



State of New Jersey

Department of Environmental Protection

Air Quality, Energy and Sustainability

Division of Air Quality

Bureau of Stationary Sources

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PHILIP D. MURPHY

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Lt. Governor

Air Pollution Control Operating Permit Renewal

Permit Activity Number: BOP180001

Program Interest Number: 75482

Mailing Address	Plant Location
JOHN LILLIE DIRECTOR VINELAND CITY MUNICIPAL ELECTRIC UTILITY PO BOX 1508 Vineland, NJ 08362-1508	VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W Lubin Ln & New Peach St Vineland Cumberland County

Initial Operating Permit Approval Date: January 12, 2000

Operating Permit Approval Date: DRAFT

Operating Permit Expiration Date: January 11, 2025

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.

Consequently, pursuant to N.J.A.C. 7:27-22.33, all preconstruction permits and operating certificates issued to this facility have been incorporated in this operating permit.

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

PERMIT SHIELD

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

COMPLIANCE SCHEDULES

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

COMPLIANCE CERTIFICATIONS AND DEVIATION REPORTS

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

ACCESSING PERMITS

The facility's current approved operating permit and any previously issued permits (e.g. superseded, expired, or terminated) are available for download in PDF format at: <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](https://www.state.nj.us/dep/aqpp/applying.html) available at <https://www.state.nj.us/dep/aqpp/applying.html>.

If you have any questions regarding this permit approval, please call Aliya M. Khan at (609) 292-2169.

Approved by:

David J. Owen

Enclosure

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

**Facility Name: VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W
Program Interest Number: 75482
Permit Activity Number: BOP180001**

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Section A

**Facility Name: VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W
Program Interest Number: 75482
Permit Activity Number: BOP180001**

POLLUTANT EMISSIONS SUMMARY

Table 1: Total emissions from all Significant Source Operations¹ 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 ₂ e ²
Emission Units Summary	33.7	239	235	3.2	197	197	197	0.62	31.7	
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	33.7	239	235	3.2	197	197	197	0.12	31.9	326,028

Table 2: Estimate of total emissions from all Insignificant Source Operations¹ 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	3.140	0.25	0.05	0	0	0	0	0	0
Non-Source Fugitive Emissions ³	1.39	0	0	0	0.34	0.170	0.170	0	0

VOC: Volatile Organic Compounds TSP: Total Suspended Particulates PM_{2.5}: Particulates under 2.5 microns
 NO_x: Nitrogen Oxides Other: Any other air contaminant Pb: Lead
 CO: Carbon Monoxide regulated under the Federal CAA HAPs: Hazardous Air Pollutants
 SO₂: Sulfur Dioxide PM₁₀: Particulates under 10 microns CO₂e: 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 CO₂e 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: VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W
Program Interest Number: 75482
Permit Activity Number: BOP180001**

POLLUTANT EMISSIONS SUMMARY

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

HAP	TPY
Arsenic	0.15
Beryllium	0.014
Cadmium	0.03
Cobalt	0.05
Formaldehyde	2.0
HCL	23.7
HF	0.8
Lead	0.62
Manganese	0.58
Mercury	0.006
Nickel	1.9
Polycyclic Organic Matter	0.61
Phosphorus	0.63
Selenium	0.6

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

Other Air Contaminant	TPY
Methane	4.69
Ammonia	14.2

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: VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W
Program Interest Number: 75482
Permit Activity Number: BOP180001

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: VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W
Program Interest Number: 75482
Permit Activity Number: BOP180001**

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:

<u>SECTION</u>	<u>SUBJECT ITEM</u>	<u>ITEM #</u>	<u>REF. #</u>
B	---	1	---
B	---	13b	---
D	FC	---	3
D	FC	---	9
D	GR2	---	All

Section D

**Facility Name: VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W
Program Interest Number: 75482
Permit Activity Number: BOP180001**

FACILITY SPECIFIC REQUIREMENTS AND INVENTORIES

FACILITY SPECIFIC REQUIREMENTS PAGE INDEX

Subject Item and Name Page Number

Facility (FC):

FC	1
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Insignificant Sources (IS):

IS NJID	IS Description	
IS2	Small storage tanks (<2,000 gallons)	6
IS7	Parts cleaners (<6 sq. ft.)	7
IS9	Small fuel combustion sources (<1MMBtu/hr)	8

Groups (GR):

GR NJID	GR Designation	GR Description	
GR1	HEDD_PMP	Oxides of Nitrogen averaging plan between turbine and engine and periodic monitoring procedure apply to both equipment.	9
GR2	RGGI	RGGI Requirements	10

Emission Units (U):

U NJID	U Designation	U Description	
U1	CT	Operation of combustion turbine burning distillate oil	20
U2	CTSTART	Use of starter diesel engine burning distillate oil	44
U3	TANK-3	Storage of distillate oil	55

**VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W (75482)
BOP180001**

Date: 1/19/2021

**New Jersey Department of Environmental Protection
Reason for Application**

Permit Being Modified

Permit Class: BOP **Number:** 160004

**Description
of Modifications:** Operating Permit 5-year Renewal.

BOP180001

**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.

BOP180001

**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.

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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]

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	<p>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.</p> <p>[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)]</p>	None.	<p>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)].</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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]</p>
14	<p>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]</p>	None.	None.	<p>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)]</p>
15	<p>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]</p>	<p>Other: Comply with 40 CFR 68. [40 CFR 68].</p>	<p>Other: Comply with 40 CFR 68. [40 CFR 68].</p>	<p>Other (provide description): Other. Comply with 40 CFR 68 as described in the Applicable Requirement. [40 CFR 68]</p>

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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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Subject Item: IS2 Small storage tanks (<2,000 gallons)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight) for Zone 1. [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 the fuel was stored in New Jersey may be stored, offered for sale, sold, delivered or exchanged in trade, for use in New Jersey, after the effective date of the applicable standard in Table 1B. [N.J.A.C. 7:27- 9.2(a)]	None.	None.	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Subject Item: IS7 Parts cleaners (<6 sq. ft.)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	VOC (Total): Solvent cleaning machine shall have an open top less than six square feet or have a capacity less than 100 gallons. [N.J.A.C. 7:27-22.1]	Other: At the time of filling, confirm by MSDS or bill of lading.[40 CFR 63].	None.	None.

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Facility Specific Requirements**

Subject Item: IS9 Small fuel combustion sources (<1MMBtu/hr)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %. Smoke emissions from stationary internal combustion engines shall not exceed 20% opacity, 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]	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). [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.

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Facility Specific Requirements**

Subject Item: GR1 Oxides of Nitrogen averaging plan between turbine and engine and periodic monitoring procedure apply to both equipment.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	This stationary simple cycle gas turbine is an HEDD unit fired by distillate oil that must comply with Oxides of Nitrogen (N.J.A.C. 7:27-19.5) rule. Additionally, VMEU - West Station will also be required to keep the U2 Starter Engine into compliance with N.J.A.C. 7:27-19.8, through the revised NOx averaging plan dated May 2014. [N.J.A.C. 7:27-22.16(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). VMEU must demonstrate compliance with all the requirements of N.J.A.C. 7:27-19.5, and N.J.A.C. 7:27-19.8, through the NOx averaging plan dated May 2014. [N.J.A.C. 7:27-19.6(h)]
2	NOx (Total): VMEU - West Station must comply with all requirements of the NOx averaging plan proposed by the facility dated May, 2014, as approved by the Department, beginning May 1, 2015. [N.J.A.C. 7:27-19.6]	NOx (Total): Monitored by periodic emission monitoring at the approved frequency, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. [N.J.A.C. 7:27-19.6]	NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system at no required frequency. [N.J.A.C. 7:27-19.6]	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). [N.J.A.C. 7:27-19.6]
3	VMEU - West Station must comply with all the requirements of its NOx Averaging Plan at: 1. GR1 HEDD_PMP 2. U1 OS2 3. U2 OS Summary 4. U2 OS2 5. U2 OS3 [N.J.A.C. 7:27-19.6]	Other: VMEU - West Station must comply with all the requirements of its NOx Averaging Plan as approved and modified by the Department. [N.J.A.C. 7:27-19.6].	Other: VMEU - West Station must comply with all the requirements of its NOx Averaging Plan as approved and modified by the Department. [N.J.A.C. 7:27-19.6].	Submit a report: As per the approved schedule VMEU - West Station must comply with all the requirements of its NOx Averaging Plan as approved and modified by the Department. [N.J.A.C. 7:27-19.6]
4	NOx (Total) <= 4.3 lb/MMBTU. This limit is applicable to the 4.9 MMBtu/hr starter engine combusting ULSD. This emission limit is a NOx averaging plan limit. This limit will be in effect at all times, including startup, shutdown and maintenance periods. [N.J.A.C. 7:27-19.6]	NOx (Total): Monitored by periodic emission monitoring annually. Please see the requirements at U2 OS Summary for details. [N.J.A.C. 7:27-19]	NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. Please see the requirements at U2 OS Summary for details. [N.J.A.C. 7:27-19.6]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	NOx (Total) <= 15 grams/brake horsepower-hour. This limit is applicable to the 4.9 MMBtu/hr starter engine combusting ULSD. This emission limit is a NOx averaging plan limit. This limit will be in effect at all times, including startup, shutdown and maintenance periods. [N.J.A.C. 7:27-19.6]	NOx (Total): Monitored by periodic emission monitoring annually. Please see U2 OS Summary for details. [N.J.A.C. 7:27-19.6]	NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. Please see U2 OS Summary for details. [N.J.A.C. 7:27-19.6]	None.
6	NOx (Total) <= 1.5 lb/MW-hr. This emission limit is applicable to the 450 MMBtu/hr (HHV) combustion turbine combusting ULSD. This emission limit is a NOx averaging plan limit. This limit will be in effect at all times, including startup, shutdown and maintenance periods. [N.J.A.C. 7:27-19.6]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs (See U1, OS Summary STACK TESTING SUMMARY). [N.J.A.C. 7:27-19]	NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency (See U1, OS Summary STACK TESTING SUMMARY). [N.J.A.C. 7:27-19.6]	None.
7	The starter engine will run maximum of 20 minutes per each start-up event which is used for NOx averaging plan. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor each half hour during operation. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system each half hour during operation. Record total minute the starter engine ran per each event. [N.J.A.C. 7:27-22.16(o)]	None.

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Subject Item: GR2 RGGI Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>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:</p> <p>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;</p> <p>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;</p> <p>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)]</p>	<p>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)]</p>	<p>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]</p>	<p>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:</p> <p>i. For a unit that commences commercial operation before December 17, 2018, the calendar quarter beginning January 1, 2020; or</p> <p>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.</p> <p>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.</p> <p>The CO2 authorized account representative shall submit, to the Bureau of Energy and Sustainability, a compliance certification in support of each quarterly report, pursuant to N.J.A.C. 7:27C-8.5(c)3. [N.J.A.C. 7:27C-8.5(c)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<p>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)]</p>	<p>Other: The Permittee shall review any transactions recorded in its COATS account for accuracy.[N.J.A.C. 7:27-22.16(o)].</p>	None.	<p>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</p> <p>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)]</p>
3	<p>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:</p> <ol style="list-style-type: none"> 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)] 	<p>Other: The Permittee shall review any transactions recorded in its COATS account for accuracy.[N.J.A.C. 7:27-22.16(o)].</p>	None.	<p>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)]</p>

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

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	CO2: Copies of Documents & Reports [N.J.A.C. 7:27C- 1.4(o)]	None.	<p>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:</p> <ul style="list-style-type: none"> - 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. <p>[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]</p>	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.	<p>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):</p> <ol style="list-style-type: none"> 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: <p>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]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	<p>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]</p>	<p>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)]</p> <p>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)].</p>	<p>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)]</p>	<p>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)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	<p>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;</p> <p>shall, for each such monitoring system, determine, record and report, the necessary data as specified. [N.J.A.C. 7:27C- 8.1(e)]</p>	<p>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)].</p>	<p>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)]</p>	<p>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)]</p>
9	<p>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]</p>	<p>None.</p>	<p>None.</p>	<p>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]</p>

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

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	<p>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)]</p> <p>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)]</p> <p>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)]</p>	<p>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)].</p>	None.	<p>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)]</p>
12	<p>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)]</p>	None.	None.	<p>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]</p>

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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)]	<p>Other: The output monitoring plan shall include:</p> <ul style="list-style-type: none"> - 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)] <p>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].</p>	<p>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)].</p>	<p>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)]</p>

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Emission Unit: U1 Operation of combustion turbine burning distillate oil

Subject Item: CD1 Water injection system to control NO_x

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Water injection system shall be operated at all times the combustion turbine is operating, except during start-up and shut-down periods. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	Operate and maintain a monitoring system to monitor and record water injection rate and power output. [N.J.A.C. 7:27-22.16(e)]	Other: Water injection rate monitor and Load meter. Continuously[N.J.A.C. 7:27-22.16(e)].	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.
3	Except during start-up and shut-down periods, minimum water injection rate during normal operation of the combustion turbine shall not be lower than set forth in the Chart 1. [N.J.A.C. 7:27-22.16(e)]	Other: Water injection rate monitor and Load meter. Continuously[N.J.A.C. 7:27-22.16(e)].	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.

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Emission Unit: U1 Operation of combustion turbine burning distillate oil

Subject Item: CD3 SCR on Combustion Turbine U1

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The Selective Catalytic Reduction (SCR) system shall be used to reduce Nitrogen Oxides (NO _x) resulting from combustion in the turbine, at the recommended manufacturer's operating flue gas flowrate range, such that compliance with NO _x (Total) emissions limits as established for the turbine in this permit is maintained. [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.
2	The SCR (CD3) shall be operated at all times that the turbine is operating, except during start-up and shutdown. [N.J.A.C. 7:27-22.16(a)]	Other: The permittee shall record the time and duration of the operation of the SCR and the gas turbine.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall continuously record the time and duration of the operation of the gas turbine and the selective catalytic reduction unit (SCR). [N.J.A.C. 7:27-22.16(o)]	None.
3	Temperature at Exit of Catalyst >= 500 and Temperature at Exit of Catalyst <= 900 degrees F except during startups or shutdowns periods. [N.J.A.C. 7:27-22.16(a)]	None.	Temperature at Exit of Catalyst: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.
4	Ammonia Flow Rate to SCR >= 8.26 gallons NH ₃ per MGal oil burned, based on stack testing performed July 23, 2015. [N.J.A.C. 7:27-22.16(a)]	Ammonia Flow Rate to SCR: Monitored by material feed/flow monitoring continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	Ammonia Flow Rate to SCR: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Record ammonia flow rate to SCR. [N.J.A.C. 7:27-22.16(o)]	None.
5	The SCR shall be operated and reagent shall be injected at all times that the turbine is operating, except during periods of SCR start-up and SCR 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.
6	The SCR catalyst, array(s) shall be maintained and replaced in accordance with good engineering practices and based on NO _x 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 manual 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.

U1 Operation of combustion turbine burning distillate oil

CD3

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Emission Unit: U1 Operation of combustion turbine burning distillate oil

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR 97 - CSAPR [None]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<p>STACK TESTING SUMMARY:</p> <p>1) If the average capacity factor of the simple cycle combustion turbine (in terms of operating hours) exceeds 10% during the previous 3 calendar years and no more than 20% in any of those calendar years, the permittee shall conduct a stack test once per permit term, using an approved protocol to demonstrate compliance with emission limits for NOx, CO, VOC, TSP, and PM10, as specified in the compliance plan for U1 OS2, when burning ULSD.</p> <p>2) Within 6 months of the 10% capacity factor exceedance, submit a stack test protocol to the Department.</p> <p>The turbine shall be tested a maximum of once per permit term.</p> <p>When conducting stack emission testing, three tests shall be conducted at base load.</p> <p>Tests shall be conducted for OS2, while the SCR and the water injection system is in operation in accordance with Chart 1 in Appendix I.</p> <p>Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitoring as required under the applicable operating scenario(s).[N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario(s).[N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 as specified in the applicable requirement. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: http://www.epa.gov/ttnchie1/ert. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. A copy of the certified summary test results available prior to submission of the operating permit renewal application, which is at least 12 months prior to expiration of the Operating Permit, shall be submitted with the application.</p> <p>Test results shall be reported in lb/hr, lb/MMBTU (HHV), lb/MW-hr and ppm_{dv} @ 15% oxygen. [N.J.A.C. 7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	Opacity <= 20 %. Smoke emissions from stationary turbine shall not exceed 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	Other: Visual determination in accordance with N.J.A.C. 7:27B-2 shall be performed once every 100 hours of operation, as averaged over a compliance year. 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 determination exceed 125 hours of oil firing operation. If the visual determination 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.[N.J.A.C. 7:27-22.16(o)].	Opacity: Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency (See Applicable Requirement). [N.J.A.C. 7:27-22.16(o)]	None.
4	TSP <= 45 lb/hr Particulate emission limit from the combustion of fuel based on rated heat input of source at any time including start-up and shutdown periods. [N.J.A.C. 7:27- 4.2(a)]	TSP: Monitored by stack emission testing at the approved frequency, based on each of three Department validated stack test runs. (See U1, OS Summary STACK TESTING SUMMARY:). [N.J.A.C. 7:27- 4.2(a)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27- 4.2(a)]	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	CO <= 250 ppmvd @ 15% O2 at all times, including start up and shut down. [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 U1, OS Summary STACK TESTING SUMMARY:). [N.J.A.C. 7:27-16.9(b)]	CO: Recordkeeping by stack test results at the approved frequency. (See U1, OS Summary STACK TESTING SUMMARY:). [N.J.A.C. 7:27-16.9(b)]	None.
7	VOC (Total) <= 50 ppmvd @ 15% O2 at all times, including start up and shut down. [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 U1, OS Summary STACK TESTING SUMMARY:). [N.J.A.C. 7:27-16.9(c)]	VOC (Total): Recordkeeping by stack test results at the approved frequency. (See U1, OS Summary, STACK TESTING SUMMARY:). [N.J.A.C. 7:27-16.9(c)]	None.

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

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	The Permittee of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)]	Other: Monitor and maintain the operating parameter settings that are established after the combustion process is adjusted in order to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(g)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon performing combustion adjustment or by manual logging of parameter or storing data in a computer data system. The permittee shall record the following information for each adjustment in a log book or computer data system: 1. The date and times the adjustment began and ended; 2. The name, title, and affiliation of the person who performed the procedure and adjustment; 3. The type of procedure and maintenance performed; 4. The concentration of NO _x , CO, and O ₂ measured before and after the adjustment was made; and 5. The type and amount of fuel use over the 12 months prior to the adjustment. The records shall be kept for a minimum of 5 years and be readily accessible to the Department upon request. . [N.J.A.C. 7:27-19.16(h)]	None.
10	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.
11	Maximum Gross Heat Input <= 450 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(a)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	Fuel Oil Usage \leq 28.356 MMgal/yr. Fuel consumption per 365 consecutive days shall be calculated by the sum of the fuel consumed during any one day added to the sum of the fuel consumed during the preceding 364 days. Fuel Oil limited to ultra low sulfur distillate (ULSD) oil. [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(e)]	Fuel Oil Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage daily. Compliance shall be determined based on 365 consecutive day period. [N.J.A.C. 7:27-22.16(e)]	None.
13	NOx (Total) \leq 238 tons/yr. Annual emission limit based on maximum annual fuel use. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
14	CO \leq 234 tons/yr. Annual emission limit based on maximum annual fuel use. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
15	VOC (Total) \leq 33.5 tons/yr. Annual emission limit based on maximum annual fuel use. These VOC emissions include Formaldehyde emissions. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
16	SO2 \leq 3.2 tons/yr. Annual emission limit based on maximum annual fuel use. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
17	TSP \leq 197 tons/yr. Annual emission limit based on maximum annual fuel use. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
18	PM-10 (Total) \leq 197 tons/yr. Annual emission limit based on maximum annual fuel use. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
19	PM-2.5 (Total) \leq 197 tons/yr. Annual emission limit based on maximum annual fuel use. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	SO2 <= 0.32 lb/MMBTU. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	SO2: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. (See U1, OS Summary STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. [N.J.A.C. 7:27-22.16(o)]	None.
21	Ammonia <= 14.2 tons/yr based on 5.0 ppmvd@15%O2 Ammonia slip. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
22	Acetaldehyde <= 0.17 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
23	Acetophenone <= 0.101 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Acetophenone: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetophenone: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
24	Acrolein <= 0.132 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
25	Arsenic compounds <= 0.143 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Arsenic compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Arsenic compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
26	Benzene <= 4.65 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
27	Beryllium compounds <= 0.014 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Beryllium compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Beryllium compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
28	Butadiene (1,3-) <= 0.032 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
29	Cadmium compounds <= 0.03 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Cadmium compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
30	Cobalt compounds <= 0.07 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Cobalt compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cobalt compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
31	Ethylbenzene <= 0.458 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
32	Formaldehyde <= 2 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by scrubber liquor sampling (ASTM Method 3695-88) once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
33	HCl Emissions <= 23.7 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	HCl Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	HCl Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
34	Hydrogen fluoride <= 0.78 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Hydrogen fluoride: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Hydrogen fluoride: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
35	Lead compounds <= 0.12 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Lead compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Lead compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
36	Manganese compounds <= 0.574 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Manganese compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Manganese compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
37	Mercury compounds <= 0.006 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Mercury compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Mercury compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
38	Methane <= 3.94 tons/yr. Annual emission limit based on maximum annual fuel use. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
39	Naphthalene <= 0.404 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
40	Nickel compounds <= 1.82 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Nickel compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Nickel compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
41	Polycyclic organic matter <= 0.611 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
42	Selenium compounds <= 0.601 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Selenium compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Selenium compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
43	Phosphorus <= 0.632 tons/yr. Annual emission limit based on lb/hr emission factor and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Phosphorus: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Phosphorus: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
44	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 CSAPR Attachment.[40 CFR 97].	Other: As per the CSAPR Attachment[40 CFR 97].	Other (provide description): Other. As per the CSAPR Attachment. [40 CFR 97]

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U1 Operation of combustion turbine burning distillate oil

Operating Scenario: OS2 CT firing ULSD and operating with water injection and SCR - all requirements of this scenario became effective on May 1, 2015.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Nitrogen oxides (NOx) <= 1.6 lb/MW-hr. This emission limit is from table 7 of N.J.A.C. 7:27-19.5. This limit in effect at all times, including startup, shutdown and maintenance periods. [N.J.A.C. 7:27-19.5(g)2]	Nitrogen oxides (NOx): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. (See U1, OS Summary STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	Nitrogen oxides (NOx): Recordkeeping by stack test results at the approved frequency. (See U1, OS Summary STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	None.
2	NOx (Total) <= 1.5 lb/MW-hr. This emission limit is a NOx averaging plan limit, and will be in effect at all times including startup, shutdown and maintenance periods, for as long as the NOx averaging plan dated May, 2014 remains in force. [N.J.A.C. 7:27-19.6(a)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. (See U1, OS Summary STACK TESTING SUMMARY). [N.J.A.C. 7:27-19.15(a)2]	NOx (Total): Recordkeeping by stack test results at the approved frequency. (See U1, OS Summary STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	Submit a stack test report: As per the approved schedule. (See U1, OS Summary STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]
3	NOx (Total) <= 25 ppmvd @ 15% O2. [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 U1, OS Summary STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. (See U1, OS Summary STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (See U1, OS Summary STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]
4	NOx (Total) <= 54.4 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 U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results at the approved frequency. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]
5	CO <= 0.12 lb/MMBTU. Maximum emission rate for operation at 50% load or greater. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results at the approved frequency. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	CO <= 53.5 lb/hr. Maximum emission rate for operation at 50% load or greater. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results at the approved frequency. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]
7	CO <= 250 ppmvd @ 15% O2. Maximum emission concentration for operation at less than 50% load. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results at the approved frequency. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]
8	CO <= 0.6 lb/MMBTU. Maximum emission rate for operation at less than 50% load. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results at the approved frequency. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]
9	CO <= 134 lb/hr. Maximum emission rate for operation at less than 50% load. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results at the approved frequency. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]
10	VOC (Total) <= 0.017 lb/MMBTU. These VOC emissions include 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 U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results at the approved frequency. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]
11	VOC (Total) <= 7.65 lb/hr. These VOC emissions include 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 U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results at the approved frequency. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]
12	SO2 <= 1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	TSP <= 0.1 lb/MMBTU. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

U1 Operation of combustion turbine burning distillate oil

OS2

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	TSP <= 45 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results at the approved frequency. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (See U1, OS Summary, STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]
15	PM-10 (Total) <= 0.1 lb/MMBTU. [N.J.A.C. 7:27-22.16(E)]	None.	None.	None.
16	PM-10 (Total) <= 45 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. (See U1, OS Summary STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results prior to permit expiration date. (See U1, OS Summary STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (See U1, OS Summary STACK TESTING SUMMARY). [N.J.A.C. 7:27-22.16(o)]
17	PM-2.5 (Total) <= 45 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
18	Ammonia <= 5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
19	Arsenic compounds <= 0.0327 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from Boiler MACT fuel data median (from rule proposal). [N.J.A.C. 7:27-22.16(a)]	Arsenic compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Arsenic compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
20	Methane <= 0.9 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP42 for Utility boilers. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
21	Acetaldehyde <= 0.0387 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPA CT database, as summarized in the letter from Sim Roy, August 21, 2001, maximum for gas. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	Acetophenone <= 0.023 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from GE/ERC Report (Gas). [N.J.A.C. 7:27-22.16(a)]	Acetophenone: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Acetophenone: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
23	Acrolein <= 0.0301 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from GE/ERC Report (Gas). [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
24	Benzene <= 1.062 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPA CT database, as summarized in the letter from Sim Roy, August 21, 2001. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
25	Beryllium compounds <= 0.00348 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from Boiler MACT fuel data median (from rule proposal). [N.J.A.C. 7:27-22.16(a)]	Beryllium compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Beryllium compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
26	Butadiene (1,3-) <= 0.0072 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP42: Section 3.1 for distillate firing in Combustion Turbine. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Butadiene (1,3-): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
27	Cadmium Emissions <= 0.0108 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from Boiler MACT fuel data average (from rule proposal). [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
28	Chromium (Hexavalent) Emissions \leq 0.0000436 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from 0.8 x California Air Toxics Emission Factors (CATEF). [N.J.A.C. 7:27-22.16(a)]	Chromium (Hexavalent) Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Chromium (Hexavalent) Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
29	Cobalt compounds \leq 0.016 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from Boiler MACT fuel data maximum (from rule proposal). [N.J.A.C. 7:27-22.16(a)]	Cobalt compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Cobalt compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
30	Ethylbenzene \leq 0.105 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP42: Section 3.1 for distillate firing in Combustion Turbine. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
31	Formaldehyde \leq 0.455 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPA CT database, as summarized in the letter from Sim Roy, August 21, 2001, maximum for oil. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
32	Hydrogen chloride \leq 5.4 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from half boiler MACT test max. [N.J.A.C. 7:27-22.16(a)]	Hydrogen chloride: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Hydrogen chloride: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
33	Hydrogen fluoride \leq 0.178 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from Boiler MACT fuel data average (from rule proposal). [N.J.A.C. 7:27-22.16(a)]	Hydrogen fluoride: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Hydrogen fluoride: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
34	Lead compounds \leq 0.0273 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from lead in VMEU fuel $<$ 1PPM. [N.J.A.C. 7:27-22.16(a)]	Lead compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Lead compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
35	Manganese compounds \leq 0.131 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from Boiler MACT fuel data maximum (from rule proposal). [N.J.A.C. 7:27-22.16(a)]	Manganese compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Manganese compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
36	Mercury compounds \leq 0.00135 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from AP42: Section 1.3 for boilers. [N.J.A.C. 7:27-22.16(a)]	Mercury compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Mercury compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
37	Naphthalene \leq 0.0923 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from California Air Toxics Emission Factors (CATEF). [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
38	Nickel compounds \leq 0.415 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from Boiler MACT fuel data maximum (from rule proposal). [N.J.A.C. 7:27-22.16(a)]	Nickel compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Nickel compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
39	Phosphorus \leq 0.144 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from Boiler MACT fuel data median (from rule proposal). [N.J.A.C. 7:27-22.16(a)]	Phosphorus: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Phosphorus: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
40	Polycyclic organic matter <= 0.14 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from EPA CT database, as summarized in the letter from Sim Roy, August 21, 2001, maximum for oil. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.
41	Selenium compounds <= 0.137 lb/hr Emission limit based maximum heat input rate (HHV) of the Combustion Turbine, and emission factor from Boiler MACT fuel data maximum (from rule proposal). [N.J.A.C. 7:27-22.16(a)]	Selenium compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(a)]	Selenium compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(a)]	None.

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Facility Specific Requirements**

Emission Unit: U1 Operation of combustion turbine burning distillate oil

Operating Scenario: OS3 Combustion Turbine Startup

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %. Smoke emissions from stationary turbine 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	Start-up is defined as the period of time from initiation of combustion turbine operation until the unit reaches steady state at 80 to 100 percent load conditions. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
3	Start-up Period <= 30 minutes. [N.J.A.C. 7:27-22.16(e)]	Start-up Period: Monitored by hour/time monitor upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Start-up Period: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	None.
4	Particulate Emissions <= 45 lb/hr Particulate emission limit from the combustion of #2 fuel oil based on rated heat input of 450 MMBtu/hr (HHV) for turbine. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
5	CO <= 250 ppmvd @ 15% O2. CO RACT emission limit applies during all operation. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the CO emission limits during startup on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.
6	CO <= 134 lb/hr for turbine during a startup on #2 fuel oil for <50% maximum load. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the CO emission limits during startup on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	CO <= 53.5 lb/hr for turbine during a startup on #2 fuel oil for >= 50% maximum load. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the CO emission limits during startup on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.
8	VOC (Total) <= 22.1 lb/hr for turbine during a startup on #2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the VOC (Total) emission limits during startup on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.
9	VOC (Total) <= 50 ppmvd @ 15% O ₂ . VOC RACT emission limit applies during all operation. [N.J.A.C. 7:27-16.9(c)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the VOC (Total) emission limits during startup on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.
10	NO _x (Total) <= 195 lb/hr for turbine during a startup on #2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	NO _x (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	NO _x (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the NO _x (Total) emission limits during startup on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.
11	TSP <= 45 lb/hr for turbine during a startup on #2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the TSP emission limits during startup on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.
12	PM-10 (Total) <= 45 lb/hr for turbine during a startup on #2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the PM-10 (Total) emission limits during startup on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	PM-2.5 (Total) <= 45 lb/hr for turbine during a startup on #2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the PM-2.5 (Total) emission limits during startup on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.
14	Ammonia <= 5 ppmvd @ 15% O2 for turbine during a startup on #2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	Ammonia: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ammonia: Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the Ammonia emission limits during startup on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.
15	SO2 <= 0.73 lb/hr for turbine during a startup on #2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the SO2 emission limits during startup on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.

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Emission Unit: U1 Operation of combustion turbine burning distillate oil

Operating Scenario: OS4 Combustion Turbine Shutdown

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Shut-down is defined as the period of time from the initial lowering of combustion turbine output below 80% of the base load to the cessation of combustion operation. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	Shutdown Period <= 30 minutes. [N.J.A.C. 7:27-22.16(e)]	Shutdown Period: Monitored by hour/time monitor upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Shutdown Period: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	None.
3	Opacity <= 20 %. Smoke emissions from stationary turbine 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.
4	Particulate Emissions <= 45 lb/hr Particulate emission limit from the combustion of #2 fuel oil based on rated heat input of 450 MMBtu/hr (HHV) for turbine. [N.J.A.C. 7:27- 4.2(a)]	Particulate Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Particulate Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the Particulate emission limits during shutdown on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.
5	CO <= 250 ppmvd @ 15% O ₂ . CO RACT emission limit applies during all operation. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the CO emission limits during shutdown on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.
6	CO <= 134 lb/hr for turbine during a shutdown on #2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the CO emission limits during shutdown on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	VOC (Total) <= 50 ppmvd @ 15% O ₂ . VOC RACT emission limit applies during all operation. [N.J.A.C. 7:27-16.9(c)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the VOC (Total) emission limits during shutdown on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.
8	VOC (Total) <= 22.1 lb/hr for turbine during a shutdown on #2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the VOC (Total) emission limits during shutdown on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.
9	NO _x (Total) <= 195 lb/hr for turbine during a shutdown on #2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	NO _x (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	NO _x (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the NO _x (Total) emission limits during shutdown on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.
10	TSP <= 45 lb/hr for turbine during a shutdown on #2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the TSP emission limits during shutdown on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.
11	PM-10 (Total) <= 45 lb/hr for turbine during a shutdown on #2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the PM-10 (Total) emission limits during shutdown on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.
12	PM-2.5 (Total) <= 45 lb/hr for turbine during a shutdown on #2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the PM-2.5 (Total) emission limits during shutdown on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	SO2 <= 0.73 lb/hr for turbine during a shutdown on #2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system initial calculations only. Keep calculations showing the SO2 emission limits during shutdown on ULSD. [N.J.A.C. 7:27-22.16(o)]	None.

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Emission Unit: U2 Use of starter diesel engine burning distillate oil

Subject Item: CD2 Starter engine catalytic converter

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The catalyst array(s) shall be maintained and replaced in accordance with the recommendations of the manufacturer, and as necessary based on emission levels indicated through portable emission monitoring. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	The catalyst shall be operated at all times that the engine is operating. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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Emission Unit: U2 Use of starter diesel engine burning distillate oil

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>PERIODIC EMISSIONS MONITORING SUMMARY: Perform periodic emission monitoring of NOx, CO and O2 for 20 minute runs.</p> <p>If an engine operates intermittently, it does not have to have quarterly Periodic Monitoring Procedure (PMP) performed for CO and NOx if it is operated less than 200 hours during that month, unless the engine has operated 200 or more hours since the engine last had PMP performed; in that case, PMP must be performed during any month that the engine reaches 200 hours of operation since the last PMP and at least annually.</p> <p>Emission factors will be confirmed through annual tests using periodic monitoring methods. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Monitored by periodic emission monitoring annually for NOx, CO and O2. The average of three twenty minute test runs shall be performed according to the approved periodic emission monitoring protocol. [N.J.A.C. 7:27-22.16(o)]</p>	<p>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)]</p>	<p>Submit a report: Annually.</p> <p>A protocol to conduct periodic emission testing shall be submitted to the Emission Measurement Section (EMS) at Mail Code: 380-01A, PO Box 420, Trenton, NJ 08625, for approval, within 60 days from the date of the approval of the operating permit modification BOP080003. The approved protocol shall be used for all future periodic emission testing unless a modified protocol is approved by the Department. A revised protocol shall be submitted to EMS for approval whenever a revision is necessary.</p> <p>The permittee shall notify Enforcement 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 the approved protocol.</p> <p>Test reports shall be submitted to Chief, REO within 45 days following the end of each calendar year 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 ppm_{dv} @ 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)]</p>
2	<p>Opacity <= 20 %. Smoke emissions from stationary internal combustion engines shall not exceed 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds.</p> <p>. [N.J.A.C. 7:27- 3.5]</p>	<p>None.</p>	<p>None.</p>	<p>None.</p>

U2 Use of starter diesel engine burning distillate oil

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	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.
4	CO <= 500 ppmvd @ 15% O2. Maximum CO concentration. [N.J.A.C. 7:27-16.10(b)]	CO: Monitored by periodic emission monitoring annually. [N.J.A.C. 7:27-16.10(b)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-16.10(b)]	None.
5	The owner or operator of a stationary reciprocating engine that has a maximum rated power output of 37 kW or more shall adjust the combustion process in accordance with the procedure set forth at N.J.A.C. 7:27-19.16 and in accordance with the manufacturer's recommended procedures and maintenance schedules. [N.J.A.C. 7:27-16.10(e)] and [N.J.A.C. 7:27-19.8(f)]	Monitored by periodic emission monitoring upon performing combustion adjustment. Monitoring shall be performed in accordance with the specific procedures for combustion adjustment monitoring specified in NJDEP Technical Manual 1005. [N.J.A.C. 7:27-19.16(h)]	Recordkeeping by data acquisition system (DAS) / electronic data storage upon performing combustion adjustment. The permittee shall record the following information for each adjustment in a log book or computer data system: 1. The date and times the adjustment began and ended; 2. The name, title, and affiliation of the person who performed the procedure and adjustment; 3. The type of procedure and maintenance performed; 4. The concentration of NOx, CO, and O2 measured before and after the adjustment was made; and 5. The type and amount of fuel use over the 12 months prior to the adjustment. The records shall be kept for a minimum of 5 years and be readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(h)]	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	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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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	<p>NO_x (Total) ≤ 15 grams/brake horsepower-hour. This emission limit is a NO_x averaging plan limit. This limit will be in effect at all times, including startup, shutdown and maintenance periods. [N.J.A.C. 7:27-22.16(a)]</p>	<p>NO_x (Total): Monitored by periodic emission monitoring annually. See U2 OS Summary, PERIODIC EMISSIONS MONITORING SUMMARY.</p> <p>The periodic monitoring procedure shall be carried out in accordance with the procedure specified in the approved stack emission test protocol.</p> <p>If the PMP test result exceeds the permit limit, the permittee shall do the following:</p> <p>(1) Verify that the equipment and/or control device is operating according to manufacturer's specifications and the operating permit compliance plan. If the equipment or control device is not operating properly, the permittee shall take corrective action immediately to eliminate the excess emissions.</p> <p>(2) If the corrective action taken in step (1) does not correct the problem within 60 days, the applicant shall perform a repeat the PMP test. Such tests and corrective measures shall be performed within one year of the annual PMP test until corrective action is taken to successfully correct the problem. [N.J.A.C. 7:27-22.16(o)]</p>	<p>NO_x (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and retain the following records:</p> <p>(1) Date and time of PMP;</p> <p>(2) PMP results and calculations in accordance with the procedure specified in the latest version of EPA CTM-034. PMP results must be recorded in the same units as permit limits;</p> <p>(3) Description of corrective action taken if needed;</p> <p>(4) Date and time of corrective action taken, if applicable. [N.J.A.C. 7:27-22.16(o)]</p>	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	NO _x (Total) ≤ 4.3 lb/MMBTU. This emission limit is a NO _x averaging plan limit. This limit will be in effect at all times, including startup, shutdown and maintenance periods. [N.J.A.C. 7:27-22.16(a)]	<p>NO_x (Total): Monitored by periodic emission monitoring annually. See U2 OS Summary PERIODIC EMISSIONS MONITORING SUMMARY.</p> <p>The periodic monitoring procedure (PMP) shall be carried out in accordance with the procedure specified in the approved stack emission test protocol.</p> <p>If the PMP test result exceeds the permit limit, the permittee shall do the following:</p> <p>(1) Verify that the equipment and/or control device is operating according to manufacturer's specifications and the operating permit compliance plan. If the equipment or control device is not operating properly, the permittee shall take corrective action immediately to eliminate the excess emissions.</p> <p>(2) If the corrective action taken in step (1) does not correct the problem within 60 days, the applicant shall perform a repeat the PMP test. Such tests and corrective measures shall be performed within one year of the annual PMP test until corrective action is taken to successfully correct the problem. [N.J.A.C. 7:27-22.16(o)]</p>	<p>NO_x (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and retain the following records:</p> <p>(1) Date and time of PMP;</p> <p>(2) PMP results and calculations in accordance with the procedure specified in the latest version of EPA CTM-034. PMP results must be recorded in the same units as permit limits;</p> <p>(3) Description of corrective action taken if needed;</p> <p>(4) Date and time of corrective action taken, if applicable. [N.J.A.C. 7:27-22.16(o)]</p>	None.
9	The starter engine will run maximum of 20 minutes per each start-up event which is used for NO _x averaging plan. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor each half hour during operation. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system each half hour during operation. Record total minute the starter engine ran per each event. [N.J.A.C. 7:27-22.16(o)]	None.
10	Maximum Gross Heat Input ≤ 4.9 MMBTU/hr (HHV). Maximum heat input. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records showing maximum heat input rate for the starter diesel engine [N.J.A.C. 7:27-22.16(a)].	None.
11	Type of fuel to be fired in the starter engine shall be limited to Ultra Low Sulfur Diesel fuel oil. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by invoices / bills of lading per delivery. [N.J.A.C. 7:27-22.16(a)]	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	Fuel Oil Usage \leq 1,800 gal/yr. Fuel consumption per year shall be calculated by the sum of the fuel consumed during any one month added to the sum of the fuel consumed during the preceding 11 months. [N.J.A.C. 7:27-22.16(a)]	Fuel Oil Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(o)]	Fuel Oil Usage: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Compliance shall be determined based on consecutive 12 month period, rolling one month basis. [N.J.A.C. 7:27-22.16(o)]	None.
13	NOx (Total) \leq 0.53 tons/yr. Annual emission limit based on maximum permitted hours. (50 hours per year). [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
14	CO \leq 0.15 tons/yr. Annual emission limit based on maximum permitted hours (50 hrs per year). [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
15	VOC (Total) \leq 0.05 tons/yr. Annual emission limit based on maximum permitted operating hours (50 hours per year). These VOC emissions include Formaldehyde emissions. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations annually. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(a)]	None.
16	TSP \leq 0.015 tons/yr. Annual emission limit based on maximum permitted operating hours (50 hours per year). [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
17	PM-10 (Total) \leq 0.015 tons/yr. Annual emission limit based on maximum permitted operating hours (50 hours per year). [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(a)]	None.
18	PM-2.5 (Total) \leq 0.015 tons/yr. Annual emission limit based on maximum permitted operating hours (50 hours per year). [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(a)]	None.
19	Methane \leq 0.75 tons/yr Emission limit based maximum heat input rate (HHV) of the engine, and emission factor from AP42:10% of AP42 TOC for diesel engines. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	NO _x (Total) <= 21.1 lb/hr. Maximum emission rate from operating permit application, however starter engine is limited to 20 minute runs. This hourly limit is only for the testing purpose. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
21	CO <= 5.8 lb/hr. Maximum emission rate from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
22	VOC (Total) <= 1.9 lb/hr. Maximum emission rate from operating permit application. These VOC emissions include Formaldehyde emissions. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
23	TSP <= 0.6 lb/hr. Maximum emission rate. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
24	PM-10 (Total) <= 0.6 lb/hr. Maximum emission rate. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
25	PM-2.5 (Total) <= 0.6 lb/hr. Maximum emission rate. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
26	Methane <= 0.17 lb/hr. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	None.
27	The Vineland Municipal Electric Utility (VMEU) West Station has one existing non-emergency CI stationary Reciprocating Internal Combustion Engines [RICE, E2] with a site rating of more than 500 brake HP located at a major source of HAP emissions; this engine qualifies as a limited use CI RICE and is therefore, not subject to 40 CFR 63 Subpart ZZZZ emission limitations and operating limitations. [40 CFR 63.6590(b)(3)(iv)]	None.	None.	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U2 Use of starter diesel engine burning distillate oil

Operating Scenario: OS2 Starter diesel engine - startup

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>NO_x (Total) ≤ 15 grams/brake horsepower-hour. This emission limit is a NO_x averaging plan limit. This limit will be in effect at all times, including startup, shutdown and maintenance periods. [N.J.A.C. 7:27-22.16(a)]</p>	<p>NO_x (Total): Monitored by periodic emission monitoring annually. See U2 OS PERIODIC EMISSIONS MONITORING SUMMARY.</p> <p>The periodic monitoring procedure shall be carried out in accordance with the procedure specified in the approved stack emission test protocol.</p> <p>If the PMP test result exceeds the permit limit, the permittee shall do the following:</p> <p>(1) Verify that the equipment and/or control device is operating according to manufacturer's specifications and the operating permit compliance plan. If the equipment or control device is not operating properly, the permittee shall take corrective action immediately to eliminate the excess emissions.</p> <p>(2) If the corrective action taken in step (1) does not correct the problem within 60 days, the applicant shall perform a repeat the PMP test. Such tests and corrective measures shall be performed within one year of the annual PMP test until corrective action is taken to successfully correct the problem. [N.J.A.C. 7:27-22.16(o)]</p>	<p>NO_x (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and retain the following records:</p> <p>(1) Date and time of PMP;</p> <p>(2) PMP results and calculations in accordance with the procedure specified in the latest version of EPA CTM-034. PMP results must be recorded in the same units as permit limits;</p> <p>(3) Description of corrective action taken if needed;</p> <p>(4) Date and time of corrective action taken, if applicable. [N.J.A.C. 7:27-22.16(o)]</p>	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	NO _x (Total) ≤ 4.3 lb/MMBTU. This emission limit is a NO _x averaging plan limit. This limit will be in effect at all times, including startup, shutdown and maintenance periods. [N.J.A.C. 7:27-22.16(a)]	<p>NO_x (Total): Monitored by periodic emission monitoring annually. See U2 PERIODIC EMISSIONS MONITORING SUMMARY.</p> <p>The periodic monitoring procedure shall be carried out in accordance with the procedure specified in the approved stack emission test protocol.</p> <p>If the PMP test result exceeds the permit limit, the permittee shall do the following:</p> <p>(1) Verify that the equipment and/or control device is operating according to manufacturer's specifications and the operating permit compliance plan. If the equipment or control device is not operating properly, the permittee shall take corrective action immediately to eliminate the excess emissions.</p> <p>(2) If the corrective action taken in step (1) does not correct the problem within 60 days, the applicant shall perform a repeat the PMP test. Such tests and corrective measures shall be performed within one year of the annual PMP test until corrective action is taken to successfully correct the problem. [N.J.A.C. 7:27-22.16(o)]</p>	<p>NO_x (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and retain the following records:</p> <p>(1) Date and time of PMP;</p> <p>(2) PMP results and calculations in accordance with the procedure specified in the latest version of EPA CTM-034. PMP results must be recorded in the same units as permit limits;</p> <p>(3) Description of corrective action taken if needed;</p> <p>(4) Date and time of corrective action taken, if applicable. [N.J.A.C. 7:27-22.16(o)]</p>	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U2 Use of starter diesel engine burning distaillate oil

Operating Scenario: OS3 Starter diesel engine-Shutdown

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>NOx (Total) <= 15 grams/brake horsepower-hour. This emission limit is a NOx averaging plan limit. This limit will be in effect at all times, including startup, shutdown and maintenance periods. [N.J.A.C. 7:27-22.16(a)]</p>	<p>NOx (Total): Monitored by periodic emission monitoring annually. See U2 OS Summary PERIODIC EMISSIONS MONITORING SUMMARY.</p> <p>The periodic monitoring procedure shall be carried out in accordance with the procedure specified in the approved stack emission test protocol.</p> <p>If the PMP test result exceeds the permit limit, the permittee shall do the following:</p> <p>(1) Verify that the equipment and/or control device is operating according to manufacturer's specifications and the operating permit compliance plan. If the equipment or control device is not operating properly, the permittee shall take corrective action immediately to eliminate the excess emissions.</p> <p>(2) If the corrective action taken in step (1) does not correct the problem within 60 days, the applicant shall perform a repeat the PMP test. Such tests and corrective measures shall be performed within one year of the annual PMP test until corrective action is taken to successfully correct the problem. [N.J.A.C. 7:27-22.16(o)]</p>	<p>NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and retain the following records:</p> <p>(1) Date and time of PMP;</p> <p>(2) PMP results and calculations in accordance with the procedure specified in the latest version of EPA CTM-034. PMP results must be recorded in the same units as permit limits;</p> <p>(3) Description of corrective action taken if needed;</p> <p>(4) Date and time of corrective action taken, if applicable. [N.J.A.C. 7:27-22.16(o)]</p>	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	NOx (Total) <= 4.3 lb/MMBTU. This emission limit is a NOx averaging plan limit. This limit will be in effect at all times, including startup, shutdown and maintenance periods. [N.J.A.C. 7:27-22.16(a)]	<p>NOx (Total): Monitored by periodic emission monitoring annually. See U2 OS Summary PERIODIC EMISSIONS MONITORING SUMMARY.</p> <p>The periodic monitoring procedure shall be carried out in accordance with the procedure specified in the approved stack emission test protocol.</p> <p>If the PMP test result exceeds the permit limit, the permittee shall do the following:</p> <p>(1) Verify that the equipment and/or control device is operating according to manufacturer's specifications and the operating permit compliance plan. If the equipment or control device is not operating properly, the permittee shall take corrective action immediately to eliminate the excess emissions.</p> <p>(2) If the corrective action taken in step (1) does not correct the problem within 60 days, the applicant shall perform a repeat the PMP test. Such tests and corrective measures shall be performed within one year of the annual PMP test until corrective action is taken to successfully correct the problem. [N.J.A.C. 7:27-22.16(o)]</p>	<p>NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and retain the following records:</p> <p>(1) Date and time of PMP;</p> <p>(2) PMP results and calculations in accordance with the procedure specified in the latest version of EPA CTM-034. PMP results must be recorded in the same units as permit limits;</p> <p>(3) Description of corrective action taken if needed;</p> <p>(4) Date and time of corrective action taken, if applicable. [N.J.A.C. 7:27-22.16(o)]</p>	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U3 Storage of distillate oil

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Sulfur Content in Fuel \leq 15 ppmw (0.0015% by weight). [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 the fuel was stored in New Jersey may be stored, offered for sale, sold, delivered or exchanged in trade, for use in New Jersey, after the effective date of the applicable standard in Table 1B. [N.J.A.C. 7:27- 9.2(a)]	None.	None.	None.
3	Fuel Oil Usage \leq 28.36 MMgal/yr. Annual throughput limit from permit application. Fuel Oil includes #2 fuel oil, kerosene, ultra low sulfur distillate (ULSD) oil or a mixture of these distillate products. [N.J.A.C. 7:27-22.16(a)]	Fuel Oil Usage: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(e)]	Fuel Oil Usage: Recordkeeping by invoices / bills of lading per delivery. Maintain record of total fuel delivered by date. [N.J.A.C. 7:27-22.16(e)]	None.
4	VOC (Total) \leq 0.152 tons/yr. Maximum emission rate from operating permit application. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Profile (General)

Facility Name (AIMS): Vineland Municipal Electric Utility (VMEU)

Facility ID (AIMS): 75482

Street VMEU WEST GEN STA
Address: 1185 NEW PEACH ST
VINELAND, NJ 08362

Mailing DIRECTOR - VINELAND MUNICIPAL
Address: UTILITIES
640 E WOOD ST
PO BOX 1508
VINELAND, NJ 08362-1508

County: Cumberland

Location 450 MMBtu/hr simple cycle combustion
Description: turbine with No. 2 Fuel Oil storage tank and other associated equipment. From Delsea Dr. in Vineland, turn west onto Almond Rd. and proceed to the end of the road. Turn left and the Station is in immediate view.

State Plane Coordinates:

X-Coordinate: 337,375

Y-Coordinate: 240,060

Units: Feet

Datum: NAD83

Source Org.:

Source Type:

Industry:

Primary SIC: 4911

Secondary SIC:

NAICS: 221112

**New Jersey Department of Environmental Protection
Facility Profile (General)**

Contact Type: Air Permit Information Contact

Organization: City of Vineland Electric Utility

Org. Type: Municipal

Name: Lisa A. Fleming

NJ EIN: 21600167000

Title: Sup. Environmental Specialist

Phone: (856) 794-4000 x4163

Mailing Address: 211 N. West.

Fax: (856) 405-4625 x

PO Box 1508

Other: () - x

Vineland, NJ 08632-1508

Type:

Email: lfleming@vinelandcity.org

Contact Type: BOP - Operating Permits

Organization: City of Vineland Electric Utility

Org. Type: Municipal

Name: Lisa A. Fleming

NJ EIN: 21600167000

Title: Sup. Environmental Specialist

Phone: (856) 794-4000 x4163

Mailing Address: 211 N. West.

Fax: (856) 405-4625 x

PO Box 1508

Other: () - x

Vineland, NJ 08632-1508

Type:

Email: lfleming@vinelandcity.org

Contact Type: Emission Statements

Organization: City of Vineland Electric Utility

Org. Type: Municipal

Name: Lisa A. Fleming

NJ EIN: 21600167000

Title: Sup. Environmental Specialist

Phone: (856) 794-4000 x4163

Mailing Address: 211 N. West.

Fax: (856) 405-4625 x

PO Box 1508

Other: () - x

Vineland, NJ 08632-1508

Type:

Email: lfleming@vinelandcity.org

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Fees/Billing Contact

Organization: City of Vineland Electric Utility

Org. Type: Municipal

Name: Lisa A. Fleming

NJ EIN: 21600167000

Title: Sup. Environmental Specialist

Phone: (856) 794-4000 x4163

Mailing Address: 211 N. West.

Fax: (856) 405-4625 x

PO Box 1508

Vineland, NJ 08632-1508

Other: () - x

Type:

Email: lfleming@vinelandcity.org

Contact Type: General Contact

Organization: City of Vineland Electric Utility

Org. Type: Municipal

Name: Lisa A. Fleming

NJ EIN: 21600167000

Title: Sup. Environmental Specialist

Phone: (856) 794-4000 x4163

Mailing Address: 211 N. West.

Fax: (856) 405-4625 x

PO Box 1508

Vineland, NJ 08632-1508

Other: () - x

Type:

Email: lfleming@vinelandcity.org

Contact Type: On-Site Manager

Organization: VMEU-West Station

Org. Type: Municipal

Name: John Reynolds

NJ EIN: 21600167000

Title: Chief Stationary Engineer

Phone: (856) 794-4000 x4232

Mailing Address: 211 N. West Ave.

Fax: (856) 405-1625 x

P.O. Box 1508

Vineland, NJ 08632-1508

Other: () - x

Type:

Email: jreynolds@vinelandcity.org

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Owner (Current Primary)

Organization: City of Vineland

Org. Type: Municipal

Name: Anthony Fanucci

NJ EIN: 21600167000

Title: Mayor

Phone: (856) 794-4000 x

Mailing Address: 640 E. Wood St.

Fax: (856) 405-4622 x

PO Box 1508

Other: () - x

P.O. Box 1508

Type:

Vineland, NJ 08632-1508

Email: afanucci@vinelandcity.org

Contact Type: Responsible Official

Organization: VMEU-West Station

Org. Type: Municipal

Name: John Lillie

NJ EIN: 21600167000

Title: Director, Vineland Municipal Utilities

Phone: (856) 794-4000 x4164

Mailing Address: 211 N. West Ave.

Fax: (856) 405-4622 x

P.O. Box 1508

Other: () - x

P.O. Box 1508

Type:

Vineland, NJ 08632-1508

Email: jlillie@vinelandcity.org

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	External fuel pipelines / fuel unloading	Fuel tank area										
FG2	Use of electrical solvents and equipment paints outside	Outdoor equipment										
FG3	Waste oil handling outdoors	Oil unloading										
FG4	Road dust	Station grounds										
Total			1.390	0.000	0.000	0.000	0.340	0.170	0.000	0.00000000	0.010	

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	Lubricating oil systems (<10,000 gallons & .02 Vapor pressure) turbine circulating systems misc. equipment reservoirs	Other Equipment	Inside turbine housing	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS2	Small storage tanks (<2,000 gallons)	Storage Vessel	Turbine housing	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS3	Transformers	Other Equipment	Transformer yard	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS4	Use of equipment paints and electrical and cleaning solvents	Other Equipment	Station equipment	0.110	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS5	Internal fuel oil pipelines	Other Equipment	Turbine housing	2.500	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS6	Waste oil handling	Other Equipment	Garage/shed	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS7	Parts cleaners (<6 sq. ft.)	Other Equipment	Garage	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS8	Battery rack	Other Equipment	Turbine housing	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS9	Small fuel combustion sources (<1MMBtu/hr)	Fuel Combustion Equipment (Other)		0.000	0.250	0.050	0.000	0.020	0.040	0.000	0.00000000	0.000
Total				3.141	0.250	0.050	0.000	0.020	0.040	0.000	0.00000000	0.000

BOP180001

**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	CT	Combustion turbine	Combustion Turbine	BOP080003	1/1/1972	Yes	5/1/1995	
E2	CT Start	CT starter engine	Stationary Reciprocating Engine		1/1/1972	Yes		
E3	Tank 3	420,000 gallon storage tank for distillate oil	Storage Vessel	005957		No		

75482 VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W BOP180001 E1 (Combustion Turbine)
Print Date: 2/5/2020

Make:	<input type="text"/>		
Manufacturer:	<input type="text" value="Westinghouse"/>		
Model:	<input type="text" value="W251B"/>		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	<input type="text" value="450.00"/>		
Type of Turbine:	<input type="text"/>		
Type of Cycle:	<input type="text" value="Simple-Cycle"/>	Description:	<input type="text"/>
Industrial Application:	<input type="text"/>	Description:	<input type="text"/>
Power Output:	<input type="text" value="35.00"/>	Units:	<input type="text" value="Megawatts"/>
Is the combustion turbine using (check all that apply):			
A Dry Low NOx Combustor:	<input type="checkbox"/>	Steam to Fuel Ratio:	<input type="text"/>
Steam Injection:	<input type="checkbox"/>	Water to Fuel Ratio:	<input type="text"/>
Water Injection:	<input checked="" type="checkbox"/>	Description:	<input type="text"/>
Other:	<input type="checkbox"/>		
Is the turbine Equipped with a Duct Burner?	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="radio"/> Yes <input checked="" type="radio"/> No		
	Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?		
	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Comments:	<input type="text" value="Maximum power output is approximately 35 MW (Gross), 34 MW (Net). The water injection was installed in 1995."/>		

75482 VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W BOP180001 E2 (Stationary Reciprocating Engine)
Print Date: 2/5/2020

Make:	<input type="text"/>
Manufacturer:	<input type="text" value="Cummins"/>
Model:	<input type="text" value="V1710"/>
Maximum Rated Gross Heat Input (MMBtu/hr):	<input type="text" value="4.9"/>
Class:	<input type="text" value="Lean Burn"/>
Description:	<input type="text"/>
Duty:	<input type="text"/>
Description:	<input type="text"/>
Minimum Load Range (%):	<input type="text"/>
Maximum Load Range (%):	<input type="text"/>
Stroke:	<input type="text"/>
Power Output (BHP):	<input type="text" value="635"/>
Electric Output(KW):	<input type="text"/>
Compression Ratio:	<input type="text"/>
Ignition Type:	<input type="text"/>
Description:	<input type="text"/>
Engine Speed (RPM):	<input type="text" value="2100"/>
Engine Exhaust Temperature (°F):	<input type="text"/>
Air to Fuel Ratio at Peak Load:	<input type="text"/>
Ratio Basis:	<input type="text"/>
Lambda Factor (scfm/scfm):	<input type="text"/>
Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr):	<input type="text"/>
Output Type:	<input type="text"/>
Heat to Power Ratio:	<input type="text"/>
Is the Engine Using a Turbocharger?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Is the Engine Using an Aftercooler?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Is the Engine Using (check all that apply):	
A Prestratified Charge (PSC)	<input type="checkbox"/> A NOx Converter <input type="checkbox"/>
Air to Fuel Adjustment (AF)	<input type="checkbox"/> Ignition Timing Retard <input type="checkbox"/>
Low Emission Combustion	<input type="checkbox"/> Non-Selective Catalytic Retard (NSCR) <input type="checkbox"/>
Other	<input type="checkbox"/>
Description:	<input type="text"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Comments:	<input type="text"/>

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

75482 VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W BOP180001 E3 (Storage Vessel)
Print Date: 2/5/2020

What type of contents is this storage vessel equipped to contain by design?

Liquids Only

Storage Vessel Type:

Design Capacity:

420,000

Units:

gallons

Ground Location:

Is the Shell of the Equipment

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

Thermal Conductivity of Insulation [(BTU)(in)(hr)(ft²)(deg F)]:

Shape of Storage Vessel:

Shell Height (From Ground to Roof Bottom) (ft):

Length (ft):

Width (ft):

Diameter (ft):

Other Dimension

Description:

Value:

Units:

Fill Method:

Description (if other):

Maximum Design Fill Rate:

Units:

gal/min

Does the storage vessel have a roof or an open top?

Roof Type:

Roof Height (From Roof Bottom to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel have a Vapor Return Loop?

Does the storage vessel

75482 VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W BOP180001 E3 (Storage Vessel)

Print Date: 2/5/2020

Does the storage vessel
have a Conservation Vent?

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

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

Comments:

BOP180001

**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	H2O INJ	Water injection system to control NOx	Other	5/1/1995	No		
CD2	CatConv	Starter engine catalytic converter	Other	1/1/2010			CS1
CD3	SCR on CT	SCR on Combustion Turbine U1	Selective Catalytic Reduction	5/1/2015	No		

75482 VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W BOP180001 CD2 (Other)

Print Date: 2/5/2020

Make:

Manufacturer:

Model:

Maximum Air Flow Rate to Control Device (acfm):

Maximum Temperature of Vapor Stream to Control Device (°F):

Minimum Temperature of Vapor Stream to Control Device (°F):

Minimum Moisture Content of Vapor Stream to Control Device (%):

Minimum Pressure Drop Across Control Device (in. H2O):

Maximum Pressure Drop Across Control Device (in. H2O):

Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):

Alternative Method to Demonstrate Control Apparatus is Operating Properly:

Have you attached data from recent performance testing? Yes No

Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No

Have you attached a diagram showing the location and/or configuration of this control apparatus? Yes No

Comments:

75482 VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W BOP180001 CD3 (Selective Catalytic Reduction)
Print Date: 2/5/2020

Make:	Turner EnviroLogic
Manufacturer:	Turner EnviroLogic
Model:	W-3526
Minimum Temperature at Catalyst Bed (°F):	700
Maximum Temperature at Catalyst Bed (°F):	825
Minimum Temperature at Reagent Injection Point (°F):	200
Maximum Temperature at Reagent Injection Point (°F):	
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH4OH + H2O
Minimum Reagent Charge Rate (gpm):	0.6
Maximum Reagent Charge Rate (gpm):	0.8
Minimum Concentration of Reagent in Solution (% Volume):	19
Minimum NOx to Reagent Mole Ratio:	
Maximum NOx to Reagent Mole Ratio:	
Maximum Anticipated Ammonia Slip (ppm):	5
Type of Catalyst:	Ceramic Vanadium Titania
Volume of Catalyst (ft³):	1112
Form of Catalyst:	Ceramic
Anticipated Life of Catalyst:	5
Units:	Years
Have you attached a catalyst replacement schedule?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Method of Determining Breakthrough:	
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?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	<input type="radio"/> Yes <input checked="" type="radio"/> No

75482 VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W BOP180001 CD3 (Selective Catalytic Reduction)
Print Date: 2/5/2020

Comments:

injection rate >= 8.26 gal NH3 / Mgal oil burned

75482 VINELAND MUNICIPAL ELECTRIC UTILITY (VMEU - W BOP180001 CD1 (Other)

Print Date: 2/5/2020

Make:

Manufacturer:

Model:

Maximum Air Flow Rate to Control Device (acfm):

Maximum Temperature of Vapor Stream to Control Device (°F):

Minimum Temperature of Vapor Stream to Control Device (°F):

Minimum Moisture Content of Vapor Stream to Control Device (%):

Minimum Pressure Drop Across Control Device (in. H2O):

Maximum Pressure Drop Across Control Device (in. H2O):

Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):

Alternative Method to Demonstrate Control Apparatus is Operating Properly:

Have you attached data from recent performance testing? Yes No

Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No

Have you attached a diagram showing the location and/or configuration of this control apparatus? Yes No

Comments:

BOP180001

**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	CTSTCK		Rectangle	190	32	82	925.0	300.0	1,000.0	800,000.0	700,000.0	900,000.0	Up	
PT2	CTSTART		Round	8	30	86	750.0	300.0	900.0	7,000.0	6,000.0	8,000.0	Up	
PT3	TNK3VNT		Round	8	40	65							Up	
PT4	SCR Stack	Stack from Turbine and SCR Exhaust	Round	144	65	21	750.0	300.0	1,000.0	950,000.0	0.0	1,250,000.0	Up	

BOP180001

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

U 1 CT Operation of combustion turbine burning distillate oil

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.
OS2	CT-w-SCR	CT firing ULSD and operating with water injection and SCR - all requirements of this scenario became effective on May 1, 2015.	Normal - Steady State	E1	CD1 (P) CD3 (S)	PT4	2-01-001-01	0.0	8,760.0		0.0	1,250,000.0	300.0	1,000.0
OS3	CT-SU	Combustion Turbine Startup	Startup	E1		PT4								
OS4	CT-SD	Combustion Turbine Shutdown	Shutdown	E1		PT4								

U 2 CTSTART Use of starter diesel engine burning distillate oil

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	CTSTART	Use of starter diesel engine burning No. 2 fuel oil	Normal - Steady State	E2	CD2 (P)	PT2	2-02-001-02		50.0		6,000.0	8,000.0	300.0	900.0
OS2	CTSTART-SU	Starter diesel engine - startup	Startup	E2	CD2 (P)	PT2	2-02-001-02							
OS3	CTSTART-SD	Starter diesel engine-Shutdown	Shutdown	E2	CD2 (P)	PT2	2-02-001-02							

**New Jersey Department of Environmental Protection
Subject Item Group Inventory**

Group NJID: GR1 HEDD_PMP

Members:

Type	ID	OS	Step
E	E 1		
E	E 2		

Formal Reason(s) for Group/Cap:

Other

Other (explain): to list averaging plan requirements for NOx periodic monitoring procedure (PMP) at one place.

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

Operating Circumstances:

**New Jersey Department of Environmental Protection
Subject Item Group Inventory**

Group NJID: GR2 RGGI

Members:

Type	ID	OS	Step
E	E 1		
U	U 1	OS0 Summary	

Formal Reason(s) for Group/Cap:

Other

Other (explain): RGGI Requirements for Combustion Turbine

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

Operating Circumstances:

ATTACHMENT

Cross-State Air Pollution Rule (CSAPR) for the CSAPR NO_x Annual Trading Program requirements, CSAPR NO_x 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 AAAAAA.
 - (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 BBBBBB 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 BBBBBB 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 BBBBBB 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 BBBBBB.
- (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 BBBBBB, 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 BBBBBB.
- (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 BBBBBB.
 - (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 SO₂ 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 SO₂ Group 1 source and each TR SO₂ 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 SO₂ Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO₂ 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) SO₂ emissions requirements.

- (1) TR SO₂ 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 SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall hold, in the source's compliance account, TR SO₂ 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 SO₂ emissions for such control period from all TR SO₂ Group 1 units at the source.
 - (ii). If total SO₂ emissions during a control period in a given year from the TR SO₂ Group 1 units at a TR SO₂ Group 1 source are in excess of the TR SO₂ Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each TR SO₂ Group 1 unit at the source shall hold the TR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and
 - (B). The owners and operators of the source and each TR SO₂ 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 SO₂ Group 1 assurance provisions.
 - (i). If total SO₂ emissions during a control period in a given year from all TR SO₂ Group 1 units at TR SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ emissions exceeds the respective common designated representative's assurance level; and
 - (B). The amount by which total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the TR SO₂ 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 SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO₂ emissions exceed the sum, for such control period, of the state SO₂ 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 SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ 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 SO₂ emissions from the TR SO₂ Group 1 units at TR SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A TR SO₂ 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 SO₂ 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 SO₂ 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 SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ Group 1 source and each TR SO₂ 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 SO₂ 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 SO₂ Group 1 Trading Program.
- (2) The designated representative of a TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall make all submissions required under the TR SO₂ 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.

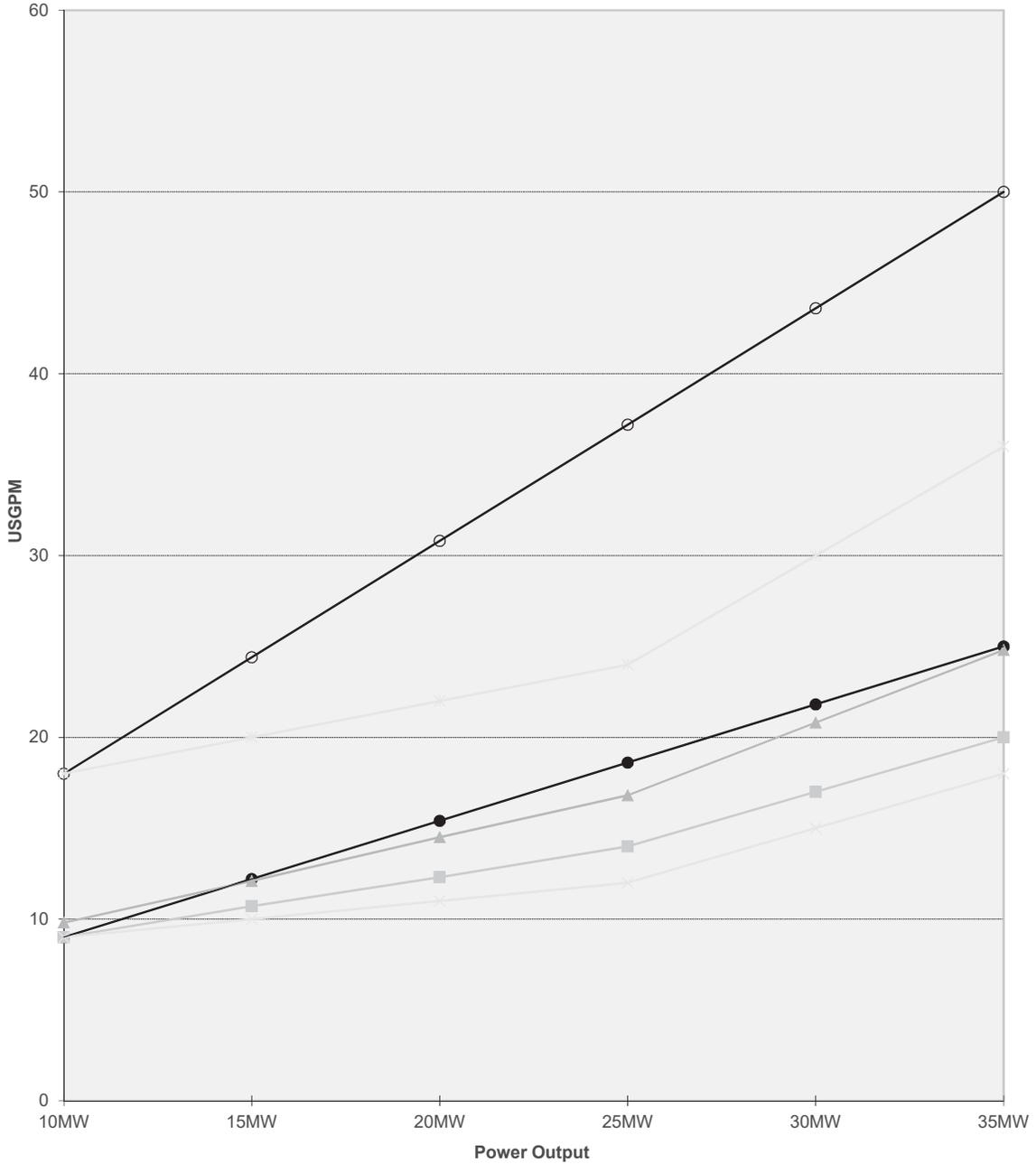
- (1) Any provision of the TR SO₂ Group 1 Trading Program that applies to a TR SO₂ Group 1 source or the designated representative of a TR SO₂ Group 1 source shall also apply to the owners and operators of such source and of the TR SO₂ Group 1 units at the source.
- (2) Any provision of the TR SO₂ Group 1 Trading Program that applies to a TR SO₂ Group 1 unit or the designated representative of a TR SO₂ Group 1 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the TR SO₂ 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 SO₂ Group 1 source or TR SO₂ 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.

CHART 1

VMEU West Station Combustion Turbine - Water Injection Curves



- current maximum control
- * original maximum control
- Current adjustment - April 96
- ▲ Temporary curve - December 95
- 1st adjustment - October 95
- × Original Curve - May 95
- Linear (Current adjustment - April 96)