



State of New Jersey

PHILIP D. MURPHY
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION

SHAWN M. LATOURETTE
Commissioner

TAHESHA L. WAY
Lt. Governor

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

Air Pollution Control Operating Permit Renewal with Significant Modification

Permit Activity Number: BOP200002

Program Interest Number: 61015

Mailing Address	Plant Location
JAMES CARTY VICE PRESIDENT VICINITY ENERGY TRENTON LP 320 S WARREN ST Trenton, NJ 08608	VICINITY ENERGY TRENTON LP Warren & Livingston Sts Trenton Mercer County

Initial Operating Permit Approval Date: October 29, 2001

Operating Permit Approval Date: Draft

Operating Permit Expiration Date:

AUTHORITY AND APPLICABILITY

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

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

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

PERMIT SHIELD

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

COMPLIANCE SCHEDULES

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

COMPLIANCE CERTIFICATIONS AND DEVIATION REPORTS

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

ACCESSING PERMITS

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

HELPLINE

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

RENEWING YOUR OPERATING PERMIT AND APPLICATION SHIELD

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

COMPLIANCE ASSURANCE MONITORING

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

ADMINISTRATIVE HEARING REQUEST

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

If you have any questions regarding this permit approval, please call Michael Mankbadi at 609-633-2675.

Approved by:

David J. Owen

Enclosure

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

Facility Name: VICINITY ENERGY TRENTON LP
Program Interest Number: 61015
Permit Activity Number: BOP200002

TABLE OF CONTENTS

<u>Section A</u>	POLLUTANT EMISSIONS SUMMARY
<u>Section B</u>	GENERAL PROVISIONS AND AUTHORITIES
<u>Section C</u>	STATE-ONLY APPLICABLE REQUIREMENTS
<u>Section D</u>	FACILITY SPECIFIC REQUIREMENTS AND INVENTORIES
	<ul style="list-style-type: none">• FACILITY SPECIFIC REQUIREMENTS – PAGE INDEX• REASON FOR APPLICATION• FACILITY SPECIFIC REQUIREMENTS (COMPLIANCE PLAN)• FACILITY PROFILE (ADMINISTRATIVE INFORMATION)• NON-SOURCE FUGITIVE EMISSIONS• INSIGNIFICANT SOURCE EMISSIONS• EQUIPMENT INVENTORY• EQUIPMENT DETAILS• CONTROL DEVICE INVENTORY• CONTROL DEVICE DETAILS• EMISSION POINT INVENTORY• EMISSION UNIT / BATCH PROCESS INVENTORY

Section A

Facility Name: VICINITY ENERGY TRENTON LP
Program Interest Number: 61015
Permit Activity Number: BOP200002

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	30.2	270	36.9	1.98	55.7	55.4	55.4	0.00200	7.08	
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	30.2	270	36.9	1.98	55.7	55.4	55.4	0.00200	7.08	112,273

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	2.01	0.600	0.150	1.33	0.160	0.160	0.160	0.00	0.00
Non-Source Fugitive Emissions	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

VOC: Volatile Organic Compounds

NO_x: Nitrogen Oxides

CO: Carbon Monoxide

SO₂: Sulfur Dioxide

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).

TSP: Total Suspended Particulates

Other: Any other air contaminant

regulated under the Federal CAA

PM₁₀: Particulates under 10 microns

PM_{2.5}: Particulates under 2.5 microns

Pb: Lead

HAPs: Hazardous Air Pollutants

CO₂e: Carbon Dioxide equivalent

*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.

Section A

Facility Name: VICINITY ENERGY TRENTON LP
Program Interest Number: 61015
Permit Activity Number: BOP200002

POLLUTANT EMISSIONS SUMMARY

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

HAP	TPY
Acetaldehyde	0.693
Acrolein	0.426
Arsenic compounds	0.000874
Benzene	0.0451
Beryllium Emissions	0.000595
Biphenyl	0.0176
Butadiene (1,3-)	0.0221
Cadmium compounds	0.00107
Chloroform	0.00236
Cobalt compounds	0.0000367
Dimethylbenz(a)anthracene	0.00000699
Ethylene dibromide	0.00367
Formaldehyde	4.44
Manganese compounds	0.00135
Naphthalene	0.00919
Nickel compounds	0.00151
Pb	0.00180
Polycyclic organic matter	0.00806
Tetrachloroethane (1,1,2,2-)	0.00331
Trichloroethane (1,1,2)	0.00264

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

Other Air Contaminant	TPY
Methane	88.0

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

Section B

Facility Name: VICINITY ENERGY TRENTON LP
Program Interest Number: 61015
Permit Activity Number: BOP200002

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)1]
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 <https://dep.nj.gov/boss/applications-and-forms/> (Attachment to the RADIUS Operating Permit Renewal Application). Both the RADIUS application and the Application Attachment, along with any other supporting documents must be submitted using the Department's Portal

at: <https://njdeponline.com/>. The application is considered timely if it is received at least 12 months before the expiration date of the operating permit. To be deemed administratively complete, the renewal application shall include all information required by the application form for the renewal and the information required pursuant to N.J.A.C. 7:27-22.30(d). However, consistent with N.J.A.C. 7:27-22.30(c), the permittee is encouraged to submit the renewal application at least 15 months prior to expiration of the operating permit, so that any deficiencies can be identified and addressed to ensure that the application is administratively complete by the renewal deadline. Only renewal applications which are timely and administratively complete are eligible for an application shield.

21. For all source emissions testing performed at the facility, the phrase “worst case conditions without creating an unsafe condition” used in the enclosed compliance plan is consistent with EPA’s National Stack Testing Guidance, dated April 27, 2009, where all source emission testing performed at the facility shall be under the representative (normal) conditions that:
 - i. Represent the range of combined process and control measure conditions under which the facility expects to operate (regardless of the frequency of the conditions); and
 - ii. Are likely to most challenge the emissions control measures of the facility with regard to meeting the applicable emission standards, but without creating an unsafe condition.
22. Consistent with EPA’s National Stack Testing Guidance and Technical Manual 1004, a facility may not stop an ongoing stack test because it would have failed the test unless the facility also ceases operation of the equipment in question to correct the issue. Stopping an ongoing stack test in these instances will be considered credible evidence of emissions non-compliance.
23. Each permittee shall maintain records of all source emissions testing or monitoring performed at the facility and required by the operating permit in accordance with N.J.A.C. 7:27-22.19. Records shall be maintained, for at least five years from the date of each sample, measurement, or report. Each permittee shall maintain all other records required by this operating permit for a period of five years from the date each record is made. At a minimum, source emission testing or monitoring records shall contain the information specified at N.J.A.C. 7:27-22.19(b). [N.J.A.C. 7:27-22.19(a) and N.J.A.C. 7:27-22.19(b)]
24. A Permittee may seek the approval of the Department for a delay in testing required pursuant to this permit by submitting a written request to the appropriate Regional Enforcement Office in accordance with N.J.A.C. 7:27-22.18(k). A Permittee may also seek advanced approval for a longer period for submittal of a source emissions test report required by the permit by submitting a request to the Department’s Regional Enforcement Office in accordance with N.J.A.C. 7:27-22.19. [N.J.A.C. 7:27-22.18(k) and N.J.A.C. 7:27-22.19]
25. Any emission limit values in an operating permit shall be interpreted to be followed by inherent trailing zeros (0) in the decimal portion of the limit to three significant figures (e.g. a printed limit of “1 lb/hr” means a limit of “1.00 lb/hr”) except for concentration limits less than 10 parts per million (ppm). For such concentration limits, the emission limit shall be interpreted to be followed by inherent trailing zeros (0) in the decimal portion of the limit to two significant figures (e.g. a printed limit of “1 ppm” means a limit of “1.0 ppm”).
26. Testing every 5 years shall be defined as no later than the end of the 60th month after the first required and each subsequent stack test was completed for the new or modified source.

Section C

Facility Name: VICINITY ENERGY TRENTON LP

Program Interest Number: 61015

Permit Activity Number: BOP200002

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	---	10b	---
D	FC	---	3
D	FC	---	9

Section D

Facility Name: VICINITY ENERGY TRENTON LP
Program Interest Number: 61015
Permit Activity Number: BOP200002

FACILITY SPECIFIC REQUIREMENTS AND INVENTORIES

FACILITY SPECIFIC REQUIREMENTS PAGE INDEX

<u>Subject Item and Name</u>	<u>Page Number</u>
-------------------------------------	---------------------------

Facility (FC):

FC	1
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Insignificant Sources (IS):

IS NJID	IS Description	
IS2	Oil/water separator [< 50 lb/hr throughput; excluding water & air]	7
IS3	Crankcase vent system [< 50 lbs/hr throughput; excluding water & air]	8
IS4	Cooling Tower [< 50 lbs/hr throughput; excluding water & air]	
IS5	(2) 500 gal. Ultra Low Sulfur Distillate Oil Storage Tanks [< 2,000 gallons; non-applicable VOC (<0.02 psia)]	9
IS12	500 gal. Lube oil tank [<10,000 gallons;non-applicable VOC (<0.02 psia)]	
IS7	Natural Gas, LPG, & Oil burning equipment [< 1 MMBtu/hr]	10
IS11	(4) - 25,000 gal. Ultra Low Sulfur Distillate Oil Storage Tanks; non-applicable VOC (< 0.02 psia)]	11

Group (GR):

IS NJID	IS Description	
GR1	Combined Operation of Engine 2 and Boiler 2	13

Emission Units (U):

U NJID	U Designation	U Description	
U11	Cogen Plant	Cogeneration system consisting of one IC engine with catalytic oxidizer and one heat recovery boiler and one boiler, all venting to a common stack	14
U15	BackupDiesel	300 HP diesel compressor; internal combustion engine operating for no more than 500 hr/yr	85

New Jersey Department of Environmental Protection
Reason for Application

Permit Being Modified

Permit Class: BOP **Number:** 150002

Description Five Year Operating Permit Renewal BOP200002 with Significant Modification
of Modifications: BOP190001 and Renewal BOP150002

Requirements from groups GR1-4 were moved to the cogeneration system in U11. The combined emission limits limit for Engine #2 and Boiler #2 were retained in GR1.

PM-2.5 emission limits were added to cogeneration system in U11 and backup diesel engine U15 consistent with N.J.A.C. 7:27-22.

U11:OS14, cogeneration system dual fuel operation, was separated into normal operation (OS13) and startup on dual fuel (OS14). Operating scenarios for boiler 1 & 2 startup and shutdown were added (OS22-25). A fuel limit for the dual fuel operation of 381 thousand gal/yr was added to cogeneration system dual fuel operation in U11:OS13.

Stack testing requirements for the cogeneration system in U11 were updated to include stack testing of SO₂ for Engine #2 (E12) and formaldehyde for all engines and boilers.

A Periodic Monitoring Procedure (PMP) for NO_x and CO was added to the backup diesel engine in U15.

VOC emission limits for the cogeneration system, U11, were adjusted to include formaldehyde.

N.J.A.C. 7:27-16.10(b) and N.J.A.C. 7:27-19.8(e) Reasonably Available Control Technology (RACT) requirements were added to the backup diesel engine in U15.

COMS requirement for cogeneration system U11 was replaced with a visible determination requirement.

Maximum Achievable Control Technology (MACT) Subpart A, ZZZZ and JJJJJ Requirements for the cogeneration system in U11 were updated. NSPS Subpart A and IIII Requirements for U15 were updated.

HAPs emissions were updated based on the new reporting thresholds in N.J.A.C. 7:27-17. Formaldehyde emissions were corrected. Total HAPs was decreased from 7.25 to 7.08 tons/year.

Direct monitoring and recordkeeping by calculations for HAPs was removed and replaced with surrogate monitoring of fuel usage in cogeneration system U11.

Fuel usage record keeping frequency for cogeneration system U11 was changed from permittee selection to a monthly basis.

The 2.16 MMBTU/hr backup diesel engine in U15, E15 was replaced with a 1.81 MMBTU/hr diesel engine; annual emissions were adjusted as follows: VOC was decreased from 0.0780 to 0.0240 tons/year, NO_x was decreased from 0.573 to 0.0500 tons/year, CO was decreased from 0.505 to 0.420 tons/year, SO₂ was decreased from 0.00100 to below

New Jersey Department of Environmental Protection

Reason for Application

was decreased from 0.505 to 0.450 tons/year, SO₂ was decreased from 0.00100 to below reporting threshold, total suspended particulate (TSP), particulate matter 10 micrometers or less (PM₁₀) and particulate matter 2.5 micrometers or less (PM_{2.5}) were decreased from 0.0280 to below reporting threshold.

Facility wide carbon dioxide equivalent (CO₂e) was decreased from 112,287 to 112,273 tons/year.

BOP200002

**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.

BOP200002

**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.	<p>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.</p> <p>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]</p>
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)].	<p>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)]</p>
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.

BOP200002

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

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

BOP200002

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

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

BOP200002

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

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

New Jersey Department of Environmental Protection
Facility Specific Requirements

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

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: IS2 Oil/water separator [< 50 lb/hr throughput; excluding water & air]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No person shall cause, suffer, allow, or permit the use of any oil-water separator unless such separator is covered with a lid while containing any VOC. Sections of oil-water separators containing essential powered mechanical devices operating above the liquid level are not subject to this requirement. [N.J.A.C. 7:27-16.6(n)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: IS3 Crankcase vent system [< 50 lbs/hr throughput; excluding water & air], IS4 Cooling Tower [< 50 lbs/hr throughput; excluding water & air]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
2	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP200002

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

Subject Item: IS5 (2) 500 gal. Ultra Low Sulfur Distillate Oil Storage Tanks [< 2,000 gallons; non-applicable VOC (<0.02 psia)], IS12 500 gal. Lube oil tank [<10,000 gallons;non-applicable VOC (<0.02 psia)]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Sulfur Content in Fuel <= 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 showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
2	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27- 9.2(a)]	None.	None.	None.

BOP200002

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

Subject Item: IS7 Natural Gas, LPG, & Oil burning equipment [< 1 MMBtu/hr]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. (Applicable to natural gas combustion only). [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	None.	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 showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
3	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27- 9.2(b)]	None.	None.	None.

BOP200002

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

Subject Item: IS11 (4) - 25,000 gal. Ultra Low Sulfur Distillate Oil Storage Tanks; non-applicable VOC (< 0.02 psia)]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The operating temperature of the tank shall not be greater than 350 degrees F. [N.J.A.C. 7:27-22.1]	None.	None.	None.
2	The vapor pressure of the liquid, excluding the vapor pressure of water, shall be less than 0.02 psia at the liquid's actual temperature or at 70 degrees F, whichever is higher. [N.J.A.C. 7:27-22.1]	None.	None.	None.
3	The tank or vessel shall have no visible emissions, exclusive of water vapor, to the outdoor atmosphere. [N.J.A.C. 7:27-22.1]	None.	None.	None.
4	The tank or vessel shall not emit any air contaminants which may cause an odor detectable outside the property boundaries of the facility. [N.J.A.C. 7:27-22.1]	None.	None.	None.
5	The tank or vessel shall not be subject to any NESHAPS, MACT, or NSPS air pollution control standards. [N.J.A.C. 7:27-22.1]	None.	None.	None.
6	The tank's or vessel's potential to emit each TXS and each HAP shall not exceed the reporting thresholds at N.J.A.C. 7:27-17.9(a). [N.J.A.C. 7:27-22.1]	None.	None.	None.
7	The percentage by weight of all HAPs collectively in the raw material stored in the tank, or mixed or blended in the vessel, shall be less than 1.0 percent. [N.J.A.C. 7:27-22.1]	None.	None.	None.

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	The owner or operator shall have readily available upon Department request a statement certified in accordance with N.J.A.C. 7-27-1.39, signed by the responsible official, as defined at N.J.A.C. 7:27-1.4, that: (1) specifies the contents of the tank; (2) affirms that the tank or vessel meets the above applicable requirements and (3) attests that the tank or vessel is in compliance with all other applicable State or federal air pollution requirements. [N.J.A.C. 7:27-22.1]	None.	None.	None.
9	Sulfur Content in Fuel <= 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 showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
10	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27- 9.2(a)]	None.	None.	None.

BOP200002

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

Subject Item: GR1 Combined Operation of Engine 2 and Boiler 2

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	VOC (Total) <= 6 lb/hr (applicable to Engine #2 (E12) operating in conjunction with boiler #2 (E14)) including formaldehyde. [N.J.A.C. 7:27-18.2(a)] and. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test) (see Stack Test Summary for U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test) (see Stack Test Summary for U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule (see Stack Test Summary for U11, OS Summary). [N.J.A.C. 7:27-22.16(e)]
2	Formaldehyde <= 1.02 lb/hr (total formaldehyde emissions from PT11) [N.J.A.C. 7:27-18.2(a)] and. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by stack emission testing every 5 years (based on completion date of the last stack test) (see Stack Test Summary for U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test) (see Stack Test Summary for U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule (see Stack Test Summary for U11, OS Summary). [N.J.A.C. 7:27-22.16(e)]
3	THC Emissions <= 25 ppmvd @ 15% O ₂ or 70% control (applicable to Engine #2 (E12) operating in conjunction with boiler #2 (E14)). Maximum allowable total hydrocarbon (THC) concentration (expressed as equivalent methane) if oxygen concentration in the flue gas is greater than 15% is either 25 ppmvd THC corrected to 15% O ₂ , or 30% of the maximum THC entering the catalytic oxidizer averaged over any consecutive 60 minute period, whichever is least stringent. [N.J.A.C. 7:27-22.16(e)]	THC Emissions: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs (see Stack Test Summary for U11, OS Summary). Total hydrocarbon stack emission tests shall be performed during operation of boiler #2. Catalyst outlet temperatures shall be maintained at 645 degrees Fahrenheit or greater during stack emission test events. [N.J.A.C. 7:27-22.16(e)]	THC Emissions: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test) (see Stack Test Summary for U11, OS Summary). Total hydrocarbon stack emission tests shall be performed during operation of boiler #2. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Stack Test Summary for U11, OS Summary). [N.J.A.C. 7:27-22.16(e)]
4	THC Emissions <= 50 ppmvd @ 7% O ₂ or 70% control (applicable to Engine #2 (E12) operating in conjunction with boiler #2 (E14)). Maximum allowable THC concentration (expressed as equivalent methane) if oxygen concentration in the flue gas is less than or equal to 15% is either 50 ppmvd THC corrected to 7% O ₂ or 30% of the maximum THC entering the catalytic oxidizer averaged over any consecutive 60 minute period, whichever is least stringent. [N.J.A.C. 7:27-22.16(e)]	THC Emissions: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs (see Stack Test Summary for U11, OS Summary). Operation at catalyst outlet temperature of 645 degrees Fahrenheit or greater during stack emission test events shall demonstrate conformance with the total hydrocarbon concentration, limits during stack tests events for GR1. [N.J.A.C. 7:27-22.16(e)]	THC Emissions: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test) (see Stack Test Summary for U11, OS Summary). Total hydrocarbon stack emission tests shall be performed during operation of boiler #2. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule (see Stack Test Summary for U11, OS Summary). [N.J.A.C. 7:27-22.16(e)]

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U11 Cogeneration system consisting of one IC engine with catalytic oxidizer and one heat recovery boiler and one boiler, all venting to a common stack

Subject Item: CD2 Catalytic Oxidizer for CO/THC Control, Applicable to OS 14 & OS15 for engine.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The catalytic oxidizer shall not be shut down until all air contaminants have been purged from the air handling systems after engine shutdown. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	The permittee shall calibrate, operate, and maintain a continuous monitoring and recordkeeping system to monitor temperature at the exit of the catalytic oxidizer chamber. [N.J.A.C. 7:27-22.16(e)]	Monitored by temperature instrument continuously. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.
3	Temperature \geq 645 degrees F Minimum operating temperature of catalytic oxidizer (measured at the exit of the oxidation chamber), except during startup, startup on dual fuel, and shutdown. [N.J.A.C. 7:27-22.16(a)]	Temperature: Monitored by temperature instrument continuously. A low temperature alarm shall sound when temperatures less than the approved minimum operating temperature for the catalyst are measured at the exit of the oxidation chamber at any time, except during startup and shutdown. [N.J.A.C. 7:27-22.16(o)]	Temperature: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.
4	Residence Time \geq 0.1 seconds. Minimum residence time of catalytic oxidizer. [N.J.A.C. 7:27-22.16(e)]	Residence Time: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Residence Time: Recordkeeping by other recordkeeping method (provide description) once initially calculations of residence time. [N.J.A.C. 7:27-22.16(o)]	None.
5	Operating Control Efficiency \geq 65 % VOC and 93% CO. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Requirements: 40 CFR 63 Subpart A 40 CFR 63 Subpart ZZZZ 40 CFR 63 Subpart JJJJJ 40 CFR 52.21 Prevention of Significant Deterioration [40 CFR Federal Rules Summary]	None.	None.	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<p>STACK TESTING SUMMARY</p> <p>The permittee shall conduct a stack test no later than every five years (see General Provisions) from the last stack test using an approved protocol to demonstrate compliance with emission limits for CO, NOx, Particulates, TSP, PM-10 and SO2 limits as specified in the complian plan for OS13, and the NOx and CO limits as specified in the compliance plan for OS14, OS15, and the THC and VOC limits as specified in the compliance plan for GR1 and the particulates, TSP and PM-10 limits as specified in the compliance plan for OS20, OS21, and for the particulates limit as specified in the compliance plan for OS24, OS25.</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.</p> <p>The permittee may propose, in the stack test protocol, to use CEMS data to satisfy the stack testing requirements, for NOx and/or CO, with EMS approval. In order for EMS to approve using CEMS data at the time of the stack test, the CEMS must be certified and be in compliance with all daily, quarterly and annual quality assurance requirements. The CEMS shall monitor and record emissions in units identical to those required by the applicable stack testing conditions of this permit. CEMS data, if allowed by this permit, shall be taken at the same worst case conditions as described above.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitoring as required under the applicable operating scenario(s).</p> <p>[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 no later than 12 months prior to the completion of the five year period since the last stack test. 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: www.epa.gov/electronic-reporting-air-emissions 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. [N.J.A.C. 7:27-22.18(e)] and . [N.J.A.C. 7:27-22.18(h)]</p>

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<p>PERIODIC STACK TESTING SUMMARY</p> <p>The permittee shall conduct a periodic stack test required by 40 CFR 60 Subpart ZZZZ using a protocol approved by the Department to demonstrate compliance with emission limits for CO as specified in the compliance plan for U11:OS13, OS14 and OS15. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	Other: Monitoring as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	<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 no later than 180 days prior to the testing due date or request from EMS, in writing, to use a previously approved protocol no later than 90 days prior to the testing due date. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT) that is downloaded at: www.epa.gov/electronic-reporting-air-emi unless another format is approved by EMS. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date. A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]</p>

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	<p>CEMS/COMS REQUIREMENTS SUMMARY</p> <p>Install and operate Continuous Monitoring Systems (CEMS or COMS) and conduct Performance Specification Test (PST) in accordance with the NJDEP Technical Manual 1005, to demonstrate compliance with CO and NOx as specified in the compliance plan for OS 14, 15,17, 19, 20, 21.</p> <p>The CEMS shall include continuous monitoring of all necessary parameters (e.g. oxygen, moisture, temperature, flow rate) to allow the required corrections to be applied to demonstrate compliance with the emission limits.</p> <p>Continuous parametric monitors and continuous parametric data recorders shall be installed and operated to demonstrate compliance with monitoring parameters, for example, flue gas flow rate, temperature, etc. as specified in the compliance plan for OS 14, 15,17, 19, 20, 21. [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>CEMS/COMS - Submit equipment protocol, submit a PST protocol, conduct PST and submit results: As per the approved schedule Submit equipment protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 within 60 days from the date of the approved permit BOP200002 and submit PST protocol within 90 days from the approved permit BOP200002. Within 30 days of PST protocol approval, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>Perform the PST test within 180 days from the date of the approved permit BOP200002 or within 90 days after the initial startup of the new or modified source, or within 90 days after the PST protocol approval, whichever comes later.</p> <p>Submit the performance specification test report to EMS no later than 30 days from the date of testing. The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(k)] and. [N.J.A.C. 7:27-22.18(g)]</p>

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	<p>CEMS/COMS REQUIREMENTS SUMMARY</p> <p>The Permittee shall operate CEMS according to the approved certification and in compliance with daily, quarterly, and annual quality assurance requirements. The CEMS shall include continuous monitoring of all necessary parameters (e.g. oxygen, moisture, temperature, flow rate) to allow the required corrections to be applied to demonstrate compliance with the emission limits.</p> <p>The Permittee shall request approval from the Department's Emission Measurement Section (EMS) to allow continued use of the existing CEMS when a change to the units of measurement is made to a permit limit. [N.J.A.C. 7:27-22.16(a)]</p>	None.	Other: Maintain readily accessible records of the Permittee's written request to EMS, and the response from EMS. [N.J.A.C. 7:27-22.16(o)].	Comply with the requirement: Upon occurrence of event. Submit a written request to the EMS within 30 days from the date of the approved operating permit to determine whether a full CEMS recertification is required, whether the change can follow the procedures for data recording and storage equipment upgrades found in the Department's Technical Manual 1005 Section IV.B.3(f), or if continued use of the existing CEMS is allowed. [N.J.A.C. 7:27-22]
6	The owner or operator shall develop a QA/QC plan for each CEMS/COMS required by this permit prepared in accordance with the NJDEP Technical Manual 1005 posted on the AQPP webpage at https://dep.nj.gov/boss/technical-manuals . [N.J.A.C. 7:27-22.16(a)]	Other: The QA/QC coordinator shall be responsible for reviewing the QA/QC plan on an annual basis. [N.J.A.C. 7:27-22.16(o)].	Other: Maintain readily accessible records of the QA/QC plan including QA data and quarterly reports. [N.J.A.C. 7:27-22.16(o)].	None.
7	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). [N.J.A.C. 7:27-9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
8	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27-9.2(b)]	None.	None.	None.

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	Boiler #2 (E14) must operate and must burn natural gas any time Engine #2 (E12) operates on dual fuel except during Engine #2 (E12) startup and during NOx, CO, TSP and PM-10 stack test events. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Maximum Gross Heat Input: Maximum annual heat input for the cogeneration system (engine #2 (E12) and two boilers) <= 1,417,080 MMBtu per any consecutive 12 month period. Limit based on permitted amount of natural gas for both boilers and permitted heat input for engine #2 (E12). [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(e)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage each month during operation. Fuel use for any 12 consecutive months is computed by adding the fuel consumed in a given month to that consumed in the preceding 11 months. [N.J.A.C. 7:27-22.16(e)]	None.
11	Maximum annual total heat input for engine #2 (E12) <= 525,600 MMBtu per any consecutive 12 month period. [N.J.A.C. 7:27-22.16(a)]	Monitored by fuel flow/firing rate instrument continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage each month during operation. Total heat input per the 12 consecutive month period shall be calculated by adding the total heat input during any one month to the sum of the total heat input during the preceding 11 months. [N.J.A.C. 7:27-22.16(e)]	None.
12	Engine fuel limited to Dual Fuel (maximum of 9.92% ultra low sulfur distillate and the remainder natural gas) or ultra low sulfur distillate. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	Boilers fuel limited to natural gas or ultra low sulfur distillate. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	VOC (Total) <= 30.2 tons/yr (including formaldehyde) including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-18.2(a)] and. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations annually, based on one calendar year. Calculations shall be based on total facility fuel consumption records and records of stack test results. [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.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	NOx (Total) <= 270 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-18.2(a)], [40 CFR 52.21] and. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
16	CO <= 36.4 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
17	SO2 <= 1.98 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations annually, based on one calendar year. Calculations shall be based on total facility fuel consumption records and records of stack test results. [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. Compliance shall be determined based on a 12 consecutive month period. [N.J.A.C. 7:27-22.16(o)]	None.

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	TSP <= 55.7 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations annually, based on one calendar year. Calculations shall be based on total facility fuel consumption records and records of stack test results. [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.
19	PM-10 (Total) <= 55.4 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations annually, based on one calendar year. Calculations shall be based on total facility fuel consumption records and records of stack test results. [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.
20	PM-2.5 (Total) <= 55.4 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
21	Methane <= 88 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations annually, based on one calendar year. Calculations shall be based on total facility fuel consumption records. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
22	HAPs <= 7.08 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	HAPs: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations. [N.J.A.C. 7:27-22.16(o)].	None.
23	Pb <= 0.00177 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Pb: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations. [N.J.A.C. 7:27-22.16(o)].	None.
24	Acetaldehyde <= 0.693 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations. [N.J.A.C. 7:27-22.16(o)].	None.
25	Acrolein <= 0.426 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations. [N.J.A.C. 7:27-22.16(o)].	None.
26	Benzene <= 0.0451 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations. [N.J.A.C. 7:27-22.16(o)].	None.
27	Ethylene dibromide <= 0.00367 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Ethylene dibromide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations. [N.J.A.C. 7:27-22.16(o)].	None.
28	Butadiene (1,3-) <= 0.0221 tons/yr including startup and shutdown, based on fuel usage limits. [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)]	Other: Maintain records of initial calculations. [N.J.A.C. 7:27-22.16(o)].	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
29	Formaldehyde <= 4.44 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
30	Biphenyl <= 0.0176 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Biphenyl: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
31	Arsenic compounds <= 0.000874 tons/yr including startup and shutdown, based on fuel usage limits. [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)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
32	Beryllium Emissions <= 0.000595 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Beryllium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
33	Cadmium compounds <= 0.00107 tons/yr including startup and shutdown, based on fuel usage limits. [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)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
34	Naphthalene <= 0.00919 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
35	Tetrachloroethane (1,1,2,2-) <= 0.003314 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Tetrachloroethane (1,1,2,2-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
36	Trichloroethane (1,1,2) <= 0.002635 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Trichloroethane (1,1,2): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
37	Chloroform <= 0.002361 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Chloroform: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
38	Manganese compounds <= 0.00135 tons/yr including startup and shutdown, based on fuel usage limits. [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)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
39	Cobalt compounds <= 0.0000367 tons/yr including startup and shutdown, based on fuel usage limits. [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)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
40	Dimethylbenz(a)anthracene (7,12-) <= 0.00000699 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Dimethylbenz(a)anthracene (7,12-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
41	Nickel compounds <= 0.00151 tons/yr including startup and shutdown, based on fuel usage limits. [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)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
42	Ethylene dibromide <= 0.00367 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Ethylene dibromide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
43	Polycyclic organic matter <= 0.00806 tons/yr including startup and shutdown, based on fuel usage limits. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
44	No owner or operator subject to the provisions of MACT Subpart A in 40 CFR 63 shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to: (1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere; (2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions. (MACT Subpart A) [40 CFR 63.4(b)]	None.	None.	None.
45	The owner and operator must not use fragmentation or phasing of reconstruction activities (i.e., intentionally dividing reconstruction into multiple parts for purposes of avoiding new source requirements) to avoid becoming subject to new source requirements. (MACT Subpart A) [40 CFR 63.4(c)]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
46	The owner or operator must operate and maintain any affected source at all times, including periods of startup, shutdown, and malfunction, including associated air pollution control equipment and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in 40 CFR 63.6(e)(3), review of operation and maintenance records, and inspection of the source. (MACT Subpart A) [40 CFR 63.6(e)(1)(i)]	None.	None.	None.
47	The owner or operator shall correct malfunctions as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, the owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices. (MACT Subpart A) [40 CFR 63.6(e)(1)(ii)]	None.	None.	None.

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
48	The owner or operator of an affected source must develop a written startup, shutdown, and malfunction (SSM) plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The SSM plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard. This plan must be developed by the owner or operator by the source's compliance date for that relevant standard. (MACT Subpart A) [40 CFR 63.6(e)(3)(i)]	None.	Other: The owner or operator shall maintain relevant records described in 40 CFR 63.10(b)(2)(i) through (2)(v) for a period of 5 years following the occurrence. Those records include the occurrence and duration of each startup or shutdown when it causes the source to exceed any applicable limitation in the relevant emission standards; the occurrence and duration of each malfunction of operation or the required air pollution control and monitoring equipment; all required maintenance performed on the air pollution control and monitoring equipment; and corrective actions taken during periods of those startups, shutdowns or malfunction. [40 CFR 63.10(b)(2)].	None.
49	The owner or operator of an affected source must keep records of actions taken during a startup, shutdown (and the startup or shutdown causes the source to exceed any applicable limitation in the relevant emission standards), or malfunction, which are consistent with the procedures specified in the affected source's startup, shutdown, or malfunction plan, including records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. (MACT Subpart A) [40 CFR 63.6(e)(3)(iii)]	None.	Recordkeeping by other recordkeeping method (provide description) upon occurrence of event. The owner or operator shall maintain all information necessary, including actions taken, to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan when all actions taken during periods of startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. [40 CFR 63.10(b)(2)(v)]	Submit a report: Semiannually beginning within 6 months of initial start-up. The startup, shutdown, or malfunction report shall consist of a letter containing: name, title, and signature of the owner or operator and shall be submitted to the Administrator. The report shall be delivered by the 30th day following the end of each calendar half. The report shall only be required if a startup, shutdown caused the source to exceed any applicable emission limitation in the relevant standard, or if a malfunction occurred during the reporting period, provided the actions taken by the owner or operator are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan. [40 CFR 63.10(d)(5)(i)]

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
50	The owner or operator of an affected source must record the actions taken during a startup, shutdown or malfunction during which the source exceeds any applicable emission standard and those actions are not consistent with the procedures specified in the affected source's startup, shutdown, or malfunction plan. The owner or operator must report such actions to the Administrator. (MACT Subpart A) [40 CFR 63.6(e)(3)(iv)]	None.	Recordkeeping by other recordkeeping method (provide description) upon occurrence of event. The owner or operator shall maintain records of actions taken during periods of startup or shutdown when the source exceeded applicable emission limitations in a relevant standard and when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan; or actions taken during periods of malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan. [40 CFR 63.10(b)(2)(iv)]	Submit a report: Upon occurrence of event. The report shall consist of a telephone call or facsimile and shall be submitted within 2 working days after commencing action, followed by a letter delivered or postmarked within 7 working days after the end of the event. [40 CFR 63.10(d)(5)(ii)]
51	The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying to the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in 40 CFR 63.6(e)(3)(viii), the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. (MACT Subpart A) [40 CFR 63.6(e)(3)(v)]	None.	None.	Submit recordkeeping format: Upon occurrence of event. The Administrator may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of the owner or operator. Upon receipt of such a request, the owner or operator must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. The owner or operator may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. [40 CFR 63.6(e)(3)(v)]

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
52	If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction (defined in 40 CFR 63.2), the owner or operator shall revise the plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events, and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. (MACT Subpart A) [40 CFR 63.6(e)(3)(viii)]	None.	None.	Submit a report: As per the approved schedule. Each revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by 40 CFR 63.10(d)(5). [40 CFR 63.6(e)(3)(viii)]
53	The owner or operator of an affected source required to do performance testing under a relevant standard shall conduct a performance test. Each performance test shall consist of three (3) separate runs and the arithmetic mean of the results of the three runs shall apply as specified in 40 CFR 63.7(e)(3). (MACT Subpart A) [40 CFR 63.7(a)(2)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall maintain files of all information, including all reports and notifications, required by 40 CFR 63 in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]	Conduct a performance test: As per the approved schedule. Within 180 days of the compliance date of the source. [40 CFR 63.7(a)(2)]

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
54	The owner or operator of an affected source must notify the Administrator in writing before the performance test is scheduled. (MACT Subpart A) [40 CFR 63.7(b)(1)]	None.	Recordkeeping by other recordkeeping method (provide description) upon occurrence of event. The owner or operator shall maintain files of all information, including all reports and notifications, required by 40 CFR 63 in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]	Submit notification: As per the approved schedule. At least 60 days before the performance test is initially scheduled. Per 40 CFR 63.7(b)(2), the owner or operator shall notify the Administrator as soon as practicable and without delay prior to the scheduled test and specify the date when the performance test is rescheduled, if the owner or operator is unable to conduct the performance test as initially scheduled. [40 CFR 63.7(b)(1)]
55	The owner or operator of an affected source shall develop, before conducting a required performance test and, if requested by the Administrator, shall submit a site-specific plan to the Administrator for approval. The test plan shall include: test program summary, test schedule, data quality objectives, and an internal and external quality assurance (QA) program. An internal and external quality assurance (QA) program shall include the information prescribed in 40 CFR 63.7(c)(2)(ii) and (c)(2)(iii). (MACT Subpart A) [40 CFR 63.7(c)(2)(i)]	None.	Recordkeeping by other recordkeeping method (provide description) at no required frequency. The owner or operator shall maintain files of all information recorded in a form suitable and readily available for inspection. The files shall be retained for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]	Submit a plan: As per the approved schedule. The site- specific test plan shall be submitted upon the Administrator's request at least 60 calendar days before the performance test is scheduled. [40 CFR 63.7(c)(2)(iv)]
56	The owner or operator of an affected source must analyze performance audit (PA) samples during each performance test. The owner or operator must request performance audit materials 30 days prior to the test date. (MACT Subpart A) [40 CFR 63.7(c)(4)(i)]	None.	None.	None.

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
57	The owner or operator shall conduct the performance test under such conditions as the Administrator specifies based on representative performance. Upon request, the owner or operator shall make available to the Administrator such record. (MACT Subpart A) [40 CFR 63.7(e)(1)]	None.	None.	None.
58	The owner or operator of an affected source shall report the results of the performance test to the Administrator. (MACT Subpart A) [40 CFR 63.7(g)(1)]	None.	Recordkeeping by other recordkeeping method (provide description) upon occurrence of event. Results of performance test shall be maintained and recorded in a form suitable and readily available for expeditious inspection and review for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]	Submit a report: As per the approved schedule. The owner or operator shall report the results of the performance test before the close of business on the 60th day following the completion of performance test. [40 CFR 63.10(d)(2)]
59	The owner or operator of an affected source shall conduct monitoring as specified in the relevant standard, unless otherwise specified by the Administrator. (MACT Subpart A) [40 CFR 63.8(b)(1)]	None.	None.	None.
60	The owner or operator using more than one continuous monitoring system (CMS) to measure the emission from one affected source shall report the results as required, for each CMS. (MACT Subpart A) [40 CFR 63.8(b)(3)]	None.	None.	None.

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
61	The owner or operator of an affected source must maintain and operate each continuous monitoring system (CMS) as specified in 40 CFR 63.6(e)(1). (MACT Subpart A) [40 CFR 63.8(c)(1)(i)]	None.	Recordkeeping by other recordkeeping method (provide description) upon occurrence of event. The owner or operator shall maintain records of all CMS malfunction or inoperative periods (including out of control periods), all maintenance and adjustments performed for CMS as specified in 40 CFR 63.10(b) and (c). The reports shall be maintained and recorded in a form suitable and readily available for expeditious inspection and review for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]	Submit a report: Semi-annually on January 31 and July 31 of each year. The owner or operator shall submit an excess emissions and continuous monitoring system performance report and/or a summary report to the Administrator semiannually. The report shall be delivered by the 30th day following the end of each calendar half. Per 40 CFR 63.10(e)(3)(v), written reports of excess emissions or exceedances of process or control system parameters shall include all the information required in 40 CFR 63.10 (c)(5) through (c)(13), in 40 CFR 63.8(c)(7) and (c)(8), and in the relevant standard, and they shall contain the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances of a parameter have occurred, or a CMS has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report. [40 CFR 63.10(e)(3)(i)]
62	The owner or operator of an affected source must keep the necessary parts for routine repairs of the affected continuous monitoring system (CMS) equipment readily available. (MACT Subpart A) [40 CFR 63.8(c)(1)(ii)]	None.	None.	None.
63	The owner or operator of an affected source must develop and implement a written startup, shutdown, and malfunction plan for continuous monitoring system (CMS) as specified in 40 CFR 63.6(e)(3). (MACT Subpart A) [40 CFR 63.8(c)(1)(iii)]	None.	None.	None.
64	All continuous monitoring system (CMS) must be installed such that representative measures of emissions from the affected source are obtained. In addition all CEMS must be located according to the procedures in the applicable performance specifications. (MACT Subpart A) [40 CFR 63.8(c)(2)(i)]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
65	The continuous monitoring system (CMS), including continuous opacity monitoring system (COMS) and CEMS, shall be operated at all times except for: breakdowns, out of control periods, repairs, maintenance, calibration checks and zero and high level calibration drifts adjustments. The CMS shall meet minimum frequency of operation requirements as described in 40 CFR 63.8(c)(4)(i) and (ii). (MACT Subpart A) [40 CFR 63.8(c)(4)]	None.	None.	None.
66	The owner or operator of a continuous monitoring system (CMS) [(that is not a continuous parameter monitoring system (CPMS))] must check the zero (low level) and high level calibration drifts at least once daily. The zero (low level) and high level calibrations drifts must be adjusted, at minimum, whenever the 24-hour zero (low level) drift exceeds two times the limits. The system shall allow the amount of excess zero (low level) and high -level drift measured at 24- hour interval checks to be recorded and quantified. For continuous opacity monitoring system (COMS), the optical surfaces and instrumental surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity. The CPMS must be calibrated prior to use and must be checked daily. (MACT Subpart A) [40 CFR 63.8(c)(6)]	None.	None.	None.
67	The owner or operator of the affected source shall take corrective action and conduct retesting, when the continuous monitoring system (CMS) is out of control. (MACT Subpart A) [40 CFR 63.8(c)(7)(ii)]	None.	None.	None.

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
68	The owner or operator of a continuous monitoring system (CMS) shall report all out-of-control periods. (MACT Subpart A) [40 CFR 63.8(c)(8)]	None.	Recordkeeping by other recordkeeping method (provide description) upon occurrence of event. The owner or operator shall maintain records all CMS malfunction or inoperative periods (including out of control periods), all maintenance and adjustments performed for CMS as specified in 40 CFR 63.10(b) and (c). The reports shall be maintained and recorded in a form suitable and readily available for expeditious inspection and review for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]	Submit a report: As per the approved schedule. The report shall be delivered by the 30th day following the end of each calendar half. The report shall consist of a letter containing: name, title, and signature of the owner or operator. The owner or operator shall report within 24 hours the actions inconsistent with the malfunction plan, and a follow up report shall be submitted within 2 weeks after the commencing actions. [40 CFR 63.10(e)(3)]
69	The owner or operator of an affected source that is required to use a continuous monitoring system (CMS) and is subject to monitoring requirements shall develop and implement a CMS quality control program including a site- specific performance evaluation test plan. In addition, each quality control program shall include at minimum as specified in paragraph 40 CFR 63.8(d)(2)(i) to (vi). (MACT Subpart A) [40 CFR 63.8(d)(2)]	None.	Recordkeeping by other recordkeeping method (provide description) upon occurrence of event. The owner or operator shall keep these written procedures on record for the life of the affected source and make available for inspection upon request. The owner or operator shall keep the previous version of the plan for a period of 5 years after each revision. [40 CFR 63.8(d)(3)]	None.

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
70	The owner or operator of an affected source being monitored shall conduct a performance evaluation of the continuous monitoring system (CMS). Such performance evaluation shall be conducted according to the applicable specifications and procedures described in this section or in the relevant standard. The owner or operator of an affected source shall notify the Administrator in writing of the date of performance evaluation test. (MACT Subpart A) [40 CFR 63.8(e)(1)]	None.	Recordkeeping by other recordkeeping method (provide description) upon occurrence of event. Notification records shall be maintained and recorded in a form suitable and readily available for expeditious inspection and review for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]	Submit notification: As per the approved schedule. The owner or operator shall submit the notification within 60 days prior to the performance evaluation date or to the performance test date, as prescribed in 40 CFR 63.9(g)(1). [40 CFR 63.8(e)(2)]
71	The owner or operator of an affected source shall develop and submit a site-specific performance evaluation test plan to the Administrator for approval upon request. The performance evaluation test plan shall include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external QA program. Data quality objectives are the pre-evaluation expectations of precision, accuracy, and completeness of data. An internal and external quality assurance (QA) program shall include the information prescribed in 40 CFR 63.8(e)(3)(ii). (MACT Subpart A) [40 CFR 63.8(e)(3)(i)]	None.	Recordkeeping by other recordkeeping method (provide description) upon occurrence of event. The owner or operator shall keep these written procedures on record for the life of the affected source and make available for inspection upon request. The owner or operator shall keep the previous version of the plan for a period of 5 years after each revision. [40 CFR 63.8(d)(3)]	Submit a plan: As per the approved schedule. The owner or operator shall submit the site-specific performance evaluation test plan at least 60 days before the performance test or performance evaluation is scheduled. [40 CFR 63.8(e)(3)(iii)]

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
72	The owner or operator of an affected source that is required to use a continuous monitoring system (CMS) shall conduct a performance evaluation of the CMS as specified in 40 CFR 63.8(e)(4). (MACT Subpart A) [40 CFR 63.8(e)(4)]	None.	Recordkeeping by other recordkeeping method (provide description) upon occurrence of event. The owner or operator shall maintain files of all information recorded in a form suitable and readily available for inspection. The files shall be retained for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]	Conduct a performance test: As per the approved schedule. The performance evaluation shall be conducted within 180 days after the compliance date of the source if no performance test is required. The performance evaluation shall be conducted as specified in 40 CFR 63.7 if a performance test is required. The performance evaluation shall be conducted before the performance test if the owner or operator elects to submit continuous opacity monitoring system (COMS) data for compliance with a relevant opacity standard. [40 CFR 63.8(e)(4)]
73	The owner or operator of an affected source shall submit to the Administrator the results of the performance evaluation. (MACT Subpart A) [40 CFR 63.8(e)(5)]	None.	Recordkeeping by other recordkeeping method (provide description) upon occurrence of event. Results of performance evaluation test shall be maintained and recorded in a form suitable and readily available for expeditious inspection and review for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]	Submit test results: As per the approved schedule. Within 60 days of the performance evaluation, if no performance test is required, or before the close of business on the 60th day following the completion of performance test, if a performance test is required. Per 40 CFR 63.8(e)(5)(ii), the owner or operator using a continuous opacity monitoring system (COMS) during any performance test, shall submit three copies of the report of the results of COMS, within 15 calendar days before the performance test. [40 CFR 63.8(e)(5)(i)]

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
74	The owner or operator of each CEMS shall reduce the monitoring data as specified in 40 CFR 63.8(g)(1) through (g)(5). All CEMS data for measurement other than opacity, shall be reduced to 1-hour averages computed from four or more points equally spaced over each 1-hour period, except during calibration, quality assurance, or maintenance periods, when a valid hourly average shall consist of at least two data points with each representing a 15- minute period. (MACT Subpart A) [40 CFR 63.8(g)(2)]	None.	None.	None.
75	After a title V permit has been issued, the owner or operator shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under 40 CFR 63. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard. (MACT Subpart A) [40 CFR 63.9(h)(3)]	None.	Recordkeeping by other recordkeeping method (provide description) upon occurrence of event. Notification records shall be maintained for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]	Submit notification: As per the approved schedule. The notification shall be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration to NJDEP. [40 CFR 63.9(h)(3)]

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
76	The owner or operator shall submit all information required under 40 CFR 63 to the Regional Enforcement Office of NJDEP. In addition, per 40 CFR 63.9(a)(4)(ii), the owner or operator shall send a copy of each report submitted to NJDEP under 40 CFR 63 to Director, Division of Enforcement and Compliance Assistance, USEPA Region 2, 290 Broadway, New York, NY 10007-1866. (MACT Subpart A) [40 CFR 63.10(a)(4)(ii)]	None.	Other: The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)].	Other (provide description): As per the approved schedule. Submit reports and notifications as required by 40 CFR 63 to EPA Region 2 and NJDEP. [40 CFR 63.13(b)]
77	General recordkeeping requirements. The owner or operator shall maintain files of all information (including all reports and notifications) required by 40 CFR 63 recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. The owner or operator shall maintain relevant records per 40 CFR 63.10(b)(2) and 40 CFR 63.10(c). (MACT Subpart A) [40 CFR 63.10(b)(1)]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

BOP200002

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

Emission Unit: U11 Cogeneration system consisting of one IC engine with catalytic oxidizer and one heat recovery boiler and one boiler, all venting to a common stack

Operating Scenario: OS13 Engine 2 firing dual fuel (utilizing "clean burn" technology)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See GR1 for VOC, Formaldehyde and THC limits for when engine 2 operates in conjunction with boiler 2. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	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(g)]	Recordkeeping by manual logging of parameter or storing data in a computer data system 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 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.
3	Opacity <= 20 % , exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
4	NO _x (Total) <= 2.3 grams/brake horsepower-hour. Restriction on NO _x emission per horsepower hour for lean burn I.C. Engine with an output of more than 500 horsepower and fueled by liquid fuel. [N.J.A.C. 7:27-19.8(e)]	NO _x (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	NO _x (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS13

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	NO _x (Total) ≤ 42.5 lb/hr based on NO _x RACT emission limit, 2.3 gm/BHP-hr. [N.J.A.C. 7:27-19.8(a)]	NO _x (Total): Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	NO _x (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
6	CO ≤ 500 ppm _{dv} @ 15% O ₂ . [N.J.A.C. 7:27-16.10(b)]	CO: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-16.10(b)]
7	Particulate Emissions ≤ 12 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	Particulate Emissions: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Particulate Emissions: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (See Applicable Requirement for U11, OS Summary, STACK TEST 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 Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]
8	Maximum Gross Heat Input ≤ 60 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	Maximum annual total heat input for engine #2 (E12) <= 525,600 MMBtu per any consecutive 12 month period. [N.J.A.C. 7:27-22.16(a)]	Monitored by fuel flow/firing rate instrument continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage each month during operation. Total heat input per the 12 consecutive month period shall be calculated by adding the total heat input during any one month to the sum of the total heat input during the preceding 11 months. [N.J.A.C. 7:27-22.16(e)]	None.
10	Natural Gas Usage <= 464 MMft ³ per any consecutive 12 month period. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage each month during operation. Total heat input per the 12 consecutive month period shall be calculated by adding the total heat input during any one month to the sum of the total heat input during the preceding 11 months. [N.J.A.C. 7:27-22.16(e)]	None.
11	Fuel Oil Usage <= 0.381 MMgals (applicable to dual fuel operation only) per any consecutive 12 month period. [N.J.A.C. 7:27-22.16(a)]	Fuel Oil Usage: Monitored by fuel flow/firing rate instrument continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Fuel Oil Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage each month during operation. Total heat input per the 12 consecutive month period shall be calculated by adding the total heat input during any one month to the sum of the total heat input during the preceding 11 months. [N.J.A.C. 7:27-22.16(e)]	None.
12	VOC (Total) <= 4.82 lb/hr (applicable to Engine #2 (E12) operating alone) including formaldehyde. [N.J.A.C. 7:27-18.2(a)] and. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	CO <= 2.2 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
14	CO <= 2.2 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(e)]
15	NOx (Total) <= 42.5 lb/hr based on NOx RACT emission limit, 2.3 gm/BHP-hr. [N.J.A.C. 7:27-18.2(a)], [40 CFR 52.21] and. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(e)]
16	CO <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	SO ₂ ≤ 0.161 lb/hr. [N.J.A.C. 7:27-22.16(a)]	SO ₂ : Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	SO ₂ : Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	None.
18	TSP ≤ 3.2 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(e)]
19	PM-10 (Total) ≤ 3.2 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(e)]
20	PM-2.5 (Total) ≤ 3.2 lb/hr based on the emission limit of PM-10. [N.J.A.C. 7:27-22.16(a)]	Other: Compliance with the PM-10 monitoring requirement will satisfy the PM-2.5 monitoring requirement. [N.J.A.C. 7:27-22.16(o)].	Other: Compliance with the PM-10 recordkeeping requirement will satisfy the PM-2.5 monitoring requirement. [N.J.A.C. 7:27-22.16(o)].	None.
21	THC ≤ 25 ppmvd @ 15% O ₂ or 70% control. Maximum allowable total hydrocarbon (THC) concentration (expressed as equivalent methane) if oxygen concentration in the flue gas is greater than 15% is either 25 ppmvd THC corrected to 15% O ₂ , or 30% of the maximum THC entering the catalytic oxidizer averaged over any consecutive 60 minute period, whichever is least stringent. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
22	Methane ≤ 20.5 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
23	Total HAPs ≤ 1.65 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS13

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
24	Acetaldehyde <= 0.158 lb/hr based on maximum gross heat input and Webfire emission factor. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
25	Acrolein <= 0.0972 lb/hr based on maximum gross heat input and Webfire emission factor. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
26	Benzene <= 0.00994 lb/hr based on maximum gross heat input and Webfire emission factor. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
27	Formaldehyde <= 0.999 lb/hr based on maximum gross heat input and Webfire emission factor. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
28	Biphenyl <= 0.0114 lb/hr based on maximum gross heat input and Webfire emission factor. [N.J.A.C. 7:27-22.16(a)]	Biphenyl: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
29	Ethylene dibromide <= 0.000838 lb/hr based on maximum gross heat input and Webfire emission factor. [N.J.A.C. 7:27-22.16(a)]	Ethylene dibromide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
30	Butadiene (1,3-) <= 0.00505 lb/hr based on maximum gross heat input and Webfire emission factor. [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)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
31	Chloroform <= 0.000539 lb/hr based on maximum gross heat input and Webfire emission factor. [N.J.A.C. 7:27-22.16(a)]	Chloroform: Monitored by calculations once initially. [None]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
32	Tetrachloroethane (1,1,2,2-) <= 0.000757 lb/hr based on maximum gross heat input and Webfire emission factor. [N.J.A.C. 7:27-22.16(a)]	Tetrachloroethane (1,1,2,2-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
33	Polycyclic organic matter <= 0.00095 lb/hr based on maximum gross heat input and Webfire emission factor. [N.J.A.C. 7:27-22.16(a)]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
34	Trichloroethane (1,1,2) <= 0.000602 lb/hr based on maximum gross heat input and Webfire emission factor. [N.J.A.C. 7:27-22.16(a)]	Trichloroethane (1,1,2): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
35	Naphthalene \leq 0.084 lb/hr based on maximum gross heat input and Webfire emission factor. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
36	CO \leq 23 ppmvd @ 15% O ₂ or reduce CO emissions by 70 percent or more. The initial performance test must be conducted within 180 days after effective date of the rule, by November 3, 2013. An initial performance test is not required if a performance test has been previously conducted provided the test was conducted using the same methods specified in Table 4 to 40 CFR 63 Subpart ZZZZ, is no older than 2 years, and the results have been reviewed and accepted by the EMS of NJDEP. (MACT Subpart ZZZZ). [40 CFR 63.6603(a)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three 1-hour tests. The performance stack test shall be conducted once initially and every 8760 hours or 3 years, whichever comes first. The performance tests must be conducted according to the requirements in Tables 4, 5 and 6 to 40 CFR 63 Subpart ZZZZ and in accordance with a site-specific test plan developed in accordance with 40 CFR 63.7(c)(2). If requested by the Administrator, the site-specific test plan must be submitted to the Administrator. Measurements to determine O ₂ concentration must be made at the same time as the measurements for CO concentration. During the initial and subsequent performance tests, the catalyst pressure drop, catalyst inlet temperature, and average load shall be recorded. [40 CFR 63.6620]	CO: Recordkeeping by stack test results upon occurrence of event. The permittee must keep records in a form suitable and readily available (in hard copy or electronic form) for expeditious review. According to 40 CFR 63.10(b)(1), each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, except that the most recent 2 years of data do not have to be retained on site, per Table 8 of 40 CFR 63 Subpart ZZZZ. [40 CFR 63.6660]	Submit documentation of compliance: Once initially. You must submit the Notification of Compliance Status to EPA Administrator Region 2 and to NJDEP Regional Enforcement Office containing the results of the initial performance test according to 40 CFR 63.9(h)(2)(ii) before the close of business on the 60th day following the completion of the performance test. The permittee must submit a Notification of Intent to conduct a performance test, to EPA Administrator Region 2 and to NJDEP Regional Enforcement Office, at least 60 days before the performance test is scheduled to begin, as required in 40 CFR 63.7(b)(1), per 40 CFR 63.6645(g). [40 CFR 63.6645(h)]
37	An existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder constructed or reconstructed before June 12, 2006 must use diesel fuel that contains 15 ppm Sulfur and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. (MACT Subpart ZZZZ) [40 CFR 63.6604(a)]	None.	None.	None.

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
38	The owner or operator shall comply with the General Provisions as shown in Table 8 to Subpart ZZZZ of 40 CFR 63 that apply to an existing non-emergency non-black start SI RICE > 500 HP constructed or reconstructed before June 12, 2006 and located at an area source of HAP emissions. (MACT Subpart ZZZZ) [40 CFR 63.6665]	None.	None.	None.
39	The owner or operator of existing non-emergency non-black start CI RICE HP >=300 HP constructed or reconstructed before June 12, 2006 and located at an area source of HAP emissions that is not equipped with a closed crankcase ventilation system shall either install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, per 40 CFR 63.6625(g)(1), or install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals, per 40 CFR 63.6625(g)(2). (MACT Subpart ZZZZ) [40 CFR 63.6625(g)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee must keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6660]	None.
40	During startup and shutdown, the owner or operator shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. (MACT Subpart ZZZZ) [40 CFR 63.6603(a)]	None.	None.	None.
41	The engine must be in compliance with all applicable emission limitations, operating limitations, and other requirements in Subpart ZZZZ of 40 CFR 63 at all times. (MACT Subpart ZZZZ) [40 CFR 63.6605(a)]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
42	At all times the owner or operator must operate and maintain a RICE including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. (MACT Subpart ZZZZ) [40 CFR 63.6605(b)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system annually. The permittee must keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6660]	None.
43	The owner or operator must submit compliance reports semiannually according to the requirements in 40 CFR 63.6650(b)(1) through (5). (MACT Subpart ZZZZ) [40 CFR 63.6650(b)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee must keep: (1) A copy of each notification and report submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status, according to the requirement in 40 CFR 63.10(b)(2)(xiv); (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment; (3) Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii); (4) Records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63.6655]	Submit a report: Semi-annually on January 31 and July 31 of each year. The first Compliance report must cover the period beginning on May 3, 2013 and ending December 31, 2013. Each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The report must contain the results of the performance test if conducted during the reporting period. Each report must include the information required in 40 CFR 6650(c) through (e). For a source that has obtained a title V operating permit pursuant to 40 CFR part 70, the permittee may submit the first and subsequent Compliance reports according to the dates the permitting authority has established. [40 CFR 63.6650(b)]
44	The owner or operator shall comply with the General Provisions as shown in Table 8 to Subpart ZZZZ of 40 CFR 63 that apply to an existing non-emergency non-black start CI RICE > 300 HP constructed or reconstructed before June 12, 2006 and located at an area source of HAP emissions. (MACT Subpart ZZZZ) [40 CFR 63.6665]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS13

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U11 Cogeneration system consisting of one IC engine with catalytic oxidizer and one heat recovery boiler and one boiler, all venting to a common stack

Operating Scenario: OS14 Engine 2 Startup/Shutdown on dual fuel

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	"Start-up on dual fuel" is defined as the period of time when the engines switches over to dual fuel operation to when the engine reaches the appropriate safe operating load for the current condition. This occurs under OS14. Each dual fuel start-up operation shall be limited to 15 minutes. The start-up on dual fuel for OS14 sequentially follows the N.J.A.C. 7:27-19.13 Alternate Emission Limit start-up for OS15 for a maximum duration of 15 minutes for each operating scenario OS14 and OS15. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(a)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Records shall be kept for each start-up/shutdown period. Records shall show start-up/shutdown start time and start-up/shutdown end time, date, total start-up/shutdown time and name of the operator making the entry. Records shall be maintained on site for a minimum of 5 years. [N.J.A.C. 7:27-22.16(a)]	None.
2	Opacity <= 20 % , exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
3	NOx (Total) <= 2.3 grams/brake horsepower-hour. Restriction on NOx emission per horsepower hour for lean burn I.C. Engine with an output of more than 500 horsepower and fueled by liquid fuel. [N.J.A.C. 7:27-19.8(e)]	NOx (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	NO _x (Total) ≤ 42.5 lb/hr based on NO _x RACT emission limit, 2.3 gm/BHP-hr. [N.J.A.C. 7:27-19.8(a)]	NO _x (Total): Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	NO _x (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
5	CO ≤ 500 ppm _d v @ 15% O ₂ . [N.J.A.C. 7:27-16.10(b)]	CO: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-16.10(b)]
6	Particulate Emissions ≤ 12 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS14

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	CO ≤ 23 ppmvd @ 15% O ₂ or reduce CO emissions by 70 percent or more. The initial performance test must be conducted within 180 days after effective date of the rule, by November 3, 2013. An initial performance test is not required if a performance test has been previously conducted provided the test was conducted using the same methods specified in Table 4 to 40 CFR 63 Subpart ZZZZ, is no older than 2 years, and the results have been reviewed and accepted by EMS of NJDEP. (MACT Subpart ZZZZ). [40 CFR 63.6603(a)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three 1-hour tests. The performance stack test shall be conducted once initially and every 8760 hours or 3 years, whichever comes first. The performance tests must be conducted according to the requirements in Tables 4, 5 and 6 to 40 CFR 63 Subpart ZZZZ and in accordance with a site-specific test plan developed in accordance with 40 CFR 63.7(c)(2). If requested by the Administrator, the site-specific test plan must be submitted to the Administrator. Measurements to determine O ₂ concentration must be made at the same time as the measurements for CO concentration. During the initial and subsequent performance tests, the catalyst pressure drop, catalyst inlet temperature, and average load shall be recorded. [40 CFR 63.6620]	CO: Recordkeeping by stack test results upon occurrence of event. The permittee must keep records in a form suitable and readily available (in hard copy or electronic form) for expeditious review. According to 40 CFR 63.10(b)(1), each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, except that the most recent 2 years of data do not have to be retained on site, per Table 8 of 40 CFR 63 Subpart ZZZZ. [40 CFR 63.6660]	Submit documentation of compliance: Once initially. You must submit the Notification of Compliance Status to EPA Administrator Region 2 and to NJDEP Regional Enforcement Office containing the results of the initial performance test according to 40 CFR 63.9(h)(2)(ii) before the close of business on the 60th day following the completion of the performance test. The permittee must submit a Notification of Intent to conduct a performance test, to EPA Administrator Region 2 and to NJDEP Regional Enforcement Office, at least 60 days before the performance test is scheduled to begin, as required in 40 CFR 63.7(b)(1), per 40 CFR 63.6645(g). [40 CFR 63.6645(h)]
8	During startup and shutdown, the owner or operator shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. (MACT Subpart ZZZZ) [40 CFR 63.6603(a)]	None.	None.	None.
9	An existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder constructed or reconstructed before June 12, 2006 must use diesel fuel that contains 15 ppm Sulfur and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. (MACT Subpart ZZZZ) [40 CFR 63.6604(a)]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	The engine must be in compliance with all applicable emission limitations, operating limitations, and other requirements in Subpart ZZZZ of 40 CFR 63 at all times. (MACT Subpart ZZZZ) [40 CFR 63.6605(a)]	None.	None.	None.
11	The engine must be in compliance with all applicable emission limitations, operating limitations, and other requirements in Subpart ZZZZ of 40 CFR 63 at all times. (MACT Subpart ZZZZ) [40 CFR 63.6605(a)]	None.	None.	None.
12	At all times the owner or operator must operate and maintain a RICE including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. (MACT Subpart ZZZZ) [40 CFR 63.6605(b)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee must keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6660]	None.
13	The owner or operator of existing non-emergency non-black start CI RICE HP ≥ 300 HP constructed or reconstructed before June 12, 2006 and located at an area source of HAP emissions that is not equipped with a closed crankcase ventilation system shall either install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, per 40 CFR 63.6625(g)(1), or install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals, per 40 CFR 63.6625(g)(2). (MACT Subpart ZZZZ) [40 CFR 63.6625(g)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee must keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6660]	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS14

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	The owner or operator must submit compliance reports semiannually according to the requirements in 40 CFR 63.6650(b)(1) through (5). (MACT Subpart ZZZZ) [40 CFR 63.6650(b)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee must keep: (1) A copy of each notification and report submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status, according to the requirement in 40 CFR 63.10(b)(2)(xiv); (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment; (3) Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii); (4) Records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63.6655]	Submit a report: Semi-annually on January 31 and July 31 of each year. The first Compliance report must cover the period beginning on May 3, 2013 and ending December 31, 2013. Each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The report must contain the results of the performance test if conducted during the reporting period. Each report must include the information required in 40 CFR 6650(c) through (e). For a source that has obtained a title V operating permit pursuant to 40 CFR part 70, the permittee may submit the first and subsequent Compliance reports according to the dates the permitting authority has established. [40 CFR 63.6650(b)]
15	The owner or operator shall comply with the General Provisions as shown in Table 8 to Subpart ZZZZ of 40 CFR 63 that apply to an existing non-emergency non-black start SI RICE > 500 HP constructed or reconstructed before June 12, 2006 and located at an area source of HAP emissions. (MACT Subpart ZZZZ) [40 CFR 63.6665]	None.	None.	None.
16	The owner or operator shall comply with the General Provisions as shown in Table 8 to Subpart ZZZZ of 40 CFR 63 that apply to an existing non-emergency non-black start CI RICE > 300 HP constructed or reconstructed before June 12, 2006 and located at an area source of HAP emissions. (MACT Subpart ZZZZ) [40 CFR 63.6665]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS14

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U11 Cogeneration system consisting of one IC engine with catalytic oxidizer and one heat recovery boiler and one boiler, all venting to a common stack

Operating Scenario: OS15 Engine 2 firing ultra low sulfur distillate startup / shutdown

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	On and after March 7, 2007, the operation of engine #2 (E12) on 100% ultra low sulfur distillate is subject to the conditions of the N.J.A.C. 7:27-19.13 Alternate Emission Limit approved by the Department on January 11, 2007. . [N.J.A.C. 7:27-19.13]	None.	None.	None.
2	"Start-up" shall be defined as the period of time from engine start, during which the engine is operated on 100% distillate, until it is switched over to dual fuel. Each start-up or each shut-down time operating either in ultra low sulfur distillate or dual fuel mode shall be limited to 15 minutes. Total start-up for distillate and dual fuel modes shall be limited to 30 minutes. "Shutdown" shall be defined as the period prior to engine stop, during which the engine is operated on 100% distillate, after it is switched over from dual fuel. Each startup and each shutdown period shall be limited to 15 minutes. [N.J.A.C. 7:27-19.13] & [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Records shall be kept for each start-up/shutdown period. Records shall show start-up/shutdown start time and start-up/shutdown end time, date, total start-up/shutdown time and name of the operator making the entry. Records shall be maintained on site for a minimum of 5 years. [N.J.A.C. 7:27-22.16(a)]	None.
3	Opacity <= 20 %. Visible emission from stationary internal combustion engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	Other: See visible emissions requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See visible emissions requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	Opacity <= 20 % , exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
5	NOx (Total) <= 2.3 grams/brake horsepower-hour. Restriction on NOx emission per horsepower hour for lean burn I.C. Engine with an output of more than 500 horsepower and fueled by liquid fuel. This emission limit is applicable on and after March 7, 2007, unless operation is in compliance with N.J.A.C. 7:27-19.13 Alternate Emission Limit Requirements. [N.J.A.C. 7:27-19.8(e)]	None.	None.	None.
6	NOx (Total) <= 12 grams/brake horsepower-hour. Maximum N.J.A.C. 7:27-19.13 Alternate Emission Limit restriction on NOx emission per horsepower hour for lean burn I.C. Engine. This emission limit is only applicable during operation subject to N.J.A.C. 7:27-19.13 Alternate Emission Limit requirements, approved by the Department on January 11, 2007. [N.J.A.C. 7:27-19.13]	NOx (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]
7	NOx (Total) <= 221.9 lb/hr. Maximum N.J.A.C. 7:27-19.13 Alternate Emission Limit emission rate, based on NOx RACT emission limit. This emission limit is only applicable during operation subject to N.J.A.C. 7:27-19.13 Alternate Emission Limit requirements, approved by the Department on January 11, 2007. [N.J.A.C. 7:27-19.13]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [N.J.A.C. 7:27-19.13]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS15

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	CO <= 500 ppm _{dv} @ 15% O ₂ . [N.J.A.C. 7:27-16.10(b)]	CO: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-16.10(b)]
9	Particulate Emissions <= 12 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
10	Hours of Operation <= 200 hours per any consecutive 12 month period while combusting 100% ultra low sulfur distillate oil, except during emergency operation pursuant to N.J.A.C. 7:27-19.25. Combustion of 100% ultra low sulfur distillate oil shall be limited to periods of startup, shutdown, injector cleanout and major component break-in. N.J.A.C. 7:27-22.16(a) &. [N.J.A.C. 7:27-19.13]	Hours of Operation: Monitored by hour/time monitor continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. N.J.A.C. 7:27-22.16(a) &. [N.J.A.C. 7:27-19.13]	Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event For each period of operation of engine #2 (E12) on 100% ultra low sulfur distillate oil, the following shall be recorded: 1)The date of the incidence. 2) Time that 100% oil combustion began. 3) Time that 100% oil combustion ended. 4) The reason for combustion of 100% oil combustion. . [N.J.A.C. 7:27-19.13]	None.
11	Benzene <= 0.0163 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	Formaldehyde <= 0.00166 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	Acetaldehyde <= 0.000529 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	Acrolein <= 0.000165 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS15

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	Polycyclic organic matter <= 0.00444 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	Naphthalene <= 0.00273 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
17	CO <= 23 ppmvd @ 15% O2 or reduce CO emissions by 70 percent or more. The initial performance test must be conducted within 180 days after effective date of the rule, by November 3, 2013. An initial performance test is not required if a performance test has been previously conducted provided the test was conducted using the same methods specified in Table 4 to 40 CFR 63 Subpart ZZZZ, is no older than 2 years, and the results have been reviewed and accepted by EMS of NJDEP. (MACT Subpart ZZZZ). [40 CFR 63.6603(a)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three 1-hour tests. The performance stack test shall be conducted once initially and every 8760 hours or 3 years, whichever comes first. The performance tests must be conducted according to the requirements in Tables 4, 5 and 6 to 40 CFR 63 Subpart ZZZZ and in accordance with a site-specific test plan developed in accordance with 40 CFR 63.7(c)(2). If requested by the Administrator, the site-specific test plan must be submitted to the Administrator. Measurements to determine O2 concentration must be made at the same time as the measurements for CO concentration. During the initial and subsequent performance tests, the catalyst pressure drop, catalyst inlet temperature, and average load shall be recorded. [40 CFR 63.6620]	CO: Recordkeeping by stack test results upon occurrence of event. The permittee must keep records in a form suitable and readily available (in hard copy or electronic form) for expeditious review. According to 40 CFR 63.10(b)(1), each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, except that the most recent 2 years of data do not have to be retained on site, per Table 8 of 40 CFR 63 Subpart ZZZZ. [40 CFR 63.6660]	Submit documentation of compliance: Once initially. You must submit the Notification of Compliance Status to EPA Administrator Region 2 and to NJDEP Regional Enforcement Office containing the results of the initial performance test according to 40 CFR 63.9(h)(2)(ii) before the close of business on the 60th day following the completion of the performance test. The permittee must submit a Notification of Intent to conduct a performance test, to EPA Administrator Region 2 and to NJDEP Regional Enforcement Office, at least 60 days before the performance test is scheduled to begin, as required in 40 CFR 63.7(b)(1), per 40 CFR 63.6645(g). [40 CFR 63.6645(h)]
18	During startup and shutdown, the owner or operator shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. (MACT Subpart ZZZZ) [40 CFR 63.6603(a)]	None.	None.	None.

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	An existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder constructed or reconstructed before June 12, 2006 must use diesel fuel that contains 15 ppm Sulfur and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. (MACT Subpart ZZZZ) [40 CFR 63.6604(a)]	None.	None.	None.
20	The engine must be in compliance with all applicable emission limitations, operating limitations, and other requirements in Subpart ZZZZ of 40 CFR 63 at all times. (MACT Subpart ZZZZ) [40 CFR 63.6605(a)]	None.	None.	None.
21	At all times the owner or operator must operate and maintain a RICE including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. (MACT Subpart ZZZZ) [40 CFR 63.6605(b)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee must keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6660]	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS15

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	The owner or operator of existing non-emergency non-black start CI RICE HP ≥ 300 HP constructed or reconstructed before June 12, 2006 and located at an area source of HAP emissions that is not equipped with a closed crankcase ventilation system shall either install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, per 40 CFR 63.6625(g)(1), or install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals, per 40 CFR 63.6625(g)(2). (MACT Subpart ZZZZ) [40 CFR 63.6625(g)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee must keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6660]	None.
23	The owner or operator shall comply with the General Provisions as shown in Table 8 to Subpart ZZZZ of 40 CFR 63 that apply to an existing non-emergency non-black start CI RICE > 300 HP constructed or reconstructed before June 12, 2006 and located at an area source of HAP emissions. (MACT Subpart ZZZZ) [40 CFR 63.6665]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U11 Cogeneration system consisting of one IC engine with catalytic oxidizer and one heat recovery boiler and one boiler, all venting to a common stack

Operating Scenario: OS17 Boiler 1 92.4 MMBtu/hr when firing natural gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.

BOP200002

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

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

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	The owner or operator of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)]	Other: Monitored by the operating parameter settings that are established after the combustion process is adjusted in order to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)].	Other: The owner or operator shall record the operating parameter settings that are established after the combustion process is adjusted and retain until the next annual adjustment, to be made readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(e)].	None.
4	VOC (Total) <= 50 ppmdv @ 7% O ₂ . [N.J.A.C. 7:27-16.8(b)1]	None.	None.	None.
5	NO _x (Total) <= 0.1 lb/MMBTU. [N.J.A.C. 7:27-19.7(h)]	None.	None.	None.
6	CO <= 100 ppmdv @ 7% O ₂ . [N.J.A.C. 7:27-16.8(b)2]	None.	None.	None.
7	Particulate Emissions <= 14.62 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
8	Maximum Gross Heat Input <= 92.4 MMBTU/hr. [N.J.A.C. 7:27-22.16(e)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.
9	Natural Gas Usage <= 874 MMft ³ per any consecutive 12 month period for Boiler #1 (E13) and Boiler #2 (E14) combined. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage each month during operation. Fuel use for any 12 consecutive months is computed by adding the fuel consumed in a given month to that consumed in the preceding 11 months. [N.J.A.C. 7:27-22.16(e)]	None.
10	VOC (Total) <= 0.5068 lb/hr [N.J.A.C. 7:27-18.2(a)] and. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	NO _x (Total) ≤ 9.24 lb/hr based on N.J.A.C. 7:27-19.7 NO _x RACT limit. [N.J.A.C. 7:27-18.2(a)], [40 CFR 52.21] and. [N.J.A.C. 7:27-22.16(a)]	NO _x (Total): Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	NO _x (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	CO ≤ 3.3 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	SO ₂ ≤ 0.2 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
14	TSP ≤ 4.8 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	PM-10 (Total) ≤ 4.8 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	PM-2.5 (Total) ≤ 4.8 lb/hr based on the emission limit of PM-10. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS17

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	Arsenic compounds \leq 0.0000181 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-16.a]	Arsenic compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
18	Cadmium compounds \leq 0.0000996 lb/hr based on maximum gross heat input and AP-42 emission factor. [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)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
19	Cobalt compounds \leq 0.00000761 lb/hr based on maximum gross heat input and AP-42 emission factor. [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)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
20	Dimethylbenz(a)anthracene (7,12-) \leq 0.00000145 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	Dimethylbenz(a)anthracene (7,12-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
21	Formaldehyde \leq 0.00679 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
22	Nickel compounds \leq 0.00019 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-16.a]	Nickel compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit:U11 Cogeneration system consisting of one IC engine with catalytic oxidizer and one heat recovery boiler and one boiler, all venting to a common stack

Operating Scenario:OS19 Boiler 2 92.4 MMBtu/hr when firing natural gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See GR1 for VOC, Formaldehyde and THC limits for when engine 2 operates iin conjunction with boiler 2. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.

BOP200002

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

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

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	The owner or operator of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)]	Other: Monitored by the operating parameter settings that are established after the combustion process is adjusted in order to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)].	Other: The owner or operator shall record the operating parameter settings that are established after the combustion process is adjusted and retain until the next annual adjustment, to be made readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(e)].	None.
5	VOC (Total) <= 50 ppmdv @ 7% O ₂ . [N.J.A.C. 7:27-16.8(b)1]	None.	None.	None.
6	NO _x (Total) <= 0.1 lb/MMBTU. [N.J.A.C. 7:27-19.7(h)]	None.	None.	None.
7	CO <= 100 ppmdv @ 7% O ₂ . [N.J.A.C. 7:27-16.8(b)2]	None.	None.	None.
8	Particulate Emissions <= 14.62 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
9	Maximum Gross Heat Input <= 92.4 MMBTU/hr. [N.J.A.C. 7:27-22.16(e)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.
10	Natural Gas Usage <= 874 MMft ³ per any consecutive 12 month period for Boiler #1 (E13) and Boiler #2 (E14) combined. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage each month during operation. Fuel use for any 12 consecutive months is computed by adding the fuel consumed in a given month to that consumed in the preceding 11 months. [N.J.A.C. 7:27-22.16(e)]	None.
11	VOC (Total) <= 0.5068 lb/hr [N.J.A.C. 7:27-18.2(a)] and. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	NO _x (Total) ≤ 9.24 lb/hr based on N.J.A.C. 7:27-19.7 NO _x RACT limit. [N.J.A.C. 7:27-18.2(a)], [40 CFR 52.21] and. [N.J.A.C. 7:27-22.16(a)]	NO _x (Total): Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	NO _x (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	CO ≤ 3.3 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
14	SO ₂ ≤ 0.2 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
15	TSP ≤ 4.8 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	PM-10 (Total) ≤ 4.8 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
17	PM-2.5 (Total) ≤ 4.8 lb/hr based on the emission limit of PM-10. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	Arsenic compounds \leq 0.0000181 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-16.a]	Arsenic compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
19	Cadmium compounds \leq 0.0000996 lb/hr based on maximum gross heat input and AP-42 emission factor. [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)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
20	Cobalt compounds \leq 0.00000761 lb/hr based on maximum gross heat input and AP-42 emission factor. [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)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
21	Dimethylbenz(a)anthracene (7,12-) \leq 0.00000145 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	Dimethylbenz(a)anthracene (7,12-): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
22	Formaldehyde \leq 0.00679 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
23	Nickel compounds \leq 0.00019 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-16.a]	Nickel compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U11 Cogeneration system consisting of one IC engine with catalytic oxidizer and one heat recovery boiler and one boiler, all venting to a common stack

Operating Scenario: OS20 Boiler 1 Throttled from 92.4 to 82.7 MMBtu/hr when firing ultra low sulfur distillate., OS21 Boiler 2 Throttled from 92.4 to 82.7 MMBtu/hr when firing ultra low sulfur distillate.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	Monitored by visual determination each week during operation. Conduct visual opacity inspections during daylight hours to identify if the stack has visible emissions, other than condensed water vapor. Select an observation position enabling clear view of emission point(s), minimum 15 feet away without sunlight shining directly into the eyes. Observe for a minimum duration of 30 minutes. Clock observation with two stopwatches starting the 1st watch at the commencement of the 30-minute observation period and starting and stopping the 2nd watch every time visible emissions are first seen and when they cease, and record the observation. If visible emissions are observed for more than 3 minutes in the 30-consecutive minutes: (1) Verify the equipment and/or control device causing visible emissions is operating according to manufacturer's specifications. If it is not operating properly, take corrective action immediately to eliminate the excess emissions. (2) If the opacity problem is not corrected within 24 hours, perform a check via a certified opacity reader, in accordance with N.J.A.C. 7:27B-2. Conduct such test each day until the opacity problem is successfully corrected. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. Record and retain the following: (1) Date and time of inspection; (2) Emission Point number; (3) Operational status of equipment; (4) Observed results and conclusions; (5) Description of corrective action taken if needed; (6) Date and time opacity problem was solved, if applicable; (7) N.J.A.C. 7:27B-2 results if conducted; and (8) Name of person(s) conducting inspection. [N.J.A.C. 7:27-22.16(o)]	None.

BOP200002

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

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

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	The owner or operator of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)]	Other: Monitored by the operating parameter settings that are established after the combustion process is adjusted in order to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)].	Other: The owner or operator shall record the operating parameter settings that are established after the combustion process is adjusted and retain until the next annual adjustment, to be made readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(e)].	None.
4	VOC (Total) <= 50 ppm _{dv} @ 7% O ₂ . [N.J.A.C. 7:27-16.8(b)1]	None.	None.	None.
5	NO _x (Total) <= 0.12 lb/MMBTU. [N.J.A.C. 7:27-19.7(h)]	None.	None.	None.
6	CO <= 100 ppm _{dv} @ 7% O ₂ . [N.J.A.C. 7:27-16.8(b)2]	None.	None.	None.
7	Particulate Emissions <= 14.1 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	Particulate Emissions: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on each of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Particulate Emissions: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]
8	Maximum Gross Heat Input <= 82.7 MMBTU/hr (HHV). The boiler must be throttled from 92.4 to 82.7 MMBtu/hr while firing #2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.
9	Fuel Oil Usage <= 2.87 MMgals per any consecutive 12 month period for Boiler #1 (E13) and Boiler #2 (E14) combined. [N.J.A.C. 7:27-22.16(a)]	Fuel Oil Usage: Monitored by fuel flow/firing rate instrument continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Fuel Oil Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage each month during operation. Fuel use for any 12 consecutive months is computed by adding the fuel consumed in a given month to that consumed in the preceding 11 months. [N.J.A.C. 7:27-22.16(e)]	None.
10	VOC (Total) <= 0.22 lb/hr based on AP-42 factor, heat input of 82.7 MMBtu/hr and 137,000 Btu/gal heating value. [N.J.A.C. 7:27-18.2(a)] and. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS20, OS21

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	NO _x (Total) ≤ 9.93 lb/hr based on N.J.A.C. 7:27-19.7 RACT limit and heat input of 82.7 MMBtu/hr. [N.J.A.C. 7:27-18.2(a)], [40 CFR 52.21] and. [N.J.A.C. 7:27-22.16(a)]	NO _x (Total): Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	NO _x (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	CO ≤ 3.02 lb/hr based on AP-42 factor, heat input of 82.7 MMBtu/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	SO ₂ ≤ 0.128 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	TSP <= 1.43 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(e)]
15	PM-10 (Total) <= 2.33 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(e)]
16	PM-2.5 (Total) <= 2.33 lb/hr. [N.J.A.C. 7:27-22.16(a)]	Other: Compliance with the PM-10 monitoring requirement will satisfy the PM-2.5 monitoring requirement.[N.J.A.C. 7:27-22.16(o)].	Other: Compliance with the PM-10 recordkeeping requirement will satisfy the PM-2.5 monitoring requirement.[N.J.A.C. 7:27-22.16(o)].	None.
17	Pb <= 0.000744 lb/hr. [N.J.A.C. 7:27-16.a]	None.	None.	None.
18	Beryllium Emissions <= 0.000248 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	Beryllium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
19	Cadmium compounds <= 0.000248 lb/hr based on maximum gross heat input and AP-42 emission factor. [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)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
20	Formaldehyde <= 0.0195 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-16.a]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
21	Polycyclic organic matter <= 0.00142 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-16.a]	Polycyclic organic matter: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
22	Nickel compounds <= 0.000248 lb/hr based on maximum gross heat input and AP-42 emission factor. [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)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS20, OS21

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
23	Manganese compounds ≤ 0.000496 lb/hr based on maximum gross heat input and AP-42 emission factor. [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)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
24	Naphthalene ≤ 0.000668 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
25	Arsenic compounds ≤ 0.000331 lb/hr based on maximum gross heat input and AP-42 emission factor. [N.J.A.C. 7:27-16.a]	Arsenic compounds: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
26	The permittee at all times must operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. (MACT Subpart JJJJJ) [40 CFR 63.11205(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall keep records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment. The permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation. The permittee shall maintain all records in accordance with 40 CFR 63.11225(d). [40 CFR 63.11225(c)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
27	<p>The permittee shall conduct an initial tune-up no later than March 21, 2014 and subsequent biennial tune-ups no later than 25 months after the previous tune-up. The tune-ups shall be conducted, as required in Table 2 to 40 CFR Part 63, Subpart JJJJJ, and in accordance with 40 CFR 63.11223(b) as follows:</p> <p>(1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the burner inspection may be delayed until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection).</p> <p>(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.</p> <p>(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. (the inspection may be delayed until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection).</p> <p>(4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.</p> <p>As per 40 CFR 63.11223(b)(7), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. (MACT Subpart JJJJJ)</p> <p>[40 CFR 63.11214(b)]</p>	<p>Monitored by periodic emission monitoring once initially and biennially.</p> <p>Measure the concentrations in the effluent stream of carbon monoxide (CO) in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR 63.11223(b)(5)]</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and biennially. The permittee shall keep the following records for a period of 5 years following the date of each recorded action as per 40 CFR 63.11225(d) to document conformance with the biennial tune-up:</p> <p>Records identifying each boiler, the date of tune-up, the procedures followed for tune-ups and the manufacturer's specifications to which the boiler was tuned.</p> <p>Per 40 CFR 63.11223(b)(6), the permittee must maintain a report containing the following information on site:</p> <p>(i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.</p> <p>(ii) A description of any corrective actions taken as a part of the tune-up of the boiler.</p> <p>(iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.</p> <p>[40 CFR 63.11225(c)(2)]</p>	<p>Submit notification: Once initially. Submit a Notification of Compliance status by July 19, 2014 electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). The Notification of Compliance Status must include the certification(s) of compliance for the following statement: "This facility complies with the requirements in 40 CFR 63.11214 to conduct an initial tune-up of the boiler" and must be signed by a responsible official.</p> <p>If the reporting form specific to MACT JJJJJ is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the EPA Administrator Region 2 at the appropriate address listed in 40 CFR 63.13.</p> <p>[40 CFR 63.11225(a)(4)]</p>

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
28	The permittee must submit the Initial Notification of Applicability no later than January 20, 2014. (MACT Subpart JJJJJ) [40 CFR 63.11225(a)(2)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain a copy of the Initial Notification and all supporting documentation for a period of 5 years. [40 CFR 63.11225(c)] and [40 CFR 63.11225(d)]	Submit notification: Once initially by January 20, 2014 or within 120 days after startup of a new source to the Administrator, EPA Region 2, certified by the responsible official. The Initial Notification shall also be submitted to NJ DEP, per 40 CFR 63.13. The permittee may use instructions and the forms provided on the EPA website https://www.epa.gov/stationary-sources-air-pollution/compliance-industrial-commercial-and-institutional-area-source [40 CFR 63.11225]
29	Prepare a biennial or 5-year, as applicable, compliance certification report by March 1 of the applicable year and submit to the delegated authority upon request, a compliance certification report for the previous calendar years containing the following information: (1) Company name and address. (2) Statement by responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJ. The notification must include the following certification(s) of compliance and signed by a responsible official: (i) "This facility complies with the requirements in 40 CFR 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler." (ii) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit." (MACT Subpart JJJJJ) [40 CFR 63.11225(b)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. The permittee shall keep the records prescribed at 40 CFR 63.11225(b)(1) through (b)(2). [40 CFR 63.11225(b)]	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS20, OS21

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
30	The permittee must provide notice of the date upon which the permittee switched fuels, made the physical change, or took a permit limit that may result in the applicability of a different subcategory or switch out of 40 CFR Part 63, Subpart JJJJJ due to a fuel change that results in the boiler meeting the definition of gas-fired boiler as defined in 40 CFR 63.11237, or taking a permit limit. The notice must be provided within 30 days of the change. (MACT Subpart JJJJJ) [40 CFR 63.11225(g)]	None.	None.	Submit notification: Upon occurrence of event. Submit a written notification to the Administrator, EPA Region 2. The notification must identify: (1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice. (2) The date upon which the fuel switch, physical change, or permit limit occurred. [40 CFR 63.11225(g)]

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U11 Cogeneration system consisting of one IC engine with catalytic oxidizer and one heat recovery boiler and one boiler, all venting to a common stack

Operating Scenario: OS22 Boiler 1 Startup/Shutdown firing natural gas, OS23 Boiler 2 Startup/Shutdown firing natural gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.
2	Start-up Period <= 10 minutes Start-up of the boiler shall be the period of time from initiation of the duct burner operation until the unit reaches steady state operation. [N.J.A.C. 7:27-22.16(e)]	Start-up Period: Monitored by hour/time monitor continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Start-up Period: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Records shall be kept for each start-up period. Records shall show start-up start time and start-up end time, date, total start-up time and name of the operator making the entry. Records shall be maintained on site for a minimum of 5 years. [N.J.A.C. 7:27-22.16(e)]	None.
3	Shutdown Period <= 10 minutes Shutdown of the boiler shall be the period from initial lowering of the duct burner output below operating load to the cessation of duct burner operation. [N.J.A.C. 7:27-22.16(e)]	Shutdown Period: Monitored by hour/time monitor continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Shutdown Period: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Records shall be kept for each start-up period. Records shall show shutdown start time and shutdown end time, date, total shutdown time and name of the operator making the entry. Records shall be maintained on site for a minimum of 5 years. [N.J.A.C. 7:27-22.16(e)]	None.
4	VOC (Total) <= 50 ppm _{dv} @ 7% O ₂ . [N.J.A.C. 7:27-16.8(b)1]	None.	None.	None.
5	NO _x (Total) <= 0.1 lb/MMBTU. [N.J.A.C. 7:27-19.7(h)]	None.	None.	None.
6	CO <= 100 ppm _{dv} @ 7% O ₂ . [N.J.A.C. 7:27-16.8(b)2]	None.	None.	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS22, OS23

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Particulate Emissions <= 14.62 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U11 Cogeneration system consisting of one IC engine with catalytic oxidizer and one heat recovery boiler and one boiler, all venting to a common stack

Operating Scenario: OS24 Boiler 1 Startup/Shutdown firing ultra low sulfur distillate, OS25 Boiler 2 Startup/Shutdown firing ultra low sulfur distillate

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Start-up Period <= 10 minutes Start-up of the boiler shall be the period of time from initiation of the duct burner operation until the unit reaches steady state operation. [N.J.A.C. 7:27-22.16(e)]	Start-up Period: Monitored by hour/time monitor continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Start-up Period: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Records shall be kept for each start-up period. Records shall show start-up start time and start-up end time, date, total start-up time and name of the operator making the entry. Records shall be maintained on site for a minimum of 5 years. [N.J.A.C. 7:27-22.16(e)]	None.
2	Shutdown Period <= 10 minutes Shutdown of the boiler shall be the period from initial lowering of the duct burner output below operating load to the cessation of duct burner operation. [N.J.A.C. 7:27-22.16(e)]	Shutdown Period: Monitored by hour/time monitor continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Shutdown Period: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Records shall be kept for each start-up period. Records shall show shutdown start time and shutdown end time, date, total shutdown time and name of the operator making the entry. Records shall be maintained on site for a minimum of 5 years. [N.J.A.C. 7:27-22.16(e)]	None.

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	Monitored by visual determination each week during operation. Conduct visual opacity inspections during daylight hours to identify if the stack has visible emissions, other than condensed water vapor. Select an observation position enabling clear view of emission point(s), minimum 15 feet away without sunlight shining directly into the eyes. Observe for a minimum duration of 30 minutes. Clock observation with two stopwatches starting the 1st watch at the commencement of the 30-minute observation period and starting and stopping the 2nd watch every time visible emissions are first seen and when they cease, and record the observation. If visible emissions are observed for more than 3 minutes in the 30-consecutive minutes: (1) Verify the equipment and/or control device causing visible emissions is operating according to manufacturer's specifications. If it is not operating properly, take corrective action immediately to eliminate the excess emissions. (2) If the opacity problem is not corrected within 24 hours, perform a check via a certified opacity reader, in accordance with N.J.A.C. 7:27B-2. Conduct such test each day until the opacity problem is successfully corrected. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. Record and retain the following: (1) Date and time of inspection; (2) Emission Point number; (3) Operational status of equipment; (4) Observed results and conclusions; (5) Description of corrective action taken if needed; (6) Date and time opacity problem was solved, if applicable; (7) N.J.A.C. 7:27B-2 results if conducted; and (8) Name of person(s) conducting inspection. [N.J.A.C. 7:27-22.16(o)]	None.
4	VOC (Total) <= 50 ppmdv @ 7% O ₂ . [N.J.A.C. 7:27-16.8(b)1]	None.	None.	None.
5	NO _x (Total) <= 0.12 lb/MMBTU. [N.J.A.C. 7:27-19.7(h)]	None.	None.	None.
6	CO <= 100 ppmdv @ 7% O ₂ . [N.J.A.C. 7:27-16.8(b)2]	None.	None.	None.

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Particulate Emissions \leq 14.1 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	Particulate Emissions: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on each of three Department validated stack test runs. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Particulate Emissions: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (see Applicable Requirements STACK TESTING SUMMARY, U11, OS Summary). [N.J.A.C. 7:27-22.16(o)]
8	The permittee at all times must operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. (MACT Subpart JJJJJ) [40 CFR 63.11205(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall keep records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment. The permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation. The permittee shall maintain all records in accordance with 40 CFR 63.11225(d). [40 CFR 63.11225(c)]	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS24, OS25

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	<p>The permittee shall conduct an initial tune-up no later than March 21, 2014 and subsequent biennial tune-ups no later than 25 months after the previous tune-up. The tune-ups shall be conducted, as required in Table 2 to 40 CFR Part 63, Subpart JJJJJ, and in accordance with 40 CFR 63.11223(b) as follows:</p> <p>(1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the burner inspection may be delayed until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection).</p> <p>(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.</p> <p>(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. (the inspection may be delayed until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection).</p> <p>(4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.</p> <p>As per 40 CFR 63.11223(b)(7), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. (MACT Subpart JJJJJ)</p> <p>[40 CFR 63.11214(b)]</p>	<p>Monitored by periodic emission monitoring once initially and biennially.</p> <p>Measure the concentrations in the effluent stream of carbon monoxide (CO) in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR 63.11223(b)(5)]</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and biennially. The permittee shall keep the following records for a period of 5 years following the date of each recorded action as per 40 CFR 63.11225(d) to document conformance with the biennial tune-up:</p> <p>Records identifying each boiler, the date of tune-up, the procedures followed for tune-ups and the manufacturer's specifications to which the boiler was tuned.</p> <p>Per 40 CFR 63.11223(b)(6), the permittee must maintain a report containing the following information on site:</p> <p>(i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.</p> <p>(ii) A description of any corrective actions taken as a part of the tune-up of the boiler.</p> <p>(iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.</p> <p>[40 CFR 63.11225(c)(2)]</p>	<p>Submit notification: Once initially. Submit a Notification of Compliance status by July 19, 2014 electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). The Notification of Compliance Status must include the certification(s) of compliance for the following statement: "This facility complies with the requirements in 40 CFR 63.11214 to conduct an initial tune-up of the boiler" and must be signed by a responsible official.</p> <p>If the reporting form specific to MACT JJJJJ is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the EPA Administrator Region 2 at the appropriate address listed in 40 CFR 63.13.</p> <p>[40 CFR 63.11225(a)(4)]</p>

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	The permittee must submit the Initial Notification of Applicability no later than January 20, 2014. (MACT Subpart JJJJJ) [40 CFR 63.11225(a)(2)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain a copy of the Initial Notification and all supporting documentation for a period of 5 years. [40 CFR 63.11225(c)] and [40 CFR 63.11225(d)]	Submit notification: Once initially by January 20, 2014 or within 120 days after startup of a new source to the Administrator, EPA Region 2, certified by the responsible official. The Initial Notification shall also be submitted to NJ DEP, per 40 CFR 63.13. The permittee may use instructions and the forms provided on the EPA website https://www.epa.gov/stationary-sources-air-pollution/compliance-industrial-commercial-and-institutional-area-source [40 CFR 63.11225]
11	Prepare a biennial or 5-year, as applicable, compliance certification report by March 1 of the applicable year and submit to the delegated authority upon request, a compliance certification report for the previous calendar years containing the following information: (1) Company name and address. (2) Statement by responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJ. The notification must include the following certification(s) of compliance and signed by a responsible official: (i) "This facility complies with the requirements in 40 CFR 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler." (ii) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit." (MACT Subpart JJJJJ) [40 CFR 63.11225(b)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. The permittee shall keep the records prescribed at 40 CFR 63.11225(b)(1) through (b)(2). [40 CFR 63.11225(b)]	None.

U11 Cogeneration system consisting of one IC engine with catalytic oxidizer..

OS24, OS25

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	The permittee must provide notice of the date upon which the permittee switched fuels, made the physical change, or took a permit limit that may result in the applicability of a different subcategory or switch out of 40 CFR Part 63, Subpart JJJJJ due to a fuel change that results in the boiler meeting the definition of gas-fired boiler as defined in 40 CFR 63.11237, or taking a permit limit. The notice must be provided within 30 days of the change. (MACT Subpart JJJJJ) [40 CFR 63.11225(g)]	None.	None.	Submit notification: Upon occurrence of event. Submit a written notification to the Administrator, EPA Region 2. The notification must identify: (1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice. (2) The date upon which the fuel switch, physical change, or permit limit occurred. [40 CFR 63.11225(g)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U15 300 HP diesel compressor; internal combustion engine operating for no more than 500 hr/yr
Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Requirements: 40 CFR 60 Subpart A 40 CFR 60 Subpart IIII 40 CFR 63 Subpart ZZZZ [40 CFR Federal Rules Summary]	None.	None.	None.

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	The permittee shall perform Periodic Monitoring Procedure (PMP) tests to ensure the reciprocating engine(s) are operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions. [N.J.A.C. 7:27-22.16(a)]	Monitored by periodic emission monitoring semiannually: once every six months; six month cycle shall begin on January 1 and July 1 of each year The minimum duration between Periodic Monitoring Procedure (PMP) tests shall be 90 calendar days. PMP frequency can only be reduced once. PMP tests are only required if the equipment operated during the monitoring period. The permittee shall measure the concentrations in the effluent stream of NOx, CO and O2 and convert them to units of pounds per hour (lb/hr) in accordance with Technical Manual 1005. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event The permittee shall maintain the following records: 1. Date of periodic emission monitoring; 2. Equipment, Emission Unit and Operating Scenario number; 3. Measured concentrations of NOx and CO (ppmvd) and O2 (%); 4. Calculated emissions of NOx and CO (lb/hr and g/bhp-hr); 5. A description of any corrective action taken; 6. Results from any subsequent measurements performed after taking any corrective action, including concentrations and calculated emission values in pounds per hour and grams per brake horsepower hour. If the equipment did not operate during a monitoring period, record "Did not operate" for that period. [N.J.A.C. 7:27-22.16(o)]	Other (provide description): Other If either of the NOx or CO PMP test results exceed the lb/hr or g/bhp-hr permit limits ("exceedance"), the frequency of PMP testing immediately reverts back to the Initial Frequency, and the permittee shall: 1. Take corrective action or cease operation within 15 minutes of the exceedance. 2. Notify the Department within 24 hours of the exceedance by calling the Environmental Action Hotline at (877) 927-6337. 3. Submit a report within 30 days of the exceedance for all periodic emission monitoring performed in the 12 months prior to this exceedance with the items listed in 1-6 of the Recordkeeping Requirement to the Central Regional Enforcement Office, Mail Code 22-03A, 401 East State Street, PO Box 420, Trenton, NJ 08625-0420. 4. Retest the equipment within 24 hours of completing corrective action or restarting operation, whichever is sooner. 5. Repeat the steps above until the exceedance has been eliminated or the equipment is removed from service; and 6. Submit a report within 30 days of completing corrective action (Step 5) for the test that showed the exceedance and each subsequent test performed following corrective action with the items listed in 1-6 of the Recordkeeping Requirement to the Central Regional Enforcement Office; and 7. Submit a permit modification application within 30 days of the exceedance to change the PMP testing back to the Initial Frequency. [N.J.A.C. 7:27-22.16(o)]
3	Opacity <= 20 % , exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
4	NOx (Total) <= 2.3 grams/brake horsepower-hour . [N.J.A.C. 7:27-19.8(e)]	None.	None.	None.

U15 300 HP diesel compressor; internal combustion engine operating for no r

OS Summary

BOP200002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	CO <= 500 ppm _{dv} @ 15% O ₂ . [N.J.A.C. 7:27-16.10(b)]	None.	None.	None.
6	Sulfur Content in Fuel <= 15 ppm _w (0.0015% by weight). [N.J.A.C. 7:27-9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
7	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27-9.2(b)]	None.	None.	None.
8	Opacity <= 10 % Visible emissions no greater than 10% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	Maximum Gross Heat Input <= 1.81 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records showing maximum heat input rate.[N.J.A.C. 7:27-22.16(o)].	None.
10	Compressor engine fuel limited to ultra low sulfur diesel fuel. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	Hours of Operation While Firing Diesel <= 500 hours per any consecutive 12 month period. [N.J.A.C. 7:27-22.16(a)]	Hours of Operation While Firing Diesel: Monitored by hour/time monitor continuously. The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Hours of Operation While Firing Diesel: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Hours of operation for any 12 consecutive months is computed by adding the hours of operation in a given month to that in the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.
12	VOC (Total) <= 0.024 tons/yr based on the permitted hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	NO _x (Total) <= 0.05 tons/yr based on the permitted hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	CO <= 0.43 tons/yr based on the permitted hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	All requests, reports, applications, submittals, and other communications to the Administrator pursuant to Part 60 shall be submitted in duplicate to the Regional Office of US Environmental Protection Agency. Submit information to: Director, Division of Enforcement & Compliance Assistance, US EPA, Region 2, 290 Broadway, New York, NY 10007-1866. (NSPS Subpart A) [40 CFR 60.4(a)]	None.	None.	Submit a report: As per the approved schedule to EPA Region 2 as required by 40 CFR 60. [40 CFR 60.4(a)]
16	Copies of all information submitted to EPA pursuant to 40 CFR Part 60, must also be submitted to the appropriate Regional Enforcement Office of NJDEP. (NSPS Subpart A) [40 CFR 60.4(b)]	None.	None.	Submit a report: As per the approved schedule to the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60. [40 CFR 60.4(b)]
17	The owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility, any malfunction of air pollution control equipment or any periods during which continuous monitoring system or monitoring device is inoperative. (NSPS Subpart A) [40 CFR 60.7(b)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The records should be kept in a permanent form suitable for inspections. [40 CFR 60.7(b)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Semi-annually beginning on the 30th day of the 6th month following initial performance tests. The report shall contain the information required in 40 CFR 60.7(b) and be postmarked by the 30th day following the end of each six-month period. The report shall be submitted to the EPA Region 2 Administrator and the appropriate Regional Enforcement Office of NJDEP and be in the format specified at 40 CFR Part 60.7(c) and 40 CFR Part 60.7(d). [40 CFR 60.7(c)]

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	The owner or operator shall maintain a file, suitable for inspection, of all monitoring measurements as indicated in Recordkeeping Requirement column. (NSPS Subpart A) [40 CFR 60.7(f)]	None.	Other: The file shall include all measurements (including continuous monitoring system, monitoring device, and performance testing measurements), all continuous monitoring system performance evaluations, all continuous monitoring system or monitoring device calibration checks, all adjustments/maintenance performed on these systems or devices, and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the dates of the record, except as prescribed in 40 CFR 60.7(f)(1) through (3). Sources subject to 40 CFR 70, are required to retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application, per 40 CFR 70.6(a)(3)(ii)(B). [40 CFR 60.7(f)].	None.
19	No owner or operator subject to NSPS standards in Part 60, shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. (NSPS Subpart A) [40 CFR 60.12]	None.	None.	None.

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	The owner or operator shall notify the Administrator of the proposed replacement of components, upon triggering reconstruction as defined at 40 CFR 60.15. (NSPS Subpart A) [40 CFR 60.15]	None.	None.	Submit notification: At a common schedule agreed upon by the operator and the Administrator. The notification shall include information listed under 40 CFR Part 60.15(d). The notification shall be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced. [40 CFR 60.15(d)]
21	Changes in time periods for submittal of information and postmark deadlines set forth in this subpart, may be made only upon approval by the Administrator and shall follow procedures outlined in 40 CFR Part 60.19. (NSPS Subpart A) [40 CFR 60.19]	None.	None.	None.
22	The owner or operator of a 2007-2010 model year CI ICE with a displacement of < 10 liters per cylinder and a maximum engine power $175 \leq \text{HP} < 750$ ($130 \leq \text{kW} < 560$) must comply with the certification emissions standards in 40 CFR 89.112 and smoke standards in 40 CFR 89.113, for the same model year and maximum engine power as follows: NMHC + NO _x ≤ 4.0 g/kW-hr, CO ≤ 3.5 g/kW-hr, PM ≤ 0.20 g/kW-hr. (NSPS Subpart IIII) [40 CFR 60.4204(b)]	Other: The owner or operator of a 2007 model year or later engine must review manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power, once initially. [40 CFR 60.4211].	Other: The owner or operator of a 2007 model year or later engine must keep manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power. [40 CFR 60.4211].	None.
23	Owners and operators of stationary CI internal combustion engines must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 over the entire life of the engine. (NSPS Subpart IIII) [40 CFR 60.4206]	Other: The owner or operator shall review the emission-related manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. [40 CFR 60.4206].	Other: The owner or operator shall keep the manufacturer's emission-related written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. If the manufacturer's emission-related written instructions are not followed, the owner or operator must keep the results of the performance test(s) demonstrating compliance with the applicable emission limits. [40 CFR 60.4206].	None.

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
24	Beginning October 1, 2010, the CI internal combustion engines with a displacement of less than 30 liters per cylinder subject to 40 CFR 60 Subpart IIII (manufactured after April 1, 2006 or modified or reconstructed after July 11, 2005) that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 1090.305 subject to the following per gallon standards: 15 ppm (0.0015 percent) maximum sulfur content and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. (NSPS Subpart IIII) [40 CFR 60.4207(b)]	Monitored by review of fuel delivery records once per bulk fuel shipment. For each diesel fuel delivery received, the owner or operator shall review written documentation of the delivery to ensure the maximum allowable fuel oil sulfur content and either a minimum cetane index or a maximum aromatic content is not being exceeded. Such written documentation can include, but is not limited to: bill of lading, delivery invoice, or certificate of analysis. [N.J.A.C. 7:27:22.16(o)] or [N.J.A.C. 7:27- 8.13(a)]	Recordkeeping by invoices / bills of lading / certificate of analysis once per bulk fuel shipment. The owner or operator shall keep records of fuel used showing oil sulfur content and either a minimum cetane index or a maximum aromatic content for each delivery received. All records must be maintained for a minimum of 2 years following the date of such records per 40 CFR 60.7(f). [N.J.A.C. 7:27:22.16(o)] or [N.J.A.C. 7:27- 8.13(a)]	None.
25	The owner or operator that must comply with the emission standards specified in 40 CFR 60 Subpart IIII must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. The owner or operator must also meet the requirements of 40 CFR parts 89, 94 and/or 1068 (General Compliance Provisions), as applicable. (NSPS Subpart IIII) [40 CFR 60.4211(a)]	Other: The owner or operator shall review the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, once initially. [40 CFR 60.4211(a)].	Other: The owner or operator shall keep the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. [40 CFR 60.4211(a)].	None.

BOP200002

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
26	The owner or operator of a 2007 model year and later stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder complying with the emission standards specified in 40 CFR 60.4204(b), must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b) as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. If the owner/operator does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or you change emission related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as prescribed in 40 CFR 60.4211(g). (NSPS Subpart IIII) [40 CFR 60.4211(c)]	Other: The owner or operator must review documentation once initially from the manufacturer that the engine is certified to meet the emission standards as applicable, for the same model year and maximum engine power. [40 CFR 60.4211(c)].	Other: The owner or operator must keep documentation for the life of the equipment from the manufacturer that the engine is certified to meet the emission standards as applicable, for the same model year and maximum engine power. [40 CFR 60.4211(c)].	None.
27	A new or reconstructed stationary RICE located at an area HAP source must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60 Subpart IIII, for compression ignition engines or 40 CFR 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR 63. (NSPS Subpart IIII) [40 CFR 63.6590(c)]	Other: Comply with all applicable provisions at NSPS IIII. [40 CFR 63].	Other: Comply with all applicable provisions at NSPS IIII. [40 CFR 63].	None.

BOP200002

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

Emission Unit: U15 300 HP diesel compressor; internal combustion engine operating for no more than 500 hr/yr

Operating Scenario: OS15 Backup Compressor firing ultra low sulfur distillate fuel

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 1.04 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
2	VOC (Total) <= 0.094 lb/hr based on EPA Tier 4 Emissions factors for diesel engines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	NOx (Total) <= 0.2 lb/hr based on EPA Tier 4 Emissions factors for diesel engines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	CO <= 1.74 lb/hr based on EPA Tier 4 Emissions factors for diesel engines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	TSP < 0.05 lb/hr (below reporting threshold). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

VICINITY ENERGY TRENTON LP (61015)
BOP200002

Date: 12/10/2021

New Jersey Department of Environmental Protection
Facility Profile (General)

Facility Name (AIMS): Vicinity Energy Trenton LP

Facility ID (AIMS): 61015

Street 320 SOUTH WARREN ST
Address: TRENTON, NJ 08608

Mailing 320 SOUTH WARREN ST
Address: TRENTON, NJ 08608

County: Mercer

Location
Description:

State Plane Coordinates:

X-Coordinate: 744,600

Y-Coordinate: 401,300

Units: Long/Lat

Datum: Unknown

Source Org.: Other/Unknown

Source Type: Other/Unknown

Industry:

Primary SIC: 4961

Secondary SIC:

NAICS: 221330

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Air Permit Information Contact

Organization: Vicinity Energy Trenton, L.P.

Org. Type: Partnership

Name: Jessica Hartley

NJ EIN: 13315328000

Title: EHSS Manager

Phone: (610) 324-3302 x

Mailing Address: 320 South Warren St
Trenton, NJ 08608

Fax: () - x

Other: () - x

Type:

Email: jessica.hartley@vicinityenergy.us

Contact Type: Fees/Billing Contact

Organization: Vicinity Energy Trenton, L.P.

Org. Type: Partnership

Name: Jessica Hartley

NJ EIN: 13315328000

Title: EHSS Manager

Phone: (610) 324-3302 x

Mailing Address: 320 South Warren St
Trenton, NJ 08608

Fax: () - x

Other: () - x

Type:

Email: jessica.hartley@vicinityenergy.us

Contact Type: Operator

Organization: Vicinity Energy Trenton, L.P.

Org. Type: Partnership

Name: Vicinity Energy Trenton, L.P.

NJ EIN: 13315328000

Title: Operator

Phone: (609) 396-7651 x

Mailing Address: 320 South Warren St
Trenton, NJ 08608

Fax: (609) 393-7318 x

Other: () - x

Type:

Email:

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Owner (Current Primary)

Organization: Vicinity Energy Trenton, L.P.

Org. Type:

Name: Vicinity Energy Trenton, L.P.

NJ EIN:

Title: Owner

Phone: (609) 396-7651 x

Mailing Address: 320 South Warren St

Fax: (609) 393-7318 x

Trenton, NJ 08608

Other: () - x

Type:

Email:

Contact Type: Responsible Official

Organization: Vicinity Energy Trenton, L.P.

Org. Type: Partnership

Name: James Carty

NJ EIN: 13315328000

Title: Vice President

Phone: (484) 431-4599 x

Mailing Address: 320 South Warren St

Fax: () - x

Trenton, NJ 08608

Other: () - x

Type:

Email: james.carty@vicinityenergy.us

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	Engine Sumps	below engines	1.000								
Total			1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000

VICINITY ENERGY TRENTON LP (61015)
BOP200002

Date: 12/10/2024

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)
IS2	Oil/water separator [< 50 lb/hr throughput; excluding water & air]	Other Equipment	exterior underground	0.500								
IS3	Crankcase vent system [< 50 lbs/hr throughput; excluding water & air]	Other Equipment	engines	1.000								
IS4	Cooling Tower [< 50 lbs/hr throughput; excluding water & air]	Other Equipment	exterior					0.100	0.100			
IS5	(2) 500 gal. Ultra Low Sulfur Distillate Oil Storage Tanks [< 2,000 gallons; non-applicable VOC (<0.02 psia)]	Storage Vessel	exterior, above ground	0.010								
IS7	Natural Gas, LPG, & Oil burning equipment [< 1 MMBtu/hr]	Fuel Combustion Equipment (Other)		0.003	0.600	0.150	1.330	0.060	0.060			
IS11	(4) - 25,000 gal. Ultra Low Sulfur Distillate Oil Storage Tanks; non-applicable VOC (< 0.02 psia)]	Storage Vessel	exterior, underground	0.492								
IS12	500 gal. Lube oil tank [<10,000 gallons;non-applicable VOC (<0.02 psia)]	Storage Vessel	Exterior, above ground	0.001								
Total				2.006	0.600	0.150	1.330	0.160	0.160	0.000	0.00000000	0.000

**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
E12	Engine #2	IC Engine #2 - 6 MW	Stationary Reciprocating Engine	095874		No	2/1/1996	
E13	Boiler #1	Boiler #1-92.4 MM Btu	Boiler	095874	1/1/1983	No	2/1/1996	
E14	Boiler #2	Heat Recovery Boiler #2-92.4 MM Btu	Duct Burner	095874	1/1/1983	No	2/1/1996	
E15	BackupEngine	Backup Diesel Compressor - 1.81 MM Btu/hr.	Stationary Reciprocating Engine		9/1/2009	No		

61015 VICINITY ENERGY TRENTON LP BOP200002 E12 (Stationary Reciprocating Engine)
Print Date: 9/30/2024

Make:	Cooper Bessemer	
Manufacturer:	Cooper Bessemer	
Model:	LSVB-20-GDT	
Maximum Rated Gross Heat Input (MMBtu/hr):	60	
Class:		
Description:		
Duty:	Base Loaded	
Description:		
Minimum Load Range (%):		
Maximum Load Range (%):		
Stroke:	4-stroke	
Power Output (BHP):	8386	
Electric Output(KW):	6000	
Compression Ratio:	19	
Ignition Type:	Other	
Description:		
Engine Speed (RPM):	400	
Engine Exhaust Temperature (°F):	850	
Air to Fuel Ratio at Peak Load:	14.5	
Ratio Basis:		
Lambda Factor (scfm/scfm):		
Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr):		
Output Type:		
Heat to Power Ratio:		
Is the Engine Using a Turbocharger?	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Is the Engine Using an Aftercooler?	<input checked="" type="radio"/> Yes <input 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 checked="" type="checkbox"/>	
Description:	Catalytic Oxidizer	
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:		

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

61015 VICINITY ENERGY TRENTON LP BOP200002 E13 (Boiler)
Print Date: 9/30/2024

Make:	<input type="text" value="International Boiler Works"/>
Manufacturer:	<input type="text" value="International Boiler Works"/>
Model:	<input type="text" value="TJW-C-75-S"/>
Maximum Rated Gross Heat Input (MMBtu/hr - HHV):	<input type="text" value="92.40"/>
Boiler Type:	<input type="text" value="Package"/>
Utility Type:	<input type="text" value="Non-Utility"/>
Output Type:	<input type="text" value="Steam Only"/>
Steam Output (lb/hr):	<input type="text"/>
Fuel Firing Method:	<input type="text"/>
Description (if other):	<input type="text"/>
Draft Type:	<input type="text" value="Forced"/>
Heat Exchange Type:	<input type="text" value="Indirect"/>

Is the boiler using? (check all that apply):

Low NOx Burner: ☒ Type:

Staged Air Combustion: ☐

Flue Gas Recirculation (FGR): ☒ Amount (%):

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:

61015 VICINITY ENERGY TRENTON LP BOP200002 E14 (Duct Burner)
Print Date: 9/30/2024

Make:	International Boiler Works
Manufacturer:	International Boiler Works
Model:	TJW-C-75-S
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	92.40
Equipment Type Description:	Yes

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:

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

61015 VICINITY ENERGY TRENTON LP BOP200002 E15 (Stationary Reciprocating Engine)
Print Date: 9/30/2024

Make:	
Manufacturer:	Atlas Copco
Model:	XAS 950 CD8 T4F
Maximum Rated Gross Heat Input (MMBtu/hr):	1.81
Class:	Other
Description:	Diesel
Duty:	Other
Description:	Provide compressed air
Minimum Load Range (%):	
Maximum Load Range (%):	
Stroke:	4-stroke
Power Output (BHP):	302
Electric Output(KW):	
Compression Ratio:	
Ignition Type:	Compression
Description:	
Engine Speed (RPM):	
Engine Exhaust Temperature (°F):	
Air to Fuel Ratio at Peak Load:	
Ratio Basis:	
Lambda Factor (scfm/scfm):	
Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr):	
Output Type:	Pump/Compressor
Heat to Power Ratio:	
Is the Engine Using a Turbocharger?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Is the Engine Using an Aftercooler?	<input checked="" type="radio"/> Yes <input 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:	
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 checked="" type="radio"/> Yes <input type="radio"/> No
Comments:	EPA Tier 4

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

VICINITY ENERGY TRENTON LP (61015)
BOP200002

Date: 12/10/2024

New Jersey Department of Environmental Protection
Control Device Inventory

CD NJID	Facility's Designation	Description	CD Type	Install Date	Grand-Fathered	Last Mod. (Since 1968)	CD Set ID
CD2		Catalytic Oxidizer for CO/THC Control, Applicable to OS 14 & OS15 for engine.	Oxidizer (Catalytic)		No		

61015 VICINITY ENERGY TRENTON LP BOP200002 CD2 (Oxidizer (Catalytic))
Print Date: 10/5/2022

Make:	Johnson Matthey
Manufacturer:	Johnson Matthey
Model:	custom unit
Minimum Inlet Temperature (°F):	850
Maximum Inlet Temperature (°F)	1100
Minimum Outlet Temperature (°F)	932
Maximum Outlet Temperature (°F):	1150
Minimum Residence Time (sec)	0.1
Fuel Type:	Propane
Description:	
Maximum Rated Gross Heat Input (MMBtu/hr):	3
Minimum Pressure Drop Across Catalyst (psi):	
Maximum Pressure Drop Across Catalyst (psi):	4
Catalyst Material:	Precious Metal
Form of Catalyst:	Honeycomb
Description:	
Minimum Expected Life of Catalyst:	10
Units:	Years
Volume of Catalyst (ft³):	32
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	<input type="radio"/> Yes <input checked="" type="radio"/> No
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
Comments:	

VICINITY ENERGY TRENTON LP (61015)
BOP200002

Date: 12/10/2024

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.		
PT11	MainStack001	Main Stack	Round	78	164	60	450.0	350.0	550.0	100,000.0	50,000.0	150,000.0	Up	
PT15	BackupDiesel	Backup Diesel Stack	Round	5	6	50	864.5	100.0	1,000.0	1,896.4	1,000.0	3,000.0	Up	

VICINITY ENERGY TRENTON LP (61015)
BOP200002

Date: 12/10/2024

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

U 11 Cogen Plant Cogeneration system consisting of one IC engine with catalytic oxidizer and one heat recovery boiler and one boiler, all venting to a common stack

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.
OS13	Eng. 2-Dual	Engine 2 firing dual fuel (utilizing "clean burn" technology)	Normal - Steady State	E12	CD2 (P)	PT11	2-02-002-04 2-02-001-04	0.0	8,760.0		50,000.0	150,000.0	350.0	550.0
OS14	E2-SU/SD Dua	Engine 2 Startup/Shutdown on dual fuel	Startup	E12	CD2 (P)	PT11	2-02-002-04 2-02-001-04	0.0	8,760.0		50,000.0	150,000.0	350.0	550.0
OS15	E2 SU/SD Dis	Engine 2 firing ultra low sulfur distillate startup / shutdown	Startup	E12	CD2 (P)	PT11	2-02-001-04	0.0	200.0		50,000.0	150,000.0	350.0	550.0
OS17	Boiler 1-Gas	Boiler 1 92.4 MMBtu/hr when firing natural gas	Normal - Steady State	E13		PT11	1-02-006-02	0.0	8,760.0		6,425.0	25,700.0	275.0	350.0
OS19	Boiler 2-Gas	Boiler 2 92.4 MMBtu/hr when firing natural gas	Normal - Steady State	E14		PT11	1-02-006-02	0.0	8,760.0		6,425.0	25,700.0	275.0	350.0
OS20	Boiler1-ULSD	Boiler 1 Throttled from 92.4 to 82.7 MMBtu/hr when firing ultra low sulfur distillate.	Normal - Steady State	E13		PT11	1-02-005-02	0.0	5,000.0		6,300.0	25,200.0	275.0	350.0
OS21	Boiler2-ULSD	Boiler 2 Throttled from 92.4 to 82.7 MMBtu/hr when firing ultra low sulfur distillate.	Normal - Steady State	E14		PT11	1-02-005-02	0.0	5,000.0		6,300.0	25,200.0	275.0	350.0
OS22	B1 SU/SD-Gas	Boiler 1 Startup/Shutdown firing natural gas	Startup	E13		PT11	1-02-006-02	0.0	5,000.0		6,425.0	25,700.0	275.0	350.0
OS23	B2 SU/SD-Gas	Boiler 2 Startup/Shutdown firing natural gas	Startup	E14		PT11	1-02-006-02	0.0	5,000.0		6,425.0	25,700.0	275.0	350.0
OS24	B1 SU/SD-ULD	Boiler 1 Startup/Shutdown firing ultra low sulfur distillate	Startup	E13		PT11	1-02-005-02	0.0	5,000.0		6,300.0	25,200.0	275.0	350.0

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

U 11 Cogen Plant Cogeneration system consisting of one IC engine with catalytic oxidizer and one heat recovery boiler and one boiler, all venting to a common stack

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.
OS25	B2 SU/SD-ULD	Boiler 2 Startup/Shutdown firing ultra low sulfur distillate	Startup	E14		PT11	1-02-005-02	0.0	5,000.0		6,300.0	25,200.0	275.0	350.0

U 15 BackupDiesel 300 HP diesel compressor; internal combustion engine operating for no more than 500 hr/yr

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.
OS15		Backup Compressor firing ultra low sulfur distillate fuel	Normal - Steady State	E15		PT15	2-02-001-02	0.0	500.0		1,000.0	3,000.0	100.0	1,000.0

Date: 12/10/2024

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

Group NJID: GR1 Eng2/Boil2

Members:

Type	ID	OS	Step
U	U 11	OS13 Eng. 2-Dual	
U	U 11	OS19 Boiler 2-Gas	

Formal Reason(s) for Group/Cap:

☒ Other

Other (explain): Combined operation

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

Operating Circumstances: