/Yr 5-yr Avg	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gilbert C/C Stag 4	2210	655.77						Aug-04										Test one of 4 units										Test one of 4 units					
Gilbert C/C Stag 5	2211	670.90						Aug-04																									
Gilbert C/C Stag 6	2212	631.72						Aug-04																									
Gilbert C/C Stag 7	2213	651.05						Aug-04																									
Gilbert CT9	2323	169.35								Aug-06			C-CT9						C-Gas				C-Oil						C-Gas				C-Oil
Sayreville CT-1	4318	91.37	Apr-99				Sep-03																										
Sayreville CT-2	4319	149.97					Sep-03												Test one of 4 units										Test one of 4 units				
Sayreville CT-3	4320	137.76	Apr-99																														
Sayreville CT-4	4321	156.39	Apr-99				Sep-03																										

Key

Term of Operating Permit

- -Term of 1st Operating Permit
- -Term of 2nd Operating Permit
- -Term of 3rd Operating Permit
- -Term of 4th Operating Permit
- -Term of 5th Operating Permit

Testing

- C -Compliance Test TSP & PM-10 (on oil) and PM-10 (on gas)
- C-CT9 -Compliance Test TSP & PM-10 (on oil)
- C-Gas -Compliance Test PM-10 (on gas)

Notes

1. Compliance Testing may be performed when the units are operating "in-market"

2. Advance notice to the NJDEP of Reference Method Stack Testing will be made as far in advance as possible (at least 7 days notice required; one week stack testing window must be scheduled with EMS at least 30 days in advance) Note: In the event that the NJDEP is unavailable to witness the test, NRG shall be allowed to procced per schedule notification to minimize economic loss.

3. Svc. Hrs./ Yr - 5-Yr Avg based on 2001 - 2005 operations.

4. Testing may be scheduled prior to the year listed on this schedule, provided the necessary approvals of the test protocols and scheduling of mutually acceptable test dates with EMS are obtained.

5. DEP shall choose the unit to be stack tested in each group of like turbines.