



# State of New Jersey

Department of Environmental Protection

Air Quality, Energy and Sustainability

Division of Air Quality

Bureau of Stationary Sources

401 E. State Street, 2nd Floor, P.O. Box 420, Mail Code 401-02

Trenton, NJ 08625-0420

PHILIP D. MURPHY

*Governor*

SHEILA Y. OLIVER

*Lt. Governor*

CATHERINE R. McCABE

*Commissioner*

## **Air Pollution Control Operating Permit Renewal**

**Permit Activity Number: BOP180001**

**Program Interest Number: 61014**

Mailing Address	Plant Location
Robert F. Ortego, P.E. Manager, Environmental Compliance TRUSTEES OF PRINCETON UNIVERSITY Elm Dr Macmillan Bldg Princeton, NJ 08543 - 2158	TRUSTEES OF PRINCETON UNIVERSITY Elm Dr Macmillan Bldg Princeton, NJ 08543 - 2158

**Initial Operating Permit Approval Date: 6/3/1999**

**Operating Permit Approval Date: DRAFT**

**Operating Permit Expiration Date: 6/2/2024**

### **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: <http://www.nj.gov/dep/aqpp>. After accessing the website, click on "Approved Operating Permits" listed under "Reports" and then type in the Program Interest (PI) Number as instructed on the screen. If needed, the RADIUS file for your permit, containing Facility Specific Requirements (Compliance Plan), Inventories and Compliance Schedules can be obtained by contacting the Helpline number given below. RADIUS software, instructions, and help are available at the Department's website at <http://www.nj.gov/dep/aqpp>.

## **HELPLINE**

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

## **RENEWING YOUR OPERATING PERMIT AND APPLICATION SHIELD**

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

## **COMPLIANCE ASSURANCE MONITORING**

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

## **ADMINISTRATIVE HEARING REQUEST**

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

If you have any questions regarding this permit approval, please call Mubin Kathrada at (609) 633-1134.

Approved by:

\_\_\_\_\_  
Yogesh Doshi

Enclosure

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

**Facility Name: TRUSTEES OF PRINCETON UNIVERSITY**  
**Program Interest Number: 61014**  
**Permit Activity Number: BOP180001**

**TABLE OF CONTENTS**

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

## Section A

**Facility Name: TRUSTEES OF PRINCETON UNIVERSITY**

**Program Interest Number: 61014**

**Permit Activity Number: BOP180001**

### **POLLUTANT EMISSIONS SUMMARY**

Table 1: Total emissions from all Significant Source Operations<sup>1</sup> at the facility.

Facility's Potential Emissions from all Significant Source Operations (tons per year)										
Source Categories	VOC (total)	NO <sub>x</sub>	CO	SO <sub>2</sub>	TSP (total)	PM <sub>10</sub> (total)	PM <sub>2.5</sub> (total)	Pb	HAPs* (total)	CO <sub>2e</sub> <sup>2</sup>
Emission Units Summary	45.62	142.10	135.68	42.13	20.67	22.16	22.16	0.0015	0.25	
Batch Process Summary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Group Summary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Total Emissions</b>	<b>45.62</b>	<b>142.10</b>	<b>135.68</b>	<b>42.13</b>	<b>20.67</b>	<b>22.16</b>	<b>22.16</b>	<b>0.0015</b>	<b>0.25</b>	<b>176,750</b>

Table 2: Estimate of total emissions from all Insignificant Source Operations<sup>1</sup> 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 <sub>x</sub>	CO	SO <sub>2</sub>	TSP (total)	PM <sub>10</sub> (total)	PM <sub>2.5</sub> (total)	Pb	HAPs (total)
Insignificant Source Operations	0.20	3.77	0.47	0.83	0.17	0.17	0.17	N/A	N/A
Non-Source Fugitive Emissions <sup>3</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

VOC: Volatile Organic Compounds

NO<sub>x</sub>: Nitrogen Oxides

CO: Carbon Monoxide

SO<sub>2</sub>: 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

PM<sub>10</sub>: Particulates under 10 microns

PM<sub>2.5</sub>: Particulates under 2.5 microns

Pb: Lead

HAPs: Hazardous Air Pollutants

CO<sub>2e</sub>: 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.

<sup>1</sup> Significant Source Operations and Insignificant Source Operations are defined at N.J.A.C. 7:27-22.1.

<sup>2</sup> Total CO<sub>2e</sub> emissions for the facility that includes all Significant Source Operations (emission units, batch process, group) and Insignificant Source Operations.

<sup>3</sup> Non-Source Fugitive Emissions are defined at N.J.A.C. 7:27-22.1 and are included if the facility falls into one or more categories listed at N.J.A.C. 7:27-22.2(a)2.

**Section A**

**Facility Name: TRUSTEES OF PRINCETON UNIVERSITY**

**Program Interest Number: 61014**

**Permit Activity Number: BOP180001**

**POLLUTANT EMISSIONS SUMMARY**

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

HAP	TPY
Acrolein	0.0010
Arsenic	0.0015
Benzene	0.0023
Beryllium	0.00030
Cadmium	0.0014
Cobalt	0.000050
DMBA (7,12-Dimethylbenz(a)anthracene	0.000010
Formaldehyde	0.15
Lead	0.0015
Manganese	0.083
Naphthalene	0.00091
Nickel	0.0016
PAHs (Polynuclear aromatic hydrocarbons)	0.0028

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

Other Air Contaminant	TPY

---

<sup>4</sup> 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: TRUSTEES OF PRINCETON UNIVERSITY**  
**Program Interest Number: 61014**  
**Permit Activity Number: BOP180001**

### GENERAL PROVISIONS AND AUTHORITIES

1. No permittee shall allow any air contaminant, including an air contaminant detectable by the sense of smell, to be present in the outdoor atmosphere in a quantity and duration which is, or tends to be, injurious to human health or welfare, animal or plant life or property, or which would unreasonably interfere with the enjoyment of life or property. This shall not include an air contaminant that occurs only in areas over which the permittee has exclusive use or occupancy. Requirements relative only to nuisance situations, including odors, are not considered federally enforceable. [N.J.A.C. 7:27-22.16(g)8]
2. Any deviation from operating permit requirements which results in a release of air contaminants shall be reported to the Department as follows:
  - a. If the air contaminants are released in a quantity or concentration which poses a potential threat to public health, welfare or the environment or which might reasonably result in citizen complaints, the permittee shall report the release to the Department:
    - i. Immediately on the Department hotline at 1-(877) 927-6337, pursuant to N.J.S.A. 26:2C-19(e); and
    - ii. As part of the compliance certification required in N.J.A.C. 7:27-22.19(f). However, if the deviation is identified through source emissions testing, it shall be reported through the source emissions testing and monitoring procedures at N.J.A.C. 7:27-22.18(e)3; or
  - b. If the air contaminants are released in a quantity or concentration which poses no potential threat to public health, welfare or the environment and which will not likely result in citizen complaints, the permittee shall report the release to the Department as part of the compliance certification required in N.J.A.C. 7:27-22.19(f), except for deviations identified by source emissions testing reports, which shall be reported through the procedures at N.J.A.C. 7:27-22.18(e)3; or
  - c. If the air contaminants are released in a quantity or concentration which poses no potential threat to public health, welfare or the environment and which will not likely result in citizen complaints, and the permittee intends to assert the affirmative defense afforded by N.J.A.C. 7:27-22.16(l), the violation shall be reported by 5:00 PM of the second full calendar day following the occurrence, or of becoming aware of the occurrence, consistent with N.J.A.C. 7:27-22.16(l). [N.J.A.C. 7:27-22.19(g)]
3. The permittee shall comply with all conditions of the operating permit including the approved compliance plan. Any non-compliance with a permit condition constitutes a violation of the New Jersey Air Pollution Control Act N.J.S.A. 26:2C-1 et seq., or the CAA, 42 U.S.C. §7401 et seq., or both, and is grounds for enforcement action; for termination, revocation and reissuance, or for modification of the operating permit; or for denial of an application for a renewal of the operating permit. [N.J.A.C. 7:27-22.16(g)1]
4. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of its operating permit. [N.J.A.C. 7:27-22.16(g)2]
5. This operating permit may be modified, terminated, or revoked for cause by the EPA pursuant to 40 CFR 70.7(g) and revoked or reopened and modified for cause by the Department pursuant to N.J.A.C. 7:27-22.25. [N.J.A.C. 7:27-22.16(g)3]

6. The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this operating permit; or to determine compliance with the operating permit. [N.J.A.C. 7:27-22.16(g)4]
7. The filing of an application for a modification of an operating permit, or of a notice of planned changes or anticipated non-compliance, does not stay any operating permit condition. [N.J.A.C. 7:27-22.16(g)5]
8. The operating permit does not convey any property rights of any sort, or any exclusive privilege. [N.J.A.C. 7:27-22.16(g)6]
9. Upon request, the permittee shall furnish to the Department copies of records required by the operating permit to be kept. [N.J.A.C. 7:27-22.16(g)7]
10.
  - a. For emergencies (as defined at 40 CFR 70.6(g)(1)) that result in non-compliance with any promulgated federal technology-based standard such as NSPS, NESHAPS, or MACT, a federal affirmative defense is available, pursuant to 40 CFR 70. To assert a federal affirmative defense, the permittee must use the procedures set forth in 40 CFR 70. The affirmative defense provisions described below may not be applied to any situation that caused the Facility to exceed any federally delegated regulation, including but not limited to NSPS, NESHAP, or MACT.
  - b. For situations other than those covered above, an affirmative defense is available for a violation of a provision or condition of the operating permit only if:
    - i. The violation occurred as a result of an equipment malfunction, an equipment startup or shutdown, or during the performance of necessary equipment maintenance; and
    - ii. The affirmative defense is asserted and established as required by N.J.S.A. 26:2C-19.1 through 19.5 and any implementing rules. [N.J.A.C. 7:27-22.16(l)]
11. In the event of a challenge to any part of this operating permit, all other parts of the permit shall continue to be valid. [N.J.A.C. 7:27-22.16(f)]
12. Each owner and each operator of any facility, source operation, or activity to which this permit applies is responsible for ensuring compliance with all requirements of N.J.A.C. 7:27-22. If the owner and operator are separate persons, or if there is more than one owner or operator, each owner and each operator is jointly and severally liable for any fees due under N.J.A.C. 7:27-22, and for any penalties for violation of N.J.A.C. 7:27-22. [N.J.A.C. 7:27-22.3]
13. The permittee shall ensure that no air contaminant is emitted from any significant source operation at a rate, calculated as the potential to emit, that exceeds the applicable threshold for reporting emissions set forth in the Appendix to N.J.A.C. 7:27-22 or 7:27-17.9(a), unless emission of the air contaminant is authorized by this operating permit. [N.J.A.C. 7:27-22.3(c)]
14. Consistent with the provisions of N.J.A.C. 7:27-22.3(e), the permittee shall ensure that all requirements of this operating permit are met. In the event that there are multiple emission limitations, monitoring, recordkeeping, and/or reporting requirements for a given source operation, the facility must comply with all requirements, including the most stringent.
15. Consistent with the provisions of N.J.A.C. 7:27-22.3(s), Except as otherwise provided in this subchapter, the submittal of any information or application by a permittee including, but not limited to, an application or notice for any change to the operating permit, including any administrative amendment, any minor or significant modification, renewal, a notice of a seven-day notice change, a notice of past or anticipated noncompliance, does not stay any operating permit condition, nor relieve a permittee from the obligation to obtain other necessary permits and to comply with all applicable Federal, State, and local requirements.

16. Applicable requirements derived from an existing or terminated consent decree with EPA will not be changed without advance consultation by the Department with EPA. N.J.A.C. 7:27-22.3(uu).
17. Unless specifically exempted from permitting, temporary mobile equipment for short-term activities may be periodically used at major facilities, on site for up to 90 days if the requirements listed below, (a) through (h) are satisfied.
  - a. The permittee will ensure that the temporary mobile equipment will not be installed permanently or used permanently on site.
  - b. The permittee will ensure that the temporary mobile equipment will not circumvent any State or Federal rules and regulations, even for a short period of time, and the subject equipment will comply with all applicable performance standards.
  - c. The permittee cannot use temporary mobile equipment unless the owner or operator of the subject equipment has obtained and maintains an approved Air Pollution Control Permit, issued pursuant to N.J.A.C. 7:27-8 or 22, prior to bringing the temporary mobile equipment to operate at the major facility.
  - d. The permittee is responsible for ensuring the temporary mobile equipment's compliance with the terms and conditions specified in its approved Air Pollution Control Permit when the temporary mobile equipment operates on the property of the permittee.
  - e. The permittee will ensure that temporary mobile equipment utilized for short-term activities will not operate on site for more than a total of 90 days during any calendar year.
  - f. The permittee will keep on site a list of temporary mobile equipment being used at the facility with the start date, end date, and record of the emissions from all such equipment (amount and type of each air contaminant) no later than 30 days after the temporary mobile equipment completed its job in accordance with N.J.A.C. 7:27-22.19(i)3.
  - g. Emissions from the temporary mobile equipment must be included in the emission netting analysis required of the permittee by N.J.A.C. 7:27-18.7. This information is maintained on site by the permittee and provided to the Department upon request in accordance with existing applicable requirements in the FC Section of its Title V permit.
  - h. Where short-term activities (employing temporary mobile equipment) will reoccur on at least an annual basis, the permittee is required to include such activities (and the associated equipment) within one year of the first use, in its Title V permit through the appropriate modification procedures.
18. Consistent with the provisions of N.J.A.C. 7:27-22.9(c), the permittee shall use monitoring of operating parameters, where required by the compliance plan, as a surrogate for direct emissions testing or monitoring, to demonstrate compliance with applicable requirements.
19. The permittee is responsible for submitting timely and administratively complete operating permit applications:
  - Administrative Amendments [N.J.A.C. 7:27-22.20(c)];
  - Seven-Day Notice changes [N.J.A.C. 7:27-22.22(e)];
  - Minor Modifications [N.J.A.C. 7:27-22.23(e)];
  - Significant Modifications [N.J.A.C. 7:27-22.24(e)]; and
  - Renewals [N.J.A.C. 7:27-22.30(b)].
20. The operating permit renewal application consists of a RADIUS application and the application attachment available at the Department's website <http://www.nj.gov/dep/aqpp/applying.html> (Attachment to the RADIUS Operating Permit Renewal Application). Both the RADIUS application and the Application Attachment, along with any other supporting documents must be submitted using the Department's Portal



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

21. For all source emissions testing performed at the facility, the phrase “worst case conditions without creating an unsafe condition” used in the enclosed compliance plan is consistent with EPA’s National Stack Testing Guidance, dated April 27, 2009, where all source emission testing performed at the facility shall be under the representative (normal) conditions that:
  - i. Represent the range of combined process and control measure conditions under which the facility expects to operate (regardless of the frequency of the conditions); and
  - ii. Are likely to most challenge the emissions control measures of the facility with regard to meeting the applicable emission standards, but without creating an unsafe condition.
22. Consistent with EPA’s National Stack Testing Guidance and Technical Manual 1004, a facility may not stop an ongoing stack test because it would have failed the test unless the facility also ceases operation of the equipment in question to correct the issue. Stopping an ongoing stack test in these instances will be considered credible evidence of emissions non-compliance.
23. Each permittee shall maintain records of all source emissions testing or monitoring performed at the facility and required by the operating permit in accordance with N.J.A.C. 7:27-22.19. Records shall be maintained, for at least five years from the date of each sample, measurement, or report. Each permittee shall maintain all other records required by this operating permit for a period of five years from the date each record is made. At a minimum, source emission testing or monitoring records shall contain the information specified at N.J.A.C. 7:27-22.19(b). [N.J.A.C. 7:27-22.19(a) and N.J.A.C. 7:27-22.19(b)]
24. A Permittee may seek the approval of the Department for a delay in testing required pursuant to this permit by submitting a written request to the appropriate Regional Enforcement Office in accordance with N.J.A.C. 7:27-22.18(k). A Permittee may also seek advanced approval for a longer period for submittal of a source emissions test report required by the permit by submitting a request to the Department’s Regional Enforcement Office in accordance with N.J.A.C. 7:27-22.19. [N.J.A.C. 7:27-22.18(k) and N.J.A.C. 7:27-22.19]

**Section C**

**Facility Name: TRUSTEES OF PRINCETON UNIVERSITY**

**Program Interest Number: 61014**

**Permit Activity Number: BOP180001**

**STATE-ONLY APPLICABLE REQUIREMENTS**

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

**STATE-ONLY APPLICABLE REQUIREMENTS**

The following applicable requirements are not federally enforceable:

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

**Section D**

**Facility Name: TRUSTEES OF PRINCETON UNIVERSITY  
 Program Interest Number: 61014  
 Permit Activity Number: BOP180001**

**FACILITY SPECIFIC REQUIREMENTS AND INVENTORIES**

**FACILITY SPECIFIC REQUIREMENTS PAGE INDEX**

**Subject Item and Name** **Page Number**

**Facility (FC):**

FC	1
----	---

**Insignificant Sources (IS):**

IS NJID	IS Description	
IS1	Fuel Oil Tanks (8) for Electric Generation, < 10,000 gal	6
IS2	Space Heaters (23), Firing Natural Gas, Heat Input < 1MMBtu/hr	7
IS3	Boilers (11), Firing Natural Gas, Heat Input < 1MMBtu/hr	8
IS4	Cogeneration Fuel Oil Tanks (5), 50,000 gal., Vapor Pressure < 0.02 psia, TXS < 0.1lbs/hr	9
IS5	Cathedral of Air Fuel Oil Tanks	11
IS6	Parts Washer (3), Garage Maintenance, Unheated, top opening < 6 sq. ft and capacity < 100 gal, TXS < 0.1 lbs/hr	12
IS7	Cooling Towers, Chilled Water Plant, Raw Materials < 50 lbs/hr	14
IS8	Ceramic Kiln, Direct Firing Fuel Oil, 185 Nassau Street, Heat Input < 1MMBtu/hr	15
IS9	Spray Booth, McCormick, Cleaning < 0.5 gallons/hr	16
IS10	Water Heaters, Firing Natural Gas, Heat Input < 1MMBtu/hr	17
IS11	Commercial Boilers, Firing Natural Gas, Heat Input < 1MMBtu/hr	8
IS12	Emergency Generators; <1 MM BTU/hr	18

**Groups (GR):**

GR NJID	GR Designation	GR Description	
GR1	U18 OS1-OS5	(40 CFR 60 Subpart GG and Subpart A requirements apply to: U18 - OS1, OS2, OS3 and OS5)	20
GR3	U18 OS6-OS9	(40 CFR 60 Subpart Db and Subpart A requirements apply to: U18 - OS6, OS7, OS8 and OS9)	29
GR4	U29 /OS17-20	U29 / OS 17-25 / Subject to 40 CFR 60 Subpart IIII and Subpart A.	40
GR13	U18 OS6-OS9	(40 CFR 63 Subpart JJJJJ and Subpart A requirements apply to: U18 - OS6, OS7, OS8 and OS9)	42

**Emission Units (U):**

U NJID	U Designation	U Description	
U2	120 Prosp St	Two 1.01 MMBTU/hr Boilers at 120 Prospect Street, Firing Natural Gas	44

U3	171 Broadmd	Two 2.1 MMBTU/hr Boilers at 171 Broadmead Street, Firing Natural Gas	46
U4	185 Nassau	Two 2.4 MMBtu/hr Nassau Street Boilers, Firing Natural Gas	48
U5	L Apts	Four 1.43 MMBTU/hr Boilers at Lawrence Apartments, Firing Natural Gas	50
U16	Mac Gasoline	4,000 gallons Underground Unleaded Gasoline Storage Tank at MacMillan Building	52
U17	Spray Bth	Paint Spray Booth at MacMillan Building for Furniture Touch Up	57
U18	Cogen Plant	Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiesel and two Auxiliary Boilers firing Natural Gas, No. 2 Fuel Oil or Biodiesel	59
U29	Emerg Gens	Emergency Generator Diesel Fuel Engines	92

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

**Permit Being Modified**

**Permit Class:** BOP      **Number:** 120001

**Description**      Title V Permit Renewal which includes the following:  
**of Modifications:** PM2.5 emissions added;  
HAP emissions updated per N.J.A.C. 7:27-17.9 Table 2 thresholds;  
No.2 fuel oil sulfur specifications updated;  
Emission unit U14 deleted;  
Emergency generator (emgen) removed - OS8 of U29 deleted;  
Four emgems added - OS22 through OS25 added to U29;  
Stack test results to be based upon "the average of three tests" rather than "each of three tests";  
Applicable Federal Rules mentioned in the Operating Summary;  
Miscellaneous inconsistencies addressed.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Subject Item: FC

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

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Compliance Certification: The permittee shall submit an annual Compliance Certification for each applicable requirement, pursuant to N.J.A.C. 7:27-22.19(f). [N.J.A.C. 7:27-22]	None.	None.	<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:  <a href="http://www.state.nj.us/dep/online/">http://www.state.nj.us/dep/online/</a>. 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.

BOP180001

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

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



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

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

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

<b>Ref.#</b>	<b>Applicable Requirement</b>	<b>Monitoring Requirement</b>	<b>Recordkeeping Requirement</b>	<b>Submittal/Action Requirement</b>
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.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Subject Item: IS1 Fuel Oil Tanks (8) for Electric Generation, < 10,000 gal

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Tank contents limited to petroleum products having a vapor pressure <=0.02 psia [N.J.A.C. 7:27-22.16(o)]	Other: Tank Contents. Per Delivery[N.J.A.C. 7:27-22.16(o)].	None.	None.
2	Sulfur Content in Fuel <= 0.2 % sulfur by weight. Maximum allowable sulfur content in fuel oil by fuel oil type/viscosity and geographical zone. [N.J.A.C. 7:27- 9.2(b)]	Other: Check fuel sulfur content on invoices/bills of lading upon each delivery.[N.J.A.C. 7:27- 9.2(b)].	Other: Keep certificate of analysis from the fuel supplier showing fuel sulfur content. Per delivery.[N.J.A.C. 7:27- 9.2(b)].	None.
3	Sulfur Content in Fuel <= 500 ppmw (0.05% by weight) for diesel fuel and 0.25 % sulfur by weight for #4 and 0.5 % sulfur by weight for #5, #6 & heavier . Effective July 1, 2014 through June 30, 2016, for use in New Jersey. [N.J.A.C. 7:27- 9.2(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
4	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight) for diesel fuel and 0.25 % sulfur by weight for #4 and 0.5 % sulfur by weight for #5, #6 & heavier. Effective July 1, 2016 for use in New Jersey. [N.J.A.C. 7:27- 9.2(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.

BOP180001

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

**Subject Item:** IS2 Space Heaters (23), Firing Natural Gas, Heat Input < 1MMBtu/hr

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No visible emissions except for a period of not longer than three minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] & [N.J.A.C. 7:27- 3.2(c)]	Other: Periodic visual inspections[N.J.A.C. 7:27-22.16(o)].	None.	None.
2	Fuel type is limited to natural gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

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

**Subject Item:** IS3 Boilers (11), Firing Natural Gas, Heat Input < 1MMBtu/hr, IS11 Commercial Boilers, Firing Natural Gas, Heat Input < 1MMBtu/hr

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No visible emissions except for a period of not longer than three minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] & [N.J.A.C. 7:27- 3.2(c)]	Other: Periodic visual inspections.[N.J.A.C. 7:27-22.16(o)].	None.	None.
2	Fuel type is limited to natural gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Subject Item: IS4 Cogeneration Fuel Oil Tanks (5), 50,000 gal., Vapor Pressure < 0.02 psia, TXS < 0.1lbs/hr

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Sulfur Content in Fuel <= 0.2 % sulfur by weight. Maximum allowable sulfur content in fuel oil by fuel oil type/viscosity and geographical zone. [N.J.A.C. 7:27- 9.2(a)]	Other: Check fuel sulfur content on invoices/bills of lading upon each delivery.[N.J.A.C. 7:27- 9.2(a)].	Other: Keep certificate of analysis from the fuel supplier showing fuel sulfur content. Per delivery.[N.J.A.C. 7:27- 9.2(a)].	None.
2	Maximum TXS emissions shall be < 0.1 lbs/hour [N.J.A.C. 7:27-17.9(b)3]	None.	None.	None.
3	The operating temperature shall not be greater than 350 degrees F. [N.J.A.C. 7:27-22.1]	None.	None.	None.
4	The vapor pressure of the liquid, excluding the vapor pressure of water, shall be less than 0.02 psia at the liquid's actual temperature or at 70 degrees F, whichever is higher. [N.J.A.C. 7:27-22.1]	None.	None.	None.
5	The tank shall have no visible emissions, exclusive of water vapor, to the outdoor atmosphere. [N.J.A.C. 7:27-22.1]	None.	None.	None.
6	The tank shall not emit any air contaminants which may cause an odor detectable outside the property boundaries of the facility. [N.J.A.C. 7:27-22.1]	None.	None.	None.
7	The tank shall not qualify for any NESHAPS, MACT, or NSPS air pollution control standards, excluding the NSPS requirements to maintain a record of the contents of the tank, the period of storage of these contents, and the maximum true vapor pressure of the liquid stored. [N.J.A.C. 7:27-22.1]	None.	None.	None.
8	The tank's potential to emit each TXS and each HAP shall not exceed the de minimis reporting thresholds as specified in N.J.A.C. 7:27-22, Appendix. [N.J.A.C. 7:27-22.1]	None.	None.	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	The percentage by weight of all HAPs collectively in the raw material stored in the tank shall be less than 1.0 percent. [N.J.A.C. 7:27-22.1]	None.	None.	None.
10	The owner or operator shall have readily available upon Department request a statement certified in accordance with N.J.A.C. 7:27-1.39, signed by the responsible official, as defined at N.J.A.C. 7:27-1.4, that: (1) specifies the contents of the tank; (2) affirms that the tank meets the applicable requirements of Ref. #2 to #8 above and (3) attests that the tank is in compliance with all other applicable State or federal air pollution requirements. [N.J.A.C. 7:27-22.1]	None.	None.	None.
11	Sulfur Content in Fuel <= 0.2 % sulfur by weight. Maximum allowable sulfur content in fuel oil by fuel oil type/viscosity and geographical zone. [N.J.A.C. 7:27- 9.2(b)]	Other: Check fuel sulfur content on invoices/bills of lading upon each delivery.[N.J.A.C. 7:27- 9.2(b)].	Other: Keep certificate of analysis from the fuel supplier showing fuel sulfur content. Per delivery.[N.J.A.C. 7:27- 9.2(b)].	None.
12	Sulfur Content in Fuel <= 500 ppmw (0.05% by weight) for diesel fuel and 0.25 % sulfur by weight for #4 and 0.5 % sulfur by weight for #5, #6 & heavier . Effective July 1, 2014 through June 30, 2016, for use in New Jersey. [N.J.A.C. 7:27- 9.2(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Subject Item: IS5 Cathedral of Air Fuel Oil Tanks

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Sulfur Content in Fuel <= 0.2 % sulfur by weight. Maximum allowable sulfur content in fuel oil by fuel oil type/viscosity and geographical zone. [N.J.A.C. 7:27- 9.2(b)]	Other: Check fuel sulfur content on invoices/bills of lading upon each delivery.[N.J.A.C. 7:27- 9.2(b)].	Other: Keep certificate of analysis from the fuel supplier showing fuel sulfur content. Per delivery.[N.J.A.C. 7:27- 9.2(b)].	None.
2	Tank contents limited to petroleum products having a vapor pressure <=0.02 psia [N.J.A.C. 7:27-22.16(o)]	Other: Tank Contents. Per Delivery[N.J.A.C. 7:27-22.16(o)].	None.	None.



BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Subject Item: IS6 Parts Washer (3), Garage Maintenance, Unheated, top opening < 6 sq. ft and capacity < 100 gal, TXS < 0.1 lbs/hr

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	For a cold cleaning machine using 2 gallons or more of solvent containing greater than 5% VOC content by weight, no person shall add solvent to the machine, or cause, suffer, allow, or permit the machine to be operated, unless the machine has a permanent, conspicuous label placed in a prominent location on the machine setting forth the applicable provisions of the operating permit. [N.J.A.C. 7:27-16.6(j)1ii]	Other: Visual determination.[N.J.A.C. 7:27-22.16(o)].	None.	None.
2	No person shall add solvent to the machine or cause, suffer, allow, or permit the machine to be operated, unless there is a tightly fitting working-mode cover that completely covers the machine's opening. [N.J.A.C. 7:27-16.6(j)1iii]	Other: Keep closed at all times except when parts are being placed into or being removed from the machine or when solvent is being added or removed.[N.J.A.C. 7:27-22.16(o)].	None.	None.
3	Parts being cleaned shall be drained for at least 15 seconds or until the dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts shall be positioned so that solvent drains directly back into the machine. [N.J.A.C. 7:27-16.6(j)2iii]	Other: Visual determination.[N.J.A.C. 7:27-22.16(o)].	None.	None.
4	Spills during solvent transfer and use of the machine shall be cleaned up immediately, and the wipe rags or other sorbent material used shall be immediately stored in covered containers for disposal or recycling. [N.J.A.C. 7:27-16.6(j)2vii]	Other: Visual determination.[N.J.A.C. 7:27-22.16(o)].	None.	None.

BOP180001

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

<b>Ref.#</b>	<b>Applicable Requirement</b>	<b>Monitoring Requirement</b>	<b>Recordkeeping Requirement</b>	<b>Submittal/Action Requirement</b>
5	A person shall not use, in a cold cleaning machine, any solvent that has a vapor pressure of 1 mmHg or greater, measured at 20 Degrees C (68 Degrees F). [N.J.A.C. 7:27-16.6(j)3]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Maintain records: (i) The name and address of the person selling the solvent; (ii) A list of the VOC(s) and their concentration information in the solvent; (iii) The information about each VOC; (iv) The solvents product number assigned by the manufacturer; and (v) the vapor pressure of the solvent in mmHg (@ 20 Degrees C). [N.J.A.C. 7:27-16.6(j)4]	None.
6	Maximum TXS emissions shall be < 0.1 lbs/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

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

**Subject Item:** IS7 Cooling Towers, Chilled Water Plant, Raw Materials < 50 lbs/hr

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum allowable emission rate for particulates < 0.5 lb/hr [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
2	Smoke particulate emissions from stack no greater than 20% opacity, exclusive of visible condensed water vapor, for more than three minutes in any consecutive 30 minute period. [N.J.A.C.7-27-6.2(d)] & [N.J.A.C. 7:27- 6.2(e)]	Monitored by visual determination at no required frequency, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	None.	None.
3	Water treatment chemicals < 50 lbs/hr. [N.J.A.C. 7:27-22.1]	None.	None.	None.

BOP180001

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

**Subject Item: IS8 Ceramic Kiln, Direct Firing Fuel Oil, 185 Nassau Street, Heat Input < 1MMBtu/hr**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall comply with the applicable standards for the emissions of particulates including opacity as required in N.J.A.C. 7:27-6.2 [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	Monitored by visual determination at no required frequency, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	None.	None.
2	Fuel limited to Natural gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Subject Item: IS9 Spray Booth, McCormick, Cleaning < 0.5 gallons/hr

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum allowable emission rate for particulates < 0.5 lb/hr [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
2	Smoke particulate emissions from stack no greater than 20% opacity, exclusive of visible condensed water vapor, for more than three minutes in any consecutive 30 minute period. (N.J.A.C.7-27-6.2(d) & [N.J.A.C. 7:27- 6.2(e)]	Monitored by visual determination at no required frequency, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	None.	None.

BOP180001

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

**Subject Item:** IS10 Water Heaters, Firing Natural Gas, Heat Input < 1MMBtu/hr

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No visible emissions except for a period of not longer than three minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] & [N.J.A.C. 7:27- 3.2(c)]	Other: Periodic visual inspections.[N.J.A.C. 7:27-22.16(o)].	None.	None.
2	Fuel type is limited to natural gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Subject Item: IS12 Emergency Generators; <1 MM BTU/hr

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>Each emergency generator shall be located at the facility and produce mechanical or thermal energy, or electrical power exclusively for use at the facility. This emergency generator shall be operated only:</p> <ol style="list-style-type: none"> <li>1. During the performance of normal testing and maintenance procedures, as recommended in writing by the manufacturer and/or as required in writing by a Federal or State law or regulation,</li> <li>2. When there is power outage or the primary source of mechanical or thermal energy fails because of an emergency, or when the power disruption resulted from construction, repair, or maintenance activity (CRM) at the facility. Operation of the emergency generator under construction, repair, or maintenance activity is limited to 30 days in any calendar year; or</li> <li>3. When there is a voltage reduction issued by PJM and posted on the PJM internet website (www.pjm.com) under the "emergency procedures" menu. [N.J.A.C. 7:27-19.1]</li> </ol>	<p>Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. Record the following information:</p> <ol style="list-style-type: none"> <li>1. Once per month, the total operating time from the generator's hour meter and the monthly hours of operation for emergency use and during power disruption from CRM. Document if the emergency use was due to internal or external loss of primary source of energy, or due to a fire or flood. If internal loss at the facility, document the emergency and/or CRM that occurred, the damages to the primary source of energy and the amount of time needed for repairs.</li> <li>2. For each time the emergency generator is specifically operated for testing or maintenance:                         <ol style="list-style-type: none"> <li>i. The reason for its operation;</li> <li>ii. The date(s) of operation and the start up and shut down time;</li> <li>iii. The total operating time for testing or maintenance based on the generator's hour meter; and</li> <li>iv. The name of the operator; and</li> </ol> </li> <li>3. If a voltage reduction is the reason for the use of the emergency generator, a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction.</li> </ol> <p>The owner or operator of shall maintain the above records for at least 5 years after the record was made and shall make the records readily available to the Department or the EPA. [N.J.A.C. 7:27-19.11]</p>	<p>None.</p>

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<p>This emergency generator shall not be used:</p> <p>1. For normal testing and maintenance on days when the Department forecasts air quality anywhere in New Jersey to be "unhealthy for sensitive groups," "unhealthy," or "very unhealthy" as defined in the EPA's Air Quality Index at <a href="http://airnow.gov/">http://airnow.gov/</a>, as supplemented or amended and incorporated herein by reference, unless required in writing by a Federal or State law or regulation. Procedures for determining the air quality forecasts for New Jersey are available at the Department's air quality permitting web site at <a href="http://www.state.nj.us/dep/aqpp/aqforecast">http://www.state.nj.us/dep/aqpp/aqforecast</a>; and</p> <p>2. As a source of energy or power after the primary energy or power source has become operable again after emergency or after power disruption resulted from construction, repair, or maintenance activity. Operation of the emergency generator during construction, repair, or maintenance activity shall be limited to no more than 30 days of operation per calendar year. If the primary energy or power source is under the control of the owner or operator of the emergency generator, the owner or operator shall make a reasonable, timely effort to repair the primary energy or power source. [N.J.A.C. 7:27-19.2(d)]</p>	None.	None.	None.
3	<p>Opacity &lt;= 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]</p>	None.	None.	None.
4	<p>Sulfur Content in Fuel &lt;= 15 ppmw (0.0015% by weight). [N.J.A.C. 7:27-9.2(b)]</p>	<p>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)]</p>	<p>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)]</p>	None.



BOP180001

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

**Subject Item: GR1 (40 CFR 60 Subpart GG and Subpart A requirements apply to: U18 - OS1, OS2, OS3 and OS5)**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator of a turbine that uses steam or water injection shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine. [40 CFR 60.334(a)]	Monitored by parametric monitoring system continuously. During the performance test required under 40 CFR 60.8, the ratio of water or steam to fuel shall be continuously monitored to establish acceptable values and ranges. [40 CFR 60.334(g)]	None.	None.
2	The owner or operator may, as alternative to operating the continuous monitoring system described in 40 CFR 60.334(a), install, certify, maintain operate, and quality-assure a continuous monitoring system (CEMS) consisting of NOx and O2 monitors. As an alternative, a CO2 monitor may be used to adjust the measured NOx concentrations. Each CEMS must be installed and certified according to PS 2 and 3 of 40 CFR Part 60 Appendix B. If the owner or operator has installed a NOx CEMS to meet the requirements 40 CFR Part 75 and is continuing to meet the ongoing requirements of 40 CFR Part 75, the CEMS may be used to meet the requirements of this section. If CEMS in conformance with 40 CFR Part 75 is used, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report. [40 CFR 60.334(b)]	Monitored by continuous emission monitoring system continuously. [40 CFR 60.334]	None.	None.
3	The owner or operator of a turbine on which the steam or water to fuel ratio or other parameters are being continuously monitored shall develop and keep on -site a parameter monitoring plan which explains the procedure used to document proper operation of the NOx emission controls. [40 CFR 60.334(g)]	None.	Recordkeeping by other recordkeeping method (provide description) once initially. The parameter monitoring plan shall include information required by 40 CFR 60.334(g). [40 CFR 60.334(g)]	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	<p>No owner or operator subject to the provisions of this subpart shall burn any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw). [40 CFR 60.333(b)].</p> <p>The owner or operator shall monitor the total sulfur content of the fuel being fired in the turbine. [40 CFR 60.334(h)(1)]</p>	<p>Other: For gaseous fuel determine the total sulfur content using any of the methods at 40 CFR 60.335(b)(10)(ii) each operating day. [40 CFR 60.334(h)(1)] and [40 CFR 60.334(i)(2)].</p> <p>For liquid fuel determine the total sulfur content using any of the methods at 40 CFR 60.335(b)(10)(i) at a frequency specified at 40 CFR 60.334(i)(1). [40 CFR 60.334(h)(1)] and [40 CFR 60.334(i)(1)].</p> <p>The analyses may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.[40 CFR 60.335(b)(11)].</p>	<p>Other: Record each fuel total sulfur result.[N.J.A.C. 7:27-22.16(o)].</p>	<p>None.</p>
5	<p>The owner or operator may elect not to monitor nitrogen content of the fuel being fired in the turbine if the owner or operator does not claim an allowance for fuel bound nitrogen. [40 cfr 60.334(h)(2)].</p> <p>The facility will take no allowance for fuel bound nitrogen. [N.J.A.C. 7:27-22.16(a)]</p>	<p>None.</p>	<p>None.</p>	<p>None.</p>
6	<p>The owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u) regardless of whether an existing custom schedule approved by the Administrator. [40 CFR 60.334(h)(3)]</p>	<p>None.</p>	<p>None.</p>	<p>Demonstrate compliance: Once initially. The owner or operator shall submit the required determination to the Administrator using the sources of information described in 40 CFR 60.334(h)(3)(i) or (ii) showing the maximum total sulfur content. [40 CFR 60.334(h)(3)]</p>

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	The owner or operator shall submit reports of excess nitrogen oxides emissions and monitor downtime in accordance with 40 CFR 60.334(j) and (j)(1)(i). [40 CFR 60.334(j)] and [40 CFR 60.334(j)(1)]	None.	None.	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Semi-annually beginning on the 30th day of the 6th month following initial performance tests. Each report shall include the average steam or water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, as applicable and, (if applicable) the nitrogen content of the fuel during each excess emission. Pursuant to 40 CFR 60.334(j)5, all reports shall be postmarked by the 30th day following the end of each 6-month period. [40 CFR 60.334(j)(1)]
8	The owner or operator shall submit reports of excess sulfur dioxide emissions and monitor downtime in accordance with 40 CFR 60.334(j) and (j)(2). [40 CFR 60.334(j)] and [40 CFR 60.334(j)(2)]	None.	None.	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Semi-annually beginning on the 30th day of the 6th month following initial performance tests. Pursuant to 40 CFR 60.334(j)5, all reports shall be postmarked by the 30th day following the end of each 6-month period. [40 CFR 60.334(j)(2)]
9	The owner or operator shall report to the Administrator quarterly each period during which an exemption provided in 40 CFR Part 60.332(f) is in effect. [40 CFR 60.334(j)(3)]	None.	None.	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every quarter beginning on the 30th of the 3rd month following initial performance tests. The report shall contain for each period, the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All reports shall be postmarked by the 30th day following the end of each calendar quarter. [40 CFR 60.334(j)(3)]

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	All requests, reports, applications, submittals, and other communications to the Administrator pursuant to Part 60 shall be submitted in duplicate to the Regional Office of US Environmental Protection Agency. Submit information to: Region II, Director, Air and Waste Management Division, US Environmental Protection Agency, 290 Broadway, New York, New York 10007-1866. [40 CFR 60.4(a)]	None.	None.	Submit a report: As per the approved schedule to EPA Region II as required by 40 CFR 60. [40 CFR 60.4(a)]
11	Copies of all information submitted to EPA pursuant to 40 CFR Part 60, must also be submitted to the Central Regional Enforcement Office of NJDEP. [40 CFR 60.4(b)]	None.	None.	Submit a report: As per the approved schedule to the Central Regional Enforcement Office, NJDEP, Horizon Center, P.O. Box 407, Robbinsville, NJ 08625-0407, as required by 40 CFR 60. [40 CFR 60.4(b)]
12	The owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in section 60.14(e). The notification shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of facility before and after the change and the expected completion date of the change. Notification shall be postmarked within 60 days or as soon as practicable before any change is commenced. The Administrator may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]	None.	None.	Submit notification: Upon occurrence of event to EPA Region II and the Central Regional Enforcement Office of NJDEP as required by 40 CFR 60.7. [40 CFR 60.7(a)(4)]

BOP180001

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

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

BOP180001

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

<b>Ref.#</b>	<b>Applicable Requirement</b>	<b>Monitoring Requirement</b>	<b>Recordkeeping Requirement</b>	<b>Submittal/Action Requirement</b>
15	The owner or operator shall maintain a file, suitable for inspection, of all monitoring measurements as indicated in Recordkeeping Requirement column. [40 CFR 60.7(f)]	None.	Recordkeeping by manual logging of parameter at the approved frequency in a permanently bound logbook or readily accessible computer memory. The file shall include all measurements (including continuous monitoring system, monitoring device, and performance testing measurements), all continuous monitoring system performance evaluations, all continuous monitoring system or monitoring device calibration checks, all adjustments/maintenance performed on these systems or devices, and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. [40 CFR 60.7(f)]	None.
16	Compliance with NSPS standards specified in this permit, other than opacity, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in NSPS. [40 CFR 60.11(a)]	None.	None.	None.
17	At all times, including periods of start-up, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operation and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]	None.	None.	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	No owner or operator subject to NSPS standards in Part 60, shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]	None.	None.	None.
19	The owner or operator shall perform zero and span adjustments daily for continuous emission monitors and continuous opacity monitors following procedures outlined in 40 CFR Part 60.13(d)1 & 2. [40 CFR 60.13(d)]	None.	Other: Maintain records in accordance with 40 CFR 60.7(f). [40 CFR 60.13(d)].	None.
20	Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all continuous monitoring systems measuring emissions except opacity shall be in continuous operation. They shall complete a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15-minute period. [40 CFR 60.13(e)(2)]	Other: See Applicable Requirement. [40 CFR 60.13(e)(2)].	Other: See Applicable Requirement. [40 CFR 60.13(e)(2)].	None.
21	All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR Part 60 shall be used. [40 CFR 60.13(f)]	None.	None.	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	<p>The owner or operator shall reduce all continuous monitoring systems (other than opacity) data to 1-hour averages which shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. For owners and operators complying with the requirements in 40 CFR 60.7(f)(1) or (2), data averages must include any data recorded during periods of monitor breakdown or malfunction. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O<sub>2</sub> or ng of pollutant per J of heat input). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g. rounded to the nearest 1 percent opacity). [40 CFR 60.13(h)]</p>	None.	Other: See Applicable Requirement. [40 CFR 60.13(h)].	None.
23	<p>The provisions set forth under an applicable subparts of 40 CFR Part 60 supersede conflicting provisions listed under Modification in 40 CFR Part 60.14. [40 CFR 60.14(f)]</p>	None.	None.	None.
24	<p>Compliance with all applicable standards must be achieved within 180 days of completion of any physical or operational change subject to the control measures specified in 40 CFR Part 60.14(a). [40 CFR 60.14(g)]</p>	None.	None.	None.



BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
25	Changes in time periods for submittal of information and postmark deadlines set forth in this subpart, may be made only upon approval by the Administrator and shall follow procedures outlined in 40 CFR Part 60.19. [40 CFR 60.19]	None.	None.	None.

BOP180001

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

**Subject Item: GR3 (40 CFR 60 Subpart Db and Subpart A requirements apply to: U18 - OS6, OS7, OS8 and OS9)**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>NOx (Total) &lt;= 0.1 lb/MMBTU for auxiliary boilers E23 and E24 firing No.2 fuel oil or natural gas. [40 CFR 60.44b(a)(1)].</p> <p>NOx (Total) &lt;= 0.2 lb/MMBTU for duct burner E22 firing natural gas. [40 CFR 60.44b(a)(4)].</p> <p>The NOx standards apply at all times including periods of startup, shutdown, or malfunction. [40 CFR 60.44b(h)].</p> <p>Compliance with the NOx emission limits is determined on a 30-day rolling average basis. [40 CFR 60.44b(i)]</p>	<p>Monitored by continuous emission monitoring system continuously, based on a 1 hour block average.</p> <p>Install, calibrate, maintain, and operate CEMS for measuring NOx and O2 (or CO2) emissions discharged to the atmosphere, and shall record the output of the system. [40 CFR 60.48b(b)(1)].</p> <p>The CEMS shall be operated and data recorded during all periods of operation except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. [40 CFR 60.48b(c)].</p> <p>The 1-hr average NOx emission rates measured by the continuous NOx monitor (required under 40 CFR 60.13(h)) shall be expressed in lb/MMBtu and shall be used to calculate the average emission rates under 40 CFR 60.44b. [40 CFR 60.48b(d)]</p> <p>The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the CEM. [40 CFR 60.48b(e)]</p>	<p>Recordkeeping by required at 40 CFR 60.49b(g)(1) through (10) for each steam generating unit operating day. [40 CFR 60.49b(g)].</p> <p>All records shall be maintained by the owner or operator for a period of 2 years following the date of such record.[40 CFR 60.49b(o)].</p>	<p>Submit a report: As per the approved schedule.</p> <p>The owner or operator shall submit a NOx excess emission report to the Administrator. [40 CFR 60.49b(h)(2)(i)].</p> <p>The owner or operator of any affected facility subject to the continuous monitoring requirements for NOx under 40 CFR 60.48(b) shall submit reports containing the information recorded under 40 CFR 60.49b(g).</p> <p>The reporting period for the reports is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR 60.49b(w)].</p> <p>The owner or operator may submit electronic quarterly reports in lieu of written reports. The format of each quarterly report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements was achieved during the reporting period. [40 CFR 60.49b(v)]</p>

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<p>This requirement only applies to auxiliary boilers E23 and E24:</p> <p>Opacity &lt;= 20%, except for one 6-minute period per hour of not more than 27% opacity. [40 CFR 60.43b(f)].</p> <p>This emission standard does not apply during periods of startup, shutdown, or malfunction. [40 CFR 60.43b(g)]</p>	<p>Monitored by visual determination every 4 hours, based on 6 minute blocks.</p> <p>Conduct the visual inspection at least once in every four hours during the daylight hours in accordance with EPA Method 9, in accordance with the alternative opacity monitoring plan approved by EPA on September 24, 2001.</p> <p>If the annual capacity factor for distillate oil exceeds 10%, or the amount of distillate oil combusted exceeds 1,065,000 gallons per year, the facility would no longer qualify to use an opacity monitoring alternative, and the permittee must propose a schedule for installing and certifying a continuous opacity monitor. [40 CFR 60.13(i)(2)] &amp; [40 CFR 60.4(i)(2)]</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system every 4 hours, when fuel oil is combusted, in accordance with the alternative opacity monitoring plan approved by EPA on September 24, 2001. A copy of the EPA approval letter must be attached to the Operating permit. [40 CFR 60.13(i)(2)]</p>	<p>Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): As per the approved schedule.</p> <p>Submit an excess emission report (EER) to the NJDEP within 30 days after the end of each calendar quarter in which there are opacity exceedances during distillate oil combustion.</p> <p>If there are no opacity excess emissions during a calendar quarter, EERs may be submitted on a semi-annual basis. [40 CFR 60.13(i)(2)]</p>
3	<p>The owner or operator of an affected facility that only combusts very low sulfur oil and/or natural gas is not subject to the SO2 standard, compliance and performance testing requirements if the owner or operator obtains fuel receipts as described in 40 CFR 60.49b(r). [40 CFR 60.45b(j)]</p>	<p>Other: The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil, natural gas, shall obtain and maintain at the affected facility fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the oil meets the definition of distillate oil and gaseous fuel meets the definition of natural gas as defined in 40 CFR 60.41b and the applicable sulfur limit. The distillate oil need not meet the fuel nitrogen content specification in the definition of distillate oil. [40 CFR 60.49b(r)(1)].</p>	<p>Other: Obtain and maintain onsite fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the oil meets the definition of distillate oil and gaseous fuel meets the definition of natural gas as defined in 40 CFR 60.41b and the applicable sulfur limit. [40 CFR 60.49b(r)(1)].</p>	<p>Submit a report: As per the approved schedule.</p> <p>Include a statement in the bi-annual reports required at 40 CFR 60.49b(w), or the quarterly electronic reports required at 40 CFR 60.49b(v), certifying that only very low sulfur oil and/or natural gas was combusted in the affected facility during the reporting period. [40 CFR 60.49b(r)(1)]</p>

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	For each auxiliary boiler (E23 and E24), and the duct burner (E22), the owner or operator shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for distillate oil and natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [40 CFR 60.49b(d)(1)]	Other: The owner or operator of an affected facility shall calculate the annual capacity factor individually for distillate oil and natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.[40 CFR 60.49b(d)(1)].	Other: The owner or operator shall maintain records of the amounts of each fuel combusted during each day and the annual capacity factor individually for distillate oil and natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.[40 CFR 60.49b(d)(1)].	None.
5	All requests, reports, applications, submittals, and other communications to the Administrator pursuant to Part 60 shall be submitted in duplicate to the Regional Office of US Environmental Protection Agency. Submit information to: Director, Division of Enforcement & Compliance Assistance, US EPA, Region 2, 290 Broadway, New York, NY 10007-1866. [40 CFR 60.4(a)]	None.	None.	Submit a report: As per the approved schedule to EPA Region 2 as required by 40 CFR 60. [40 CFR 60.4(a)]
6	Copies of all information submitted to EPA pursuant to 40 CFR Part 60, must also be submitted to the appropriate Regional Enforcement Office of NJDEP. [40 CFR 60.4(b)]	None.	None.	Submit a report: As per the approved schedule to the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60. [40 CFR 60.4(b)]
7	The owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, of the date of construction or reconstruction of an affected facility as defined under 40 CFR Part 60 Subpart A. Notification shall be postmarked no later than 30 days after such date. [40 CFR 60.7(a)(1)]	None.	None.	Submit notification: Upon occurrence of event to EPA Region 2 and the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60.7 [40 CFR 60.7(a)(1)]

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	The owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, of the actual date of initial startup of an affected facility postmarked within 15 days after such date. [40 CFR 60.7(a)(3)]	None.	None.	Submit notification: Upon occurrence of event to EPA Region 2 and the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60.7 [40 CFR 60.7(a)(3)]
9	The owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). The notification shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of facility before and after the change and the expected completion date of the change. Notification shall be postmarked within 60 days or as soon as practicable before any change is commenced. The Administrator may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]	None.	None.	Submit notification: Upon occurrence of event to EPA Region 2 and the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60.7 [40 CFR 60.7(a)(4)]

BOP180001

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

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

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	The owner or operator shall maintain a file, suitable for inspection, of all monitoring measurements as indicated in Recordkeeping Requirement column. [40 CFR 60.7(f)]	None.	Other: The file shall include all measurements (including continuous monitoring system, monitoring device, and performance testing measurements), all continuous monitoring system performance evaluations, all continuous monitoring system or monitoring device calibration checks, all adjustments/maintenance performed on these systems or devices, and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the dates of the record, except as prescribed in 40 CFR 60.7(f)(1) through (3). Sources subject to 40 CFR 70, are required to retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application, per 40 CFR 70.6(a)(3)(ii)(B). [40 CFR 60.7(f)].	None.
13	Within 60 days after achieving the maximum production rate at which the affected facility will operate, but not later than 180 days after initial startup of the facility, the owner or operator shall conduct performance test(s) and shall furnish the Administrator a written report of the results. [40 CFR 60.8(a)]	None.	None.	Submit a report: At a common schedule agreed upon by the operator and the Administrator. The owner or operator shall submit results of the performance test(s) to the Administrator. [40 CFR 60.8(a)]
14	The owner or operator shall conduct performance tests and data reduced in accordance with the test methods and procedures contained in each applicable subpart, unless otherwise specified and approved by the Administrator. [40 CFR 60.8(b)]	None.	None.	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	Performance tests shall be conducted under conditions the Administrator specifies to the plant operator based on representative performance of the affected facility. Operations during periods of startup, shutdown and malfunction shall not constitute representative conditions for the purpose of the performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]	None.	None.	None.
16	The owner or operator shall provide the Administrator at least 30 days prior notice of any performance test and shall provide adequate performance testing facilities as specified in 40 CFR Part 60.8(e). [40 CFR 60.8(d)]	None.	None.	None.
17	Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. [40 CFR 60.8(f)]	None.	None.	None.
18	Compliance with NSPS standards specified in this permit, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in NSPS. [40 CFR 60.11(a)]	None.	None.	None.



BOP180001

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

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

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	The owner or operator shall perform zero and span adjustments at least once each operating day for continuous emission monitors and continuous opacity monitors following procedures outlined in 40 CFR Part 60.13(d)1 & 2. [40 CFR 60.13(d)]	None.	Other: Maintain records in accordance with 40 CFR 60.7(f). [40 CFR 60.13(d)].	None.
23	Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all continuous monitoring systems referenced by 40 CFR 60.13(c) measuring emissions except opacity shall be in continuous operation. They shall complete a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15-minute period. [40 CFR 60.13(e)(2)]	Other: See Applicable Requirement. [40 CFR 60.13(e)(2)].	Other: See Applicable Requirement. [40 CFR 60.13(e)(2)].	None.
24	All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR Part 60 shall be used. [40 CFR 60.13(f)]	None.	None.	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
25	<p>The owner or operator of all continuous monitoring systems (other than opacity) shall reduce all data to 1-hour averages for time periods. One-hour period is defined in 40 CFR 60.2 as any 60-minute period commencing on the hour. For a full operating hour, 1-hour averages shall be computed from at least four valid data points, i.e., one data point in each of the 15-minute quadrants of the hour. For a partial operating hour (any clock hour with less than 60 minutes of unit operation), the owner or operator shall follow all the procedures specified at 40 CFR 60.13(h)(2) to compute 1-hour averages. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. The owners and operators complying with the requirements in 40 CFR 60.7(f)(1) or (2) must include any data recorded during periods of monitor breakdown or malfunction in the data averages. Either arithmetic or integrated averaging of all data may be used to calculate the hourly averages. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O<sub>2</sub> or ng/J of pollutant). [40 CFR 60.13(h)(2)]</p>	None.	Other: See Applicable Requirement. [40 CFR 60.13(h)].	None.
26	<p>All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the applicable subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subpart to specify the emission limit. [40 CFR 60.13(h)(3)]</p>	None.	None.	None.

BOP180001

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

<b>Ref.#</b>	<b>Applicable Requirement</b>	<b>Monitoring Requirement</b>	<b>Recordkeeping Requirement</b>	<b>Submittal/Action Requirement</b>
27	The provisions set forth under an applicable subparts of 40 CFR Part 60 supersede conflicting provisions listed under Modification in 40 CFR Part 60.14. [40 CFR 60.14(f)]	None.	None.	None.
28	Compliance with all applicable standards must be achieved within 180 days of completion of any physical or operational change subject to the control measures specified in 40 CFR Part 60.14(a). [40 CFR 60.14(g)]	None.	None.	None.
29	The owner or operator shall notify the Administrator of the proposed replacement of components, upon triggering reconstruction as defined at 40 CFR 60.15. [40 CFR 60.15]	None.	None.	Submit notification: At a common schedule agreed upon by the operator and the Administrator. The notification shall include information listed under 40 CFR Part 60.15(d). The notification shall be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced. [40 CFR 60.15(d)]
30	Applicable subpart in 40 CFR Part 60 includes specific provisions which refine and delimit reconstruction as defined in 40 CFR Part 60.15. [40 CFR 60.15(g)]	None.	None.	None.
31	Changes in time periods for submittal of information and postmark deadlines set forth in this subpart, may be made only upon approval by the Administrator and shall follow procedures outlined in 40 CFR Part 60.19. [40 CFR 60.19]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Subject Item: GR4 U29 / OS 17-25 / Subject to 40 CFR 60 Subpart III and Subpart A.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Table 8 of 40 CFR 60 Subpart III for applicable General Provisions. [40 CFR 60.4218]	None.	None.	None.
2	For 2007 model year and later emergency CI ICE with a displacement of less than 30 liters per cylinder, that are not fire pump engines, comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency CI ICE. [40 CFR 60.4205(b)]	None.	None.	None.
3	Engines with a maximum engine power >= 37 KW (50 HP) and <= 2237 KW (3000 HP) must meet the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 for all pollutants beginning in model year 2007. [40 CFR 60.4202(a)(2)]	None.	Other: Keep manufacturer-supplied engine specification data.[N.J.A.C. 7:27-22.16(o)].	None.
4	Owners and operators of CI ICE must operate and maintain CI ICE that achieve the emission standards required in 40 CFR 60.4205 over the entire life of the engine. [40 CFR 60.4206]	None.	None.	None.
5	The owner and operator must use diesel fuel that meets the following specifications: (1) 15 ppm maximum sulfur content; (2) Cetane index or aromatic content, as follows: (i) A min cetane index of 40; or (ii) A max aromatic content of 35 vol %. [40 CFR 89.510(b)] and [40 CFR 60.4207(b)]	Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by invoices / bills of lading per delivery showing: (1) Fuel oil sulfur content, and; (2) Minimum Cetane Index or maximum aromatic content. [N.J.A.C. 7:27-22.16(o)]	None.
6	Install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]	None.	None.	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	(1) Operate and maintain the CI ICE and control device according to the manufacturer's emission-related written instructions; (2) Change only those emission-related settings that are permitted by the manufacturer; and (3) Meet the requirements of 40 CFR 89.112. [40 CFR 60.4211(a)]	None.	Other: Keep manufacturer-supplied engine specifications, installation instructions and operating instructions for the life of the engine.[N.J.A.C. 7:27-22.16(o)].	None.
8	Comply with 40 CFR 60.4205(b) by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b), for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. [40 CFR 60.4211(c)]	None.	Other: Keep manufacturer-supplied engine specifications, installation instructions and operating instructions for the life of the engine.[N.J.A.C. 7:27-22.16(o)].	None.
9	If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings recommended by the manufacturer, you must demonstrate compliance as specified at 40 CFR 60.4211(g). [40 CFR 60.4211(g)]	None.	None.	None.
10	There is no time limit on the use of emergency ICE in emergency situations. [40 CFR 60.4211(f)(1)].  Emergency ICE may be operated for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. [40 CFR 60.4211(f)(2)(i)]	Monitored by hour/time monitor upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	None.

BOP180001

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

**Subject Item:** GR13 (40 CFR 63 Subpart JJJJJ and Subpart A requirements apply to: U18 - OS6, OS7, OS8 and OS9)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>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. [40 CFR 63.11205(a)]</p>	<p>Other: Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.[40 CFR 63.11205(a)].</p>	<p>None.</p>	<p>None.</p>
2	<p>Conduct 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) Inspect the burner, and clean or replace any components of the burner. (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 and adjust the burner to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications.</p> <p>(3) Inspect the system controlling the air-to-fuel ratio and ensure 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, and with any nitrogen oxide requirement to which the unit is subject. [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>Other: 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: (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>None.</p>

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	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. [40 CFR 63.11223(b)(7)]	None.	None.	None.
4	Prepare by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified at 40 CFR 63.11225(b)(1) through (b)(2)(ii). [40 CFR 63.11225(b)]	None.	Other: Keep a copy of each annual compliance certification report for a period of 5 years. [40 CFR 63.11225(b)] and [40 CFR 63.11225(d)].	None.
5	Maintain the records specified in 40 CFR 63.11225(c)(1) through (7) as applicable. [40 CFR 63.11225(c)]	None.	Other: Keep the following records: Per 40 CFR 63.10(b)(2)(xiv), keep a copy of each notification and report submitted and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted. [40 CFR 63.11225(c)(1)]. Identify each boiler that requires a tune-up, the date of tune-up, the tune-up procedures, and the manufacturer's tune-up. [40 CFR 63.11225(c)(2)(i)]. For each boiler that requires an energy assessment (EA), keep a copy of the EA report. [40 CFR 63.11225(c)(2)(iii)]. Record the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment. [40 CFR 63.11225(c)(4)]. Record actions taken during periods of malfunction to minimize emissions in accordance with 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. [40 CFR 63.11225(c)(5)].	None.
6	See Table 10 of 40 CFR 63 Subpart DDDDD for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.



BOP180001

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

**Emission Unit:** U2 Two 1.01 MMBTU/hr Boilers at 120 Prospect Street, Firing Natural Gas

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No visible emissions except for a period of not longer than three 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	Nitrogen oxides (NOx) <= 0.86 tons/yr based on 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	CO <= 0.72 tons/yr based on 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Cadmium compounds <= 0.02 lb/yr based on 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

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

**Emission Unit:** U2 Two 1.01 MMBTU/hr Boilers at 120 Prospect Street, Firing Natural Gas

**Operating Scenario:** OS1 E2 - Firing Natural Gas, OS2 E3 - Firing Natural Gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 1.01 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records of fuel burner rated capacity.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 0.61 lb/hr , based on fuel burner rated capacity. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	NOx (Total) <= 0.1 lb/hr based on the AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	CO <= 0.08 lb/hr based on the AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Cadmium compounds <= 0.0000011 lb/hr based on the AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Natural Gas Usage <= 8.67 MMft <sup>3</sup> /yr. (Max annual fuel combustion capacity). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

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

**Emission Unit:** U3 Two 2.1 MMBTU/hr Boilers at 171 Broadmead Street, Firing Natural Gas

**Operating Scenario:** OS Summary

<b>Ref.#</b>	<b>Applicable Requirement</b>	<b>Monitoring Requirement</b>	<b>Recordkeeping Requirement</b>	<b>Submittal/Action Requirement</b>
1	No visible emissions except for a period of not longer than three 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	Nitrogen oxides (NOx) <= 1.8 tons/yr based on 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	CO <= 1.52 tons/yr based on 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Cadmium compounds <= 0.04 lb/yr based on 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

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

**Emission Unit:** U3 Two 2.1 MMBTU/hr Boilers at 171 Broadmead Street, Firing Natural Gas

**Operating Scenario:** OS1 E4 - Firing Natural Gas, OS2 E5 - Firing Natural Gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 2.1 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records of fuel burner rated capacity.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 1.26 lb/hr , based on fuel burner rated capacity. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	NOx (Total) <= 0.21 lb/hr based on the AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	CO <= 0.17 lb/hr based on the AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Cadmium compounds <= 0.0000023 lb/hr based on the AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Natural Gas Usage <= 18.04 MMft <sup>3</sup> /yr. (Max annual fuel combustion capacity). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

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

**Emission Unit:** U4 Two 2.4 MMBtu/hr Nassau Street Boilers, Firing Natural Gas

**Operating Scenario:** OS Summary

<b>Ref.#</b>	<b>Applicable Requirement</b>	<b>Monitoring Requirement</b>	<b>Recordkeeping Requirement</b>	<b>Submittal/Action Requirement</b>
1	No visible emissions except for a period of not longer than three 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	Nitrogen oxides (NOx) <= 2.06 tons/yr based on 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	CO <= 1.74 tons/yr based on 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Cadmium compounds <= 0.046 lb/yr based on 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

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

**Emission Unit:** U4 Two 2.4 MMBtu/hr Nassau Street Boilers, Firing Natural Gas

**Operating Scenario:** OS1 Package Boiler 1, OS2 Package Boiler 2

<b>Ref.#</b>	<b>Applicable Requirement</b>	<b>Monitoring Requirement</b>	<b>Recordkeeping Requirement</b>	<b>Submittal/Action Requirement</b>
1	Maximum Gross Heat Input <= 2.4 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records of fuel burner rated capacity.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 1.44 lb/hr , based on fuel burner rated capacity. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	NOx (Total) <= 0.24 lb/hr based on the AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	CO <= 0.2 lb/hr based on the AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Cadmium compounds <= 0.0000026 lb/hr based on the AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Natural Gas Usage <= 20.61 MMft <sup>3</sup> /yr. (Max annual fuel combustion capacity). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

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

**Emission Unit:** U5 Four 1.43 MMBTU/hr Boilers at Lawrence Apartments, Firing Natural Gas

**Operating Scenario:** OS Summary

<b>Ref.#</b>	<b>Applicable Requirement</b>	<b>Monitoring Requirement</b>	<b>Recordkeeping Requirement</b>	<b>Submittal/Action Requirement</b>
1	No visible emissions except for a period of not longer than three 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	Nitrogen oxides (NOx) <= 2.44 tons/yr based on 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	CO <= 2.08 tons/yr based on 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Cadmium compounds <= 0.056 lb/yr based on 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

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

**Emission Unit:** U5 Four 1.43 MMBTU/hr Boilers at Lawrence Apartments, Firing Natural Gas

**Operating Scenario:** OS1 Lawrence Apartments Boiler #1 Firing Natural Gas, OS2 Lawrence Apartments Boiler #2 Firing Natural Gas, OS3 Lawrence Apartments Boiler #3 Firing Natural Gas, OS4 Lawrence Apartments Boiler #4 Firing Natural Gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 1.43 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records of fuel burner rated capacity.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 0.86 lb/hr , based on fuel burner rated capacity. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	NOx (Total) <= 0.14 lb/hr based on the AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	CO <= 0.12 lb/hr based on the AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Cadmium compounds <= 0.0000015 lb/hr based on the AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Natural Gas Usage <= 12.28 MMft <sup>3</sup> /yr. (Max annual fuel combustion capacity). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.



BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U16 4,000 gallons Underground Unleaded Gasoline Storage Tank at MacMillan Building

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The following Federal Rules apply to U16: 40 CFR 63 Subpart A, and 40 CFR 63 Subpart CCCCCC. [None]	None.	None.	None.
2	Tank contents limited to unleaded gasoline. [N.J.A.C. 7:27-22.16(a)]	Other: Monitor each product delivery.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by invoices / bills of lading / certificate of analysis per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
3	Maximum throughput at this gasoline dispensing facility <= 150,000 gallons per any 12 consecutive months. [N.J.A.C. 7:27-22.16(a)]	Other: Monitor the date of each delivery and the quantity received.[N.J.A.C. 7:27-22.16(o)].	Other: Keep records of invoices and or bills of lading showing gallons of gasoline delivered.  Compute and record the actual throughput for each consecutive month. [N.J.A.C. 7:27-16.3(t)1].	None.
4	VOC (Total) <= 0.66 tons/yr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations annually  Calculations shall be made using EPA's AP-42 Tanks 4.0 or subsequent versions. [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  Keep copies of AP-42 Tanks program runs. [N.J.A.C. 7:27-22.16(o)]	None.
5	Gasoline transfers into the tank shall be made through a submerged fill pipe permanently affixed to the tank. [N.J.A.C. 7:27-16.3(c)1i]	None.	None.	None.
6	The tank shall be equipped with and operating a Stage I vapor recovery system (VRS) that reduces the VOC emissions by >= 98 vol. % during gasoline transfer. [N.J.A.C. 7:27-16.3(d)1]	Other: When requested by the Department, the permittee shall demonstrate the efficiency of the VRS in accordance with test procedures or documentation approved by the Department.[N.J.A.C. 7:27-16.3(j)10].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-16.o]	Conduct a performance test: Other (when requested by the Department). [N.J.A.C. 7:27-16.3(j)10]
7	The tank shall be equipped with and operating a CARB-certified Stage I enhanced vapor recovery system (EVRS) pressure/vacuum relief vent valve on each atmospheric vent. [N.J.A.C. 7:27-16.3(d)3]	None.	None.	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	The tank shall be equipped with and operating a CARB-certified Stage I EVRS, including a dual point vapor balance system on or before December 23, 2024. [N.J.A.C. 7:27-16.3(d)4]	None.	None.	None.
9	A Stage I VRS that is using a single-point vapor balance system installed before December 23, 2017, is not required to replace the single-point vapor balance system with a dual-point vapor balance system. [N.J.A.C. 7:27-16.3(d)4i]	None.	None.	None.
10	An existing Stage II VRS that is not onboard-refueling-vapor-recovery-compatible, (ORVR-compatible), must be decommissioned in accordance with N.J.A.C.7:27-16.3(h) on or before December 23, 2020. [N.J.A.C. 7:27-16.3(e)1]	None.	None.	None.
11	An existing Stage II VRS that is ORVR-compatible shall either be decommissioned in accordance with N.J.A.C.7:27-16.3(h), or maintained in accordance with the applicable requirements at N.J.A.C.7:27-16.3. [N.J.A.C. 7:27-16.3(e)2]	None.	None.	None.
12	The owner or operator of an existing Stage II VRS shall ensure that the VRS is approved by the Department, and the VRS reduces VOC emissions by >= 95 volume %. [N.J.A.C. 7:27-16.3(f)1]	Other: When requested by the Department, the permittee shall demonstrate the efficiency of the VRS, in accordance with test procedures or documentation approved by the Department.[N.J.A.C. 7:27-16.3(j)10].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Conduct a performance test: Other (when requested by the Department). [N.J.A.C. 7:27-16.3(j)10]
13	The owner or operator of an existing Stage II VRS shall ensure that the VRS is in compliance with one of N.J.A.C.7:27-16.3(f)2i, (f)2ii or (f)2iii. [N.J.A.C. 7:27-16.3(f)2]	None.	None.	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	The owner or operator of an existing Stage II VRS shall ensure that each dispensing device is in compliance with each of N.J.A.C.7:27-16.3(f)3i, (f)3ii and (f)3iii. [N.J.A.C. 7:27-16.3(f)3]	None.	None.	None.
15	The owner or operator of a gasoline dispensing facility shall ensure that the operation complies with each of the applicable requirements at N.J.A.C.7:27-16.3(g)1 through (g)4. [N.J.A.C. 7:27-16.3(g)]	None.	None.	None.
16	Conduct all the applicable tests, using the specified test methods and testing schedule specified in Table 3A of N.J.A.C.7:27-16.3(j). [N.J.A.C.7:27-16.3(j)]  A VRS or equipment shall have passed a test if it meets the applicable performance standards and specifications that are set forth in CARB's Vapor Recovery Certification Procedures and/or Test Procedures, including all subsequent revisions thereto, which are available at CARB's website <a href="https://www.arb.ca.gov/vapor/vapor.htm">https://www.arb.ca.gov/vapor/vapor.htm</a> [N.J.A.C. 7:27-16.3(j)5]	Other: Conduct all the applicable tests specified in Table 3A of N.J.A.C.7:27-16.3(j). [N.J.A.C. 7:27-16.3(j)1].	Other: On the day of the test, any corrective action, repairs, or equipment replacement made to the VRS shall be recorded with the test results on the documentation of the test results. [N.J.A.C.7:27-16.3(j)4]  Maintain records of the performance tests, and the results obtained, in accordance with N.J.A.C.7:27-16.3(t)2. [N.J.A.C. 7:27-16.3(j)8].	Conduct a performance test: As per the approved schedule. At least 14 days prior to performing any tests, notify the Department by e-mail. [N.J.A.C.7:27-16.3(j)3]  If the VRS or the equipment fails any test, the permittee shall proceed as specified at N.J.A.C.7:27-16.3(j)6. [N.J.A.C.7:27-16.3(j)6]  If the VRS or the equipment fails any retest, the permittee shall proceed as specified at N.J.A.C.7:27-16.3(j)7. [N.J.A.C. 7:27-16.3(j)7]
17	No person shall permit a delivery vessel with capacity $\geq$ 2,000 gallons to contain gasoline unless the vessel sustains a pressure change of < 3 inches of water in 5 minutes, when pressurized to 18 inches of water and evacuated to 6 inches of water. [N.J.A.C. 7:27-16.3(k)1]	Other: Monitored by visual inspection prior to each gasoline transfer. [N.J.A.C.7:27-22.16(o)]  Pressure / vacuum verification tests shall be performed at least once every 12 months, using the procedures specified by the Department. [N.J.A.C.7:27-16.3(k)2]  A certification must be affixed to the delivery vessel in a prominent location, indicating the vessel identification number and the date the vessel last passed the pressure / vacuum tests. [N.J.A.C. 7:27-16.3(k)3].	Other: A record of certification must be kept with the delivery vessel at all times. The record of certification shall include the name and address of the delivery vessel owner, the delivery vessel identification number, and for each test performed, the test method used, the testing location, date of test, tester's name and signature, and test results. [N.J.A.C. 7:27-16.3(k)4].	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	No person shall permit a transfer of gasoline from a delivery vessel if the delivery vessel is under a pressure in excess of 18 inches of water gauge, or the delivery vessel being unloaded is under a vacuum in excess of six inches of water gauge. [N.J.A.C. 7:27-16.3(l)]	Other: Monitor the delivery vessel pressure / vacuum gauges prior to each gasoline transfer.[N.J.A.C. 7:27-22.16(o)].	Other: Maintain appropriate records that reflect problems encountered.[N.J.A.C. 7:27-22.16(o)].	None.
19	No person shall permit a delivery vessel with capacity >= 2,000 gallons to contain gasoline unless the vessel is vapor-tight at all times while containing any VOC, except during emergency conditions, gauging or venting through a vapor control system approved by the Department. [N.J.A.C. 7:27-16.3(m)]	Other: Monitored by visual inspection prior to each gasoline transfer.[N.J.A.C. 7:27-22.16(o)].	Other: Maintain appropriate records that reflect problems encountered.[N.J.A.C. 7:27-22.16(o)].	None.
20	Do not transfer gasoline from a delivery vessel if any of the gasoline spill conditions specified at N.J.A.C.7:27-16.3(p)1 through (p)3 are present. [N.J.A.C. 7:27-16.3(p)]	Other: Monitored by visual inspection prior to each gasoline transfer.[N.J.A.C. 7:27-22.16(o)].	Other: Maintain appropriate records that reflect problems encountered.[N.J.A.C. 7:27-22.16(o)].	None.
21	Do not transfer gasoline from a delivery vessel unless the vapor control system is in compliance with all the specifications at N.J.A.C.7:27-16.3(r)1 through (r)5. [N.J.A.C. 7:27-16.3(r)]	None.	Keep all maintenance and design records associated with the vapor control system. Recordkeeping by other recordkeeping method (provide description) upon installation of the control device, prior to filling. [N.J.A.C. 7:27-22.16(o)]	None.
22	At all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.11115(a)]  Do not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, those specified at 40 CFR 63.11116(a)(1) through (a)(4). [40 CFR 63.11116(a)]	Other: 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, review of operation and maintenance records, and inspection of the source.[40 CFR 63.11115(a)].	Other: Keep the following records:  Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.  Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.11125(d)].	Submit a report: As per the approved schedule.  By March 15 of each year, report the number, duration, and a brief description of each malfunction that occurred during the previous calendar year and which caused or may have caused an emission limit to be exceeded. Include a description of actions taken to minimize emissions in accordance with 40 CFR 63.11115(a), and to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred. [40 CFR 63.11126(b)]

BOP180001

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

<b>Ref.#</b>	<b>Applicable Requirement</b>	<b>Monitoring Requirement</b>	<b>Recordkeeping Requirement</b>	<b>Submittal/Action Requirement</b>
23	Total throughput <= 150,000 gallons/month. [N.J.A.C. 7:27-22.16(a)]	Other: Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at the GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.[40 CFR 63.11132].	Other: Records shall be kept for a period of 5 years. [40 CFR 63.11111(e)].  You must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.[40 CFR 63.11117(d)].	None.
24	You must only load gasoline into storage tanks at your facility by utilizing submerged filling. [40 CFR 63.11117(b)].  Submerged fill pipes installed on or before November 9, 2006, must be <= 12 inches from the bottom of the tank. [40 CFR 63.11117(b)(1)]	None.	Other: Keep tank design / installation data.[N.J.A.C. 7:27-22.16(o)].	None.
25	See Table 3 of 40 CFR 63 Subpart CCCCCC for applicable General Provisions. [40 CFR 63.11130]	None.	None.	None.

BOP180001

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

**Emission Unit:** U17 Paint Spray Booth at MacMillan Building for Furniture Touch Up

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity: Opacity: Particulate emissions no greater than 20 % opacity, exclusive of visible condensed water vapor, for more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] & [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
2	The total surface coating formulation containing VOC shall not be applied at rates in excess of one half gallon per hour and two and one half gallons per day. [N.J.A.C.7:27-22.16(a)]  NOTE: If the total surface coating formulation containing VOC is applied at rates <= one half gallon per hour and two and one half gallons per day, the provisions at N.J.A.C.7:27-16.7(c), (d) and (j) do not apply. [N.J.A.C. 7:27-16.7(e)1]	None.	None.	None.
3	VOC Content per Volume of Coating (Minus Water) <= 5.99 lb/gal. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by surface coating formulation data sheets and once initial calculations.[N.J.A.C. 7:27-22.16(o)].	Other: Keep initial calculations and coating formulation data sheets for each purchase.[N.J.A.C. 7:27-22.16(o)].	None.
4	Hours of Operation <= 6,500 hr/yr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by hour/time monitor once per shift during operation.[N.J.A.C. 7:27-22.16(o)].	Other: Record the number of hours the surface coating was applied and the date.[N.J.A.C. 7:27-22.16(o)].	None.
5	Coating Usage <= 0.231 gal/hr based upon spray equipment capacity specification datasheets. [N.J.A.C. 7:27-22.16(a)]	Other: The maximum spray equipment application rate specified in the manufacturer's technical data shall not exceed 0.231 gal/hr.[N.J.A.C. 7:27-22.16(o)].	Other: Keep manufacturer's spray equipment technical specification data sheets.[N.J.A.C. 7:27-22.16(o)].	None.
6	Coating Usage <= 1,500 gal/yr. [N.J.A.C. 7:27-22.16(a)]	Other: Coating Usage: Monitored by calculation each month during operation.[N.J.A.C. 7:27-22.16(o)].	Other: Coating Usage: For each application, record the volume of surface coating formulation applied and the date.[N.J.A.C. 7:27-22.16(o)].	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	VOC (Total) <= 1.4 lb/hr. [N.J.A.C. 7:27-22.16(a)]	Other: VOC (Total): Monitored by calculations once initially, based upon the maximum VOC content of the coating (5.99 lb/gal), and the maximum coating application rate (0.231 gal/hr).[N.J.A.C. 7:27-22.16(o)].	Other: VOC (Total): Keep records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
8	VOC (Total) <= 4.5 tons/yr. [N.J.A.C. 7:27-22.16(a)]	Other: VOC (Total): Monitored by calculations once initially, based upon the maximum VOC content of the coating (5.99 lb/gal), the maximum coating application rate (0.231 gal/hr), and the maximum annual operating hours (6,500 hours).[N.J.A.C. 7:27-22.16(o)].	Other: VOC (Total): Keep records of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.
9	Coating HAP content < reporting threshold. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by review of coating formulation data sheets.[N.J.A.C. 7:27-22.16(o)].	Other: Keep coating formulation data sheets for each purchase.[N.J.A.C. 7:27-22.16(o)].	None.
10	Maintain the operating efficiency of the particulate filter CD1 by following the maintenance, inspection and filter replacement schedule recommended by the manufacturer. [N.J.A.C. 7:27-22.16(a)]	Other: Filter performance is to be monitored as recommended by the manufacturer.[N.J.A.C. 7:27-22.16(o)].	Other: Record the date for each instance of filter maintenance, inspection and cartridge replacement.[N.J.A.C. 7:27-22.16(o)].	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U18 Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiesel and two Auxiliary Boilers firing Natural Gas, No. 2 Fuel Oil or Biodiesel

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The following Federal Rules apply to U18: 40 CFR 60 Subpart A, 40 CFR 60 Subpart Db, 40 CFR 60 Subpart GG, 40 CFR 63 Subpart A, and 40 CFR 63 Subpart JJJJJ. [None]	None.	None.	None.
2	<p>Conduct a stack test at least 18 months prior to the expiration of the renewed operating permit using an approved protocol to demonstrate compliance with emission limits for VOC, NOx, CO, TSP and PM-10, as specified in the compliance plan for OS1, OS2, OS3 and OS5. The permittee shall provide EMS with the turbine load performance curve with the protocol.</p> <p>Testing must be conducted at worst-case permitted operating conditions to meet 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). [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 at least 30 months prior to the expiration of the approved operating permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="http://www.epa.gov/ttnchie1/ert">http://www.epa.gov/ttnchie1/ert</a>. 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>



BOP180001

New Jersey Department of Environmental Protection  
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<p>Conduct a stack test at least 18 months prior to the expiration of the renewed operating permit using an approved protocol to demonstrate compliance with emission limits for VOC, NOx, CO, TSP and PM-10, as specified in the compliance plan for OS6,OS7, OS8 and OS9.</p> <p>Testing must be conducted at worst-case permitted operating conditions to meet 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). [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 at least 30 months prior to the expiration of the approved operating permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="http://www.epa.gov/ttnchie1/ert">http://www.epa.gov/ttnchie1/ert</a>. 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>
4	<p>Sulfur content in No.2 FO or Biodiesel &lt;= 15 ppmw (0.0015% by weight). [N.J.A.C. 7:27- 9.2(b)]</p>	<p>Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]</p>	<p>None.</p>
5	<p>Natural Gas Usage &lt;= 1,245.2 MMft<sup>3</sup> in the Gas Turbine (E21) during any 365 consecutive day period. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C. 7:27-22.16(o)]</p>	<p>Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage daily.</p> <p>The cubic feet per any consecutive 365-day period shall be calculated by adding the cubic feet consumed during any one day to the sum of the cubic feet consumed during the preceding 364 days. [N.J.A.C. 7:27-22.16(o)]</p>	<p>None.</p>

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	No. 2 Fuel Oil or Biodiesel Usage <= 1.484 MMgal in the Gas Turbine (E21) during any 365 consecutive day period. [N.J.A.C. 7:27-22.16(a)]	Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage daily. The gallons per any consecutive 365-day period shall be calculated by adding the gallons consumed during any one day to the sum of the gallons consumed during the preceding 364 days. [N.J.A.C. 7:27-22.16(o)]	None.
7	Natural Gas Usage <= 423 MMft <sup>3</sup> in the Duct Burner (E22) during any 365 consecutive day period. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage daily. The cubic feet per any consecutive 365-day period shall be calculated by adding the cubic feet consumed during any one day to the sum of the cubic feet consumed during the preceding 364 days. [N.J.A.C. 7:27-22.16(o)]	None.
8	Natural Gas Usage <= 630 MMft <sup>3</sup> in Aux Boiler 1 (E23) and Aux Boiler 2 (E24) combined, during any 365 consecutive day period. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage daily. The cubic feet per any consecutive 365-day period shall be calculated by adding the cubic feet consumed during any one day to the sum of the cubic feet consumed during the preceding 364 days. [N.J.A.C. 7:27-22.16(o)]	None.
9	No.2 Fuel Oil or Biodiesel usage <= 1.065 MMgal in Aux Boiler 1 (E23) and Aux Boiler 2 (E24) combined, during any 365 consecutive day period. [N.J.A.C. 7:27-22.16(a)]	Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage daily. The gallons per any consecutive 365-day period shall be calculated by adding the gallons consumed during any one day to the sum of the gallons consumed during the preceding 364 days. [N.J.A.C. 7:27-22.16(o)]	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	<p>Tune-up of Aux Boiler 1 (E23) and Aux Boiler 2 (E24), and Duct Burner (E22):</p> <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)] 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: <math>Lb/MMBTU = ppmvd * MW * F \text{ dry factor} * O2 \text{ correction factor} / 387,000,000</math>, 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: <math>(20.9\%)/(20.9\% - O2 \text{ measured})</math>, 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: <a href="http://www.njdeponline.com">www.njdeponline.com</a>. Instructions for submitting this report online are specified at: <a href="http://www.nj.gov/dep/aqpp/adjustment.htm">http://www.nj.gov/dep/aqpp/adjustment.htm</a>. [N.J.A.C. 7:27-19.16(d)] and [N.J.A.C. 7:27-19.16(c)]</p>

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	<p>Tune-up of Gas Turbine E21:</p> <p>Permittee shall adjust the combustion process in the gas turbine E21 according to the manufacturer's recommended procedures and maintenance schedule. [N.J.A.C. 7:27-19.16(g)]</p>	<p>Other: Monitored by manufacturer's recommended procedures. [N.J.A.C. 7:27-19.16(g)].</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event.</p> <p>For each adjustment, record and maintain the following data for at least 5 years:</p> <ol style="list-style-type: none"> <li>1. The date of the adjustment and the times at which it began and ended;</li> <li>2. The name, title and affiliation of the person who performed the procedure and adjustment;</li> <li>3. The type of procedure and maintenance performed;</li> <li>4. The concentration of NOx, CO and O2, measured before and after the adjustment was made; and</li> <li>5. The type and amount of fuel used prior to the adjustment. [N.J.A.C.7:27-19.16(h)].</li> </ol> <p>[N.J.A.C. 7:27-19.16(h)]</p>	<p>None.</p>
12	<p>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)]</p>	<p>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)].</p>	<p>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)].</p>	<p>None.</p>
13	<p>An exceedance of an emission limit that occurs during an adjustment of the combustion process under N.J.A.C. 7:27-19.16(a) or (g) is not a violation of subchapter 19 if it occurs as a result of the adjustment. After the combustion adjustment has been completed, the maximum emission rate of any contaminant shall not exceed the maximum allowable emission rate applicable under this subchapter or under this operating permit issued pursuant to N.J.A.C. 7:27-22. [N.J.A.C. 7:27-19.16(f)]</p>	<p>None.</p>	<p>None.</p>	<p>None.</p>

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	Gas Turbine E21 Water-to-Fuel Ratio $\geq$ 0.77 at all times except during start-ups, shut-downs and fuel transfer periods. [N.J.A.C. 7:27-22.16(a)]	Monitored by water-to-fuel monitoring device continuously.  Install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine. [40 CFR 60.334(a)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.
15	The flue gas recirculation (FGR) in Aux Boiler 1 (E23) and Aux Boiler 2 (E24):  The FGR systems shall be operated at all times except during start-up, shut-down and fuel switching periods. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by the plant automation system.[N.J.A.C. 7:27-22.16(o)].	Other: Recorded by the plant automation system.[N.J.A.C. 7:27-22.16(o)].	None.
16	Acrolein $\leq$ 0.001 tons/yr (2.03 lb/yr), based on AP-42 emission factor and maximum fuel combustion. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
17	Arsenic Emissions $\leq$ 0.0015 tons/yr (3.09 lb/yr), based on AP-42 emission factor and maximum fuel combustion. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
18	Beryllium Emissions $\leq$ 0.0003 tons/yr (0.51 lb/yr), based on AP-42 emission factor and maximum fuel combustion. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
19	Cadmium Emissions $\leq$ 0.0013 tons/yr (2.6 lb/yr), based on AP-42 emission factor and maximum fuel combustion. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
20	Cobalt Emissions $\leq$ 0.00004 tons/yr (0.09 lb/yr), based on AP-42 emission factor and maximum fuel combustion. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
21	Dimethylbenz(a)anthracene (7,12-) $\leq$ 0.00001 tons/yr (0.02 lb/yr), based on AP-42 emission factor and maximum fuel combustion. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	Formaldehyde <= 0.15 tons/yr (306.11 lb/yr), based on AP-42 emission factor and maximum fuel combustion. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
23	Lead Emissions <= 0.0015 tons/yr (2.91 lb/yr), based on AP-42 emission factor and maximum fuel combustion. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
24	Manganese Emissions <= 0.083 tons/yr (165.03 lb/yr), based on AP-42 emission factor and maximum fuel combustion. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
25	Naphthalene <= 0.0009 tons/yr (1.82 lb/yr), based on AP-42 emission factor and maximum fuel combustion. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
26	Nickel Emissions <= 0.0016 tons/yr (3.17 lb/yr), based on AP-42 emission factor and maximum fuel combustion. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
27	Polynuclear aromatic hydrocarbons (PAHs) <= 0.0028 tons/yr (5.59 lb/yr), based on AP-42 emission factor and maximum fuel combustion. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
28	TSP <= 20.1 tons/yr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
29	PM-10 (Total) <= 21.6 tons/yr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
30	PM-2.5 (Total) <= 21.6 tons/yr. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
31	VOC (Total) <= 39.8 tons/yr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
32	NOx (Total) <= 118 tons/yr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
33	CO <= 127 tons/yr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(o)]	CO: 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.
34	SO2 <= 41.3 tons/yr. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
35	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 <a href="http://www.state.nj.us/dep/aqpp">http://www.state.nj.us/dep/aqpp</a> . [N.J.A.C. 7:27-22.16(a)]	Other: The QA/QC coordinator shall be responsible for reviewing the QA/QC plan on an annual basis. [N.J.A.C. 7:27-22.16(o)].	Other: Maintain readily accessible records of the QA/QC plan including QA data and quarterly reports. [N.J.A.C. 7:27-22.16(o)].	None.
36	Maintain records of all start-ups, shut-downs and fuel transfer periods, including the duration of the events. [N.J.A.C. 7:27-22.16(e)]	None.	Recordkeeping by manual logging of parameter upon occurrence of event (permanently bound) or in readily available computer files. [N.J.A.C. 7:27-22.16(e)]	None.
37	Start-Up & Shut-Down of Aux Boiler 1 (E23) and Aux Boiler 2 (E24):  The duration of the exemption from emission limits during start-up or shut-down shall not exceed 120 minutes. Start-up is defined as the period of time from initiation of fuel firing until the boiler reaches steady state operation. Shut-down is defined as the period of time from initial lowering of output below steady state operation to cessation of boiler operation. [N.J.A.C. 7:27-22.16(a)]	Monitored by continuous emission monitor continuously. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
38	<p>Start-Up &amp; Shut-Down of Gas Turbine (E21):</p> <p>The duration of the exemption from emission limits during start-up or shut-down shall not exceed 60 minutes. Start-up is defined as the period of time from initiation of fuel firing until the turbine reaches steady state operation. Shut-down is defined as the period of time from initial lowering of output below steady state operation to cessation of turbine operation. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Monitored by continuous emission monitor continuously. [N.J.A.C. 7:27-22.16(e)]</p>	<p>Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]</p>	<p>None.</p>
39	<p>Fuel Switching in Aux Boiler 1 (E23), Aux Boiler 2 (E24) and Gas Turbine (E21):</p> <p>The duration of the exemption from emission limits during the transfers shall not exceed 30 minutes. The fuel transfer period is defined as the period of time from initiation of the transfer process between natural gas and No. 2 fuel oil, or vice versa, until the completion of that process [N.J.A.C. 7:27-22.16(a)]</p>	<p>Monitored by continuous emission monitor continuously. [N.J.A.C. 7:27-22.16(e)]</p>	<p>Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]</p>	<p>None.</p>



BOP180001

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

**Emission Unit:** U18 Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiesel and two Auxiliary Boilers firing Natural Gas, No. 2 Fuel Oil or Biodiesel

**Operating Scenario:** OS1 174 MM BTU/hr Turbine, Firing Natural Gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Subject Item GR1 for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	No person shall cause, suffer, allow or permit smoke the shade or appearance of which is darker than number 1 on the Ringelmann smoke chart or greater than 20 percent opacity, exclusive of visible condensed water vapor, to be emitted into the outdoor air from the combustion of fuel in any stationary turbine engine for a period of more than 10 seconds. [N.J.A.C. 7:27-3.5]	None.	None.	None.
3	Particulate Emissions <= 19.1 lb/hr based on the rated heat input of the source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	Maximum Gross Heat Input <= 174.2 MMBTU/hr (HHV) for the Gas Turbine (E21) firing natural gas. [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously, based on a 1 hour block average.  The system continuously monitors fuel flow and calculates hourly heat input using the heating value of natural gas. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage each hour during operation. [N.J.A.C. 7:27-22.16(o)]	None.
5	Formaldehyde <= 0.025 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Acrolein <= 0.00028 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	VOC (Total) <= 5.3 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	VOC (Total) <= 0.02 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
9	VOC (Total) <= 33.6 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
10	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(c)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-16.23(a)2]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
11	NOx (Total) <= 15.7 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	NOx (Total) <= 0.09 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	NOx (Total) <= 25 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
14	CO <= 20 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
15	CO <= 0.12 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

U18 Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiese.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	CO <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
17	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. [N.J.A.C. 7:27-16.23(a)1]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage once per calendar day during operation. [N.J.A.C. 7:27-22.16(o)]	None.
18	SO2 <= 1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	Other: Compliance demonstrated by combusting pipeline quality natural gas.[N.J.A.C. 7:27-22.16(o)].	SO2: Recordkeeping by certified lab analysis results quarterly: once per quarter; quarters shall begin on January 1, April 1, July 1, and October 1 of each year. [N.J.A.C. 7:27-22.16(o)]	None.
19	SO2 <= 0.006 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	Other: Compliance demonstrated by combusting pipeline quality natural gas.[N.J.A.C. 7:27-22.16(a)].	SO2: Recordkeeping by certified lab analysis results quarterly: once per quarter; quarters shall begin on January 1, April 1, July 1, and October 1 of each year. [N.J.A.C. 7:27-22.16(o)]	None.
20	TSP <= 2.4 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
21	TSP <= 0.014 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
22	PM-10 (Total) <= 2.4 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
23	PM-10 (Total) <= 0.014 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

U18 Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiesse.

OS1

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
24	PM-2.5 (Total) <= 2.4 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
25	PM-2.5 (Total) <= 0.014 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

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

**Emission Unit:** U18 Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiesel and two Auxiliary Boilers firing Natural Gas, No. 2 Fuel Oil or Biodiesel

**Operating Scenario:** OS2 174 MM BTU/hr Turbine, Firing Natural Gas and 151 MM Btu/hr Duct Burner firing Natural gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Subject Item GR1 for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	No person shall cause, suffer, allow or permit smoke the shade or appearance of which is darker than number 1 on the Ringelmann smoke chart or greater than 20 percent opacity, exclusive of visible condensed water vapor, to be emitted into the outdoor air from the combustion of fuel in any stationary turbine engine for a period of more than 10 seconds. [N.J.A.C. 7:27-3.5]	None.	None.	None.
3	Particulate Emissions <= 32.5 lb/hr based on the rated heat input of the sources. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	Maximum Gross Heat Input <= 325.03 MMBTU/hr (HHV).  174.2 MMBtu/hr (HHV) for the Gas Turbine firing natural gas and the 150.83 MMBtu/hr (HHV) for the Duct Burner firing natural gas. [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously, based on a 1 hour block average.  The system continuously monitors fuel flow and calculates hourly heat input using the heating value of natural gas. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage each hour during operation. [N.J.A.C. 7:27-22.16(o)]	None.
5	Formaldehyde <= 0.038 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Acrolein <= 0.00028 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Arsenic Emissions <= 0.000034 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	Cadmium Emissions <= 0.00019 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	Nickel Emissions <= 0.00036 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Dimethylbenz(a)anthracene (7,12-) <= 0.0000027 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	Cobalt Emissions <= 0.000014 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	VOC (Total) <= 14.4 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	VOC (Total) <= 0.044 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
14	VOC (Total) <= 36.2 ppm @ 15% O <sub>2</sub> . [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
15	VOC (Total) <= 50 ppmvd @ 15% O <sub>2</sub> . [N.J.A.C. 7:27-16.9(c)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-16.23(a)2]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
16	NO <sub>x</sub> (Total) <= 27.9 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	NOx (Total) <= 0.086 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
18	NOx (Total) <= 24 ppm @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage each hour during operation. [N.J.A.C. 7:27-22.16(o)]	None.
19	CO <= 35.1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
20	CO <= 0.11 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
21	CO <= 48 ppm @ 15% O2. [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(a)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage each hour during operation. [N.J.A.C. 7:27-22.16(o)]	None.
22	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. [N.J.A.C. 7:27-16.23(a)1]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage once per calendar day during operation. [N.J.A.C. 7:27-22.16(o)]	None.
23	SO2 <= 1.05 lb/hr. [N.J.A.C. 7:27-22.16(a)]	Other: Compliance demonstrated by combusting pipeline quality natural gas. [N.J.A.C. 7:27-22.16(o)].	SO2: Recordkeeping by certified lab analysis results quarterly: once per quarter; quarters shall begin on January 1, April 1, July 1, and October 1 of each year. [N.J.A.C. 7:27-22.16(o)]	None.
24	SO2 <= 0.0034 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	Other: Compliance demonstrated by combusting pipeline quality natural gas. [N.J.A.C. 7:27-22.16(o)].	SO2: Recordkeeping by certified lab analysis results quarterly: once per quarter; quarters shall begin on January 1, April 1, July 1, and October 1 of each year. [N.J.A.C. 7:27-22.16(o)]	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
25	TSP <= 3.9 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
26	TSP <= 0.012 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
27	PM-10 (Total) <= 3.9 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
28	PM-10 (Total) <= 0.012 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
29	PM-2.5 (Total) <= 3.9 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
30	PM-2.5 (Total) <= 0.012 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.



BOP180001

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

**Emission Unit:** U18 Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiesel and two Auxiliary Boilers firing Natural Gas, No. 2 Fuel Oil or Biodiesel

**Operating Scenario:** OS3 164 MM BTU/hr Turbine, Firing No. 2 Fuel Oil or Biodiesel

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Subject Item GR1 for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	No person shall cause, suffer, allow or permit smoke the shade or appearance of which is darker than number 1 on the Ringelmann smoke chart or greater than 20 percent opacity, exclusive of visible condensed water vapor, to be emitted into the outdoor air from the combustion of fuel in any stationary turbine engine for a period of more than 10 seconds. Opacity <= 20 %. [N.J.A.C. 7:27- 3.5]	Opacity: Monitored by visual determination daily, based on an instantaneous determination. The permittee shall conduct the visual inspection during daylight hours. Visual inspections shall consist of a visual survey to identify if the stack has visible emissions (other than condensed water vapor) greater than the prescribed standard. If visible emissions are observed and the corrective action taken does not correct the opacity problem within 24 hours, the permittee shall perform a check via a certified opacity reader, in accordance with N.J.A.C. 7:27B-2. Such test shall be conducted each operating day until corrective action is taken to successfully correct the opacity problem. [N.J.A.C. 7:27-22.16(o)]	Opacity: Recordkeeping by manual logging of parameter or storing data in a computer data system daily. The permittee shall maintain the following records: (1) Date and time of inspection; (2) Emission point number; (3) Operational status of equipment; (4) Observed results and conclusions; (5) Description of corrective actions taken if necessary; (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)]	Conduct an inspection: Upon occurrence of event. If visible emissions are observed, the permittee shall verify that the equipment and/ or control device causing the emission is operating according to manufacturer's specifications and the compliance plan. If the equipment or control device is not operating properly, the permittee shall take corrective action immediately to eliminate the excess emissions. The permittee shall report any permit violation to the Department pursuant to N.J.A.C. 7:27-22.19(g). [N.J.A.C. 7:27-22.16(o)]
3	Particulate Emissions <= 18.7 lb/hr based on the rated heat input of the source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	Maximum Gross Heat Input <= 164.27 MMBTU/hr (HHV) for Gas Turbine (E21) firing No.2 Fuel Oil or Biodiesel. [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously, based on a 1 hour block average.  The system continuously monitors fuel flow and calculates hourly heat input using the heating value of No.2 Fuel Oil or Biodiesel. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage each hour during operation. [N.J.A.C. 7:27-22.16(o)]	None.
5	Formaldehyde <= 0.0092 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Naphthalene <= 0.0014 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Arsenic Emissions <= 0.0018 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	Beryllium Emissions <= 0.000051 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	Cadmium Emissions <= 0.00079 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Lead Emissions <= 0.0023 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	Manganese Emissions <= 0.13 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	Nickel Emissions <= 0.00075 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	Polynuclear aromatic hydrocarbons (PAHs) <= 0.0016 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	VOC (Total) <= 18.8 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
15	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(c)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-16.23(a)2]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
16	NOx (Total) <= 31.1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

U18 Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiesle.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	NO <sub>x</sub> (Total) <= 0.19 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
18	NO <sub>x</sub> (Total) <= 50 ppmvd @ 15% O <sub>2</sub> . [N.J.A.C. 7:27-22.16(a)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
19	CO <= 250 ppmvd @ 15% O <sub>2</sub> . [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. [N.J.A.C. 7:27-16.23(a)1]	CO: Recordkeeping by strip chart or data acquisition (DAS) system once per calendar day during operation. [N.J.A.C. 7:27-22.16(e)]	None.
20	CO <= 21 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
21	CO <= 0.13 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
22	CO <= 50 ppmvd @ 15% O <sub>2</sub> , when ambient temp >= 25 F.  CO <= 100 ppmvd @ 15% O <sub>2</sub> , when ambient temp < 25 F. [N.J.A.C. 7:27-22.16(a)]	Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
23	TSP <= 5.9 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
24	TSP <= 0.036 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

U18 Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiese.

OS3

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
25	PM-10 (Total) <= 5.9 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
26	PM-10 (Total) <= 0.036 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
27	PM-2.5 (Total) <= 5.9 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
28	PM-2.5 (Total) <= 0.036 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
29	SO2 <= 32.9 lb/hr. [N.J.A.C. 7:27-22.16(a)]	Other: Compliance demonstrated by firing No. 2 Fuel Oil or Biodiesel with sulfur content <= 15 ppmw (0.0015 wt.%). [N.J.A.C. 7:27-22.16(o)].	SO2: 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.
30	SO2 <= 0.2 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	Other: Compliance demonstrated by firing No. 2 Fuel Oil or Biodiesel with sulfur content <= 15 ppmw (0.0015 wt.%). [N.J.A.C. 7:27-22.16(o)].	SO2: 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.

BOP180001

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

**Emission Unit:** U18 Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiesel and two Auxiliary Boilers firing Natural Gas, No. 2 Fuel Oil or Biodiesel

**Operating Scenario:** OS5 164 MM BTU/hr Turbine Firing No. 2 Fuel Oil or Biodiesel and Duct Burner Firing Natural gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Subject Item GR1 for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	No person shall cause, suffer, allow or permit smoke the shade or appearance of which is darker than number 1 on the Ringelmann smoke chart or greater than 20 percent opacity, exclusive of visible condensed water vapor, to be emitted into the outdoor air from the combustion of fuel in any stationary turbine engine for a period of more than 10 seconds. Opacity <= 20 %. [N.J.A.C. 7:27- 3.5]	Opacity: Monitored by visual determination daily, based on an instantaneous determination. The permittee shall conduct the visual inspection during daylight hours. Visual inspections shall consist of a visual survey to identify if the stack has visible emissions (other than condensed water vapor) greater than the prescribed standard. If visible emissions are observed and the corrective action taken does not correct the opacity problem within 24 hours, the permittee shall perform a check via a certified opacity reader, in accordance with N.J.A.C. 7:27B-2. Such test shall be conducted each operating day until corrective action is taken to successfully correct the opacity problem. [N.J.A.C. 7:27-22.16(o)]	Opacity: Recordkeeping by manual logging of parameter or storing data in a computer data system daily. The permittee shall maintain the following records: (1) Date and time of inspection; (2) Emission point number; (3) Operational status of equipment; (4) Observed results and conclusions; (5) Description of corrective actions taken if necessary; (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)]	Conduct an inspection: Upon occurrence of event. If visible emissions are observed, the permittee shall verify that the equipment and/ or control device causing the emission is operating according to manufacturer's specifications and the compliance plan. If the equipment or control device is not operating properly, the permittee shall take corrective action immediately to eliminate the excess emissions. The permittee shall report any permit violation to the Department pursuant to N.J.A.C. 7:27-22.19(g). [N.J.A.C. 7:27-22.16(o)]
3	Particulate Emissions <= 31.5 lb/hr based on the rated heat input of the source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	Maximum Gross Heat Input <= 315.1 MMBTU/hr (HHV).  164.27 MMBtu/hr (HHV) for the Gas Turbine firing No.2 Fuel Oil or Biodiesel and the 150.83 MMBtu/hr (HHV) for the Duct Burner firing natural gas. [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously, based on a 1 hour block average.  The system continuously monitors fuel flow and calculates hourly heat input using the heating value of No.2 Fuel Oil or Biodiesel for the Gas Turbine and the heating value of natural gas for the Duct Burner. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage each hour during operation. [N.J.A.C. 7:27-22.16(o)]	None.

BOP180001

New Jersey Department of Environmental Protection  
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	Formaldehyde <= 0.022 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Naphthalene <= 0.0014 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Arsenic Emissions <= 0.0018 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	Beryllium Emissions <= 0.000051 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	Cadmium Emissions <= 0.00098 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Lead Emissions <= 0.0023 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	Manganese Emissions <= 0.13 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	Nickel Emissions <= 0.0011 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	Dimethylbenz(a)anthracene (7,12-) <= 0.0000027 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	Cobalt compounds <= 0.000014 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	Polynuclear aromatic hydrocarbons (PAHs) <= 0.0016 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	VOC (Total) <= 27.9 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(c)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-16.23(a)2]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
18	NOx (Total) <= 43.5 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
19	NOx (Total) <= 0.16 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
20	NOx (Total) <= 49 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
21	CO <= 36.5 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
22	CO <= 0.12 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
23	CO <= 48 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
24	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. [N.J.A.C. 7:27-16.23(a)1]	CO: Recordkeeping by strip chart or data acquisition (DAS) system once per calendar day during operation. [N.J.A.C. 7:27-22.16(e)]	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
25	TSP <= 7.5 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
26	TSP <= 0.024 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
27	PM-10 (Total) <= 7.5 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
28	PM-10 (Total) <= 0.024 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
29	PM-2.5 (Total) <= 7.5 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
30	PM-2.5 (Total) <= 0.024 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
31	SO2 <= 33 lb/hr. [N.J.A.C. 7:27-22.16(a)]	Other: Compliance demonstrated by firing No. 2 Fuel Oil or Biodiesel with sulfur content <= 15 ppmw (0.0015 wt.%). [N.J.A.C. 7:27-22.16(o)].	SO2: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
32	SO2 <= 0.1 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	Other: Compliance demonstrated by firing No. 2 Fuel Oil or Biodiesel with sulfur content <= 15 ppmw (0.0015 wt.%). [N.J.A.C. 7:27-22.16(o)].	SO2: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery. [N.J.A.C. 7:27-22.16(o)]	None.



BOP180001

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

**Emission Unit:** U18 Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiesel and two Auxiliary Boilers firing Natural Gas, No. 2 Fuel Oil or Biodiesel

**Operating Scenario:** OS6 189 MM BTU/hr Auxiliary Boiler 1 firing Natural gas, OS8 189 MM BTU/hr Auxiliary Boiler 2 firing Natural gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Subject Items GR3 and GR13 for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	No visible emissions exclusive of visible condensed water vapor, except for a period of not longer than three minutes in any consecutive 30-minute period [N.J.A.C. 7:27-3.2(a)] & [N.J.A.C. 7:27- 3.2(c)]	None.	None.	None.
3	Particulate Emissions <= 19.6 lb/hr based on the rated heat input of the source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	Maximum Gross Heat Input <= 189 MMBTU/hr (HHV) for Aux. Boiler 1 (E23) and Aux. Boiler 2 (E24) firing natural gas. [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously, based on a 1 hour block average.  The system continuously monitors fuel flow and calculates hourly heat input using the heating value of natural gas. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage each hour during operation. [N.J.A.C. 7:27-22.16(o)]	None.
5	Formaldehyde <= 0.014 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Arsenic Emissions <= 0.000037 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Cadmium Emissions <= 0.0002 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	Nickel Emissions <= 0.00039 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	Dimethylbenz(a)anthracene (7,12-) <= 0.000003 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Cobalt compounds <= 0.000016 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	VOC (Total) <= 0.95 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	VOC (Total) <= 0.005 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	VOC (Total) <= 10 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
14	VOC (Total) <= 50 ppmvd @ 7% O2. [N.J.A.C. 7:27-16.8(b)1]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-16.23(a)2]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
15	NOx (Total) <= 9.45 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
16	NOx (Total) <= 0.2 lb/MMBTU. [N.J.A.C. 7:27-19.7(i)2ii]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. [N.J.A.C. 7:27-19.15(a)2]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	NO <sub>x</sub> (Total) <= 0.05 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
18	NO <sub>x</sub> (Total) <= 33 ppmvd @ 7% O <sub>2</sub> . [N.J.A.C. 7:27-22.16(a)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
19	CO <= 7.56 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
20	CO <= 0.04 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
21	CO <= 43 ppmvd @ 7% O <sub>2</sub> . [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
22	CO <= 100 ppmvd @ 7% O <sub>2</sub> . [N.J.A.C. 7:27-16.8(b)2]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-16.23(a)2]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
23	TSP <= 0.95 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
24	TSP <= 0.005 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

U18 Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiesle.

OS6, OS8

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
25	PM-10 (Total) <= 1.85 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
26	PM-10 (Total) <= 0.0098 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
27	PM-2.5 (Total) <= 1.85 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
28	PM-2.5 (Total) <= 0.0098 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
29	SO2 <= 0.57 lb/hr. [N.J.A.C. 7:27-22.16(a)]	Other: Compliance demonstrated by combusting pipeline quality natural gas.[N.J.A.C. 7:27-22.16(o)].	SO2: Recordkeeping by certified lab analysis results quarterly: once per quarter; quarters shall begin on January 1, April 1, July 1, and October 1 of each year. [N.J.A.C. 7:27-22.16(o)]	None.
30	SO2 <= 0.003 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	Other: Compliance demonstrated by combusting pipeline quality natural gas.[N.J.A.C. 7:27-22.16(o)].	SO2: Recordkeeping by certified lab analysis results quarterly: once per quarter; quarters shall begin on January 1, April 1, July 1, and October 1 of each year. [N.J.A.C. 7:27-22.16(o)]	None.
31	SO2 <= 1.2 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(a)]	Other: Compliance demonstrated by combusting pipeline quality natural gas.[N.J.A.C. 7:27-22.16(o)].	SO2: Recordkeeping by certified lab analysis results quarterly: once per quarter; quarters shall begin on January 1, April 1, July 1, and October 1 of each year. [N.J.A.C. 7:27-22.16(o)]	None.

BOP180001

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

**Emission Unit:** U18 Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiesel and two Auxiliary Boilers firing Natural Gas, No. 2 Fuel Oil or Biodiesel

**Operating Scenario:** OS7 179 MM BTU/hr Auxiliary Boiler 1, Firing No. 2 Fuel Oil or Biodiesel, OS9 179 MM BTU/hr Auxiliary Boiler 2, Firing No. 2 Fuel Oil or Biodiesel

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Subject Items GR3 and GR13 for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	No visible emissions (NVE) exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. NVE shall be defined as opacity readings less than 5%, consistent with Technical Manual 1005 available at <a href="http://www.state.nj.us/dep/bts/consult.html">www.state.nj.us/dep/bts/consult.html</a> [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	Monitored by visual determination daily, based on an instantaneous determination. The permittee shall conduct the visual inspection during daylight hours. Visual inspections shall consist of a visual survey to identify if the stack has visible emissions (other than condensed water vapor) greater than the prescribed standard. If visible emissions are observed and the corrective action taken does not correct the opacity problem within 24 hours, the permittee shall perform a check via a certified opacity reader, in accordance with N.J.A.C. 7:27B-2. Such test shall be conducted each operating day until corrective action is taken to successfully correct the opacity problem. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system daily. The permittee shall maintain the following records: (1) Date and time of inspection; (2) Emission point number; (3) Operational status of equipment; (4) Observed results and conclusions; (5) Description of corrective actions taken if necessary; (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)]	Conduct an inspection: Upon occurrence of event. If visible emissions are observed, the permittee shall verify that the equipment and/ or control device causing the emission is operating according to manufacturer's specifications and the compliance plan. If the equipment or control device is not operating properly, the permittee shall take corrective action immediately to eliminate the excess emissions. The permittee shall report any permit violation to the Department pursuant to N.J.A.C. 7:27-22.19(g). [N.J.A.C. 7:27-22.16(o)]
3	Particulate Emissions <= 19.3 lb/hr based on the rated heat input of the source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	Maximum Gross Heat Input <= 179 MMBTU/hr (HHV) for Aux. Boiler 1 (E23) and Aux. Boiler 2 (E24) firing No.2 Fuel Oil or Biodiesel. [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously, based on a 1 hour block average.  The system continuously monitors fuel flow and calculates hourly heat input using the heating value of No.2 Fuel Oil or Biodiesel. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage each hour during operation. [N.J.A.C. 7:27-22.16(o)]	None.

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	Formaldehyde <= 0.042 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Arsenic Emissions <= 0.00072 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Beryllium Emissions <= 0.00054 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	Cadmium Emissions <= 0.00054 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	Manganese Emissions <= 0.0011 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Polynuclear aromatic hydrocarbons (PAHs) <= 0.0042 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	VOC (Total) <= 1.79 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	VOC (Total) <= 0.01 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	VOC (Total) <= 18 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
14	VOC (Total) <= 50 ppmvd @ 7% O2. [N.J.A.C. 7:27-16.8(b)1]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-16.23(a)2]	VOC (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

U18 Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiesle.

OS7, OS9

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	NO <sub>x</sub> (Total) ≤ 17.9 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
16	NO <sub>x</sub> (Total) ≤ 0.1 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
17	NO <sub>x</sub> (Total) ≤ 0.2 lb/MMBTU. [N.J.A.C. 7:27-19.7(i)2ii]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. [N.J.A.C. 7:27-19.15(a)2]	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack test requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
18	NO <sub>x</sub> (Total) ≤ 60 ppmvd @ 7% O <sub>2</sub> . [N.J.A.C. 7:27-22.16(a)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
19	CO ≤ 7.16 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
20	CO ≤ 0.04 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
21	CO ≤ 39 ppmvd @ 7% O <sub>2</sub> . [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	CO <= 100 ppmvd @ 7% O2. [N.J.A.C. 7:27-16.8(b)2]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-16.23(a)2]	CO: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
23	TSP <= 8.95 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
24	TSP <= 0.05 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
25	PM-10 (Total) <= 8.95 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
26	PM-10 (Total) <= 0.05 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results prior to permit expiration date. [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 requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
27	PM-2.5 (Total) <= 8.95 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
28	PM-2.5 (Total) <= 0.05 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
29	SO2 <= 37.59 lb/hr SO2 <= 90.8 ppmvd @ 7% O2. SO2 <= 0.21 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	Other: Compliance demonstrated by firing No. 2 Fuel Oil or Biodiesel with sulfur content <= 15 ppmw (0.0015 wt.%). [N.J.A.C. 7:27-22.16(o)].	SO2: 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.



BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The following Federal Rules apply to U29: 40 CFR 63 Subpart A, 40 CFR 63 Subpart ZZZZ, 40 CFR 60 Subpart A, 40 CFR 60 Subpart IIII, 40 CFR 89.112, and 40 CFR 80.510(b). [None]	None.	None.	None.
2	You are subject to 40 CFR 63 Subpart ZZZZ if you own or operate a stationary RICE at a major or area source of HAP emissions. [40 CFR 63.6585].  A stationary RICE located at an area source of HAP emissions is existing, if construction or reconstruction commenced before June 12, 2006. [40 CFR 63.6590(a)(1)(iii)].  A stationary RICE located at an area source of HAP emissions is new if construction commenced on or after June 12, 2006. [40 CFR 63.6590(a)(2)(iii)].  Based on the above, E9, E10, E11, E12, E15, E16, E32, E33, E39, E40, E41, E42, E45 and E46 are existing, and E25, E26, E47, E53, E54, E55, E56, E58 and E59 are new. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), and that do not operate for the purpose specified in 40 CFR 63.6640(f)(4)(ii), are not subject to 40 CFR 63 Subpart ZZZZ. [40 CFR 63.6585(f)(3)].  Therefore the requirements of 40 CFR 63 Subpart ZZZZ do not apply to OS1 (E9), OS2 (E10), OS3 (E11), OS4 (E12), OS6 (E15), OS7 (E16), OS9 (E32), OS10 (E33), OS11 (E39), OS12 (E40), OS13 (E41), OS14 (E42), OS15 (E45) and OS16 (E46). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	A new or reconstructed stationary RICE located at an area source, must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR part 60 Subpart IIII, for compression ignition engines. [40 CFR 63.6590(c)(1)].  Therefore the requirements of 40 CFR 60 Subpart IIII apply to OS17 (E47), OS18 (E53), OS19 (E54), OS20 (E55), OS21 (E56), OS22 (E58), OS23 (E26), OS24 (E59) and OS25 (E25). [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.
5	The owner or operator shall keep records of engine manufacturer data for the life of the equipment showing the rated Maximum Gross Heat Input, Maximum Engine Power, Emission Factors and Manufacture Date. [N.J.A.C. 7:27-22.16(a)]	None.	Other: The owner or operator shall keep records of engine manufacturer data for the life of the equipment showing the rated Maximum Gross Heat Input, Maximum Engine Power, and Manufacture Date.[N.J.A.C. 7:27-22.16(o)].	None.
6	Fuel limited to diesel fuel. [N.J.A.C. 7:27-22.16(a)].  Sulfur Content in Fuel <= 15 ppmw. [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.

BOP180001

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

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

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

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

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	Emergency generators may be operated at other locations (within the State of New Jersey) only in the event of an emergency, as defined at N.J.A.C. 7:27-19.1. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. 1. For each time the emergency generator is operated at a location other than the facility for which it is originally permitted in the event of an emergency, the Permittee of the emergency generator shall record the following: i) Document the location (name of facility with address) where the emergency generator is operated; ii) Document the emergency that occurred and describe whether the emergency was due to internal or external loss of primary source of energy at the location; iii) If emergency is due to internal loss at the location, document the damages to the primary source of energy and the amount of time needed for repairs; iv) Document the date(s) of operation and the start up and shut down time on each date; v) Document the total operating time at the location based on the generator's hour meter and the total amount of fuel and fuel type used for the duration of the emergency; vi) The name and contact information of the operator of the emergency generator at the location.</p> <p>2. If a voltage reduction is the reason for the use of the emergency generator, a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction.</p> <p>The Permittee of the emergency generator shall have the above records on site within 30 days of the occurrence of the emergency event, maintain the record for a period of no less than 5 years after the record was made, and shall make the records readily available to the Department or the EPA upon request. [N.J.A.C. 7:27-22.16(o)]</p>	Submit notification: Upon occurrence of event the Permittee of the emergency generator must submit the Recordkeeping Requirements to the Regional Enforcement Office within 30 days of the occurrence of the emergency event. [N.J.A.C. 7:27-22.16(o)]

BOP180001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	There is no time limit on the use of emergency stationary RICE in emergency situations. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Other: Each time the emergency generator is used because of a voltage reduction, keep a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction.[N.J.A.C. 7:27-22.16(o)].	None.
12	Hours of Operation <= 100 hr/yr for testing and maintenance (each generator). The limit on the allowable hours for testing and maintenance in accordance with the documentation from manufacturer, the vendor, or the insurance company associated with the engine. [N.J.A.C. 7:27-22.16(a)]	Hours of Operation: Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall maintain on site and record the following information:  For each time the emergency generator is specifically operated for testing or maintenance: i. The reason for its operation; ii. The date(s) of operation and the start up and shut down time; iii. The total operating time for testing or maintenance based on the generator's hour meter; and iv. The name of the operator. [N.J.A.C. 7:27-19.11]	None.
13	VOC (Total) <= 0.66 tons/yr based on 100 hours per year for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	NOx (Total) <= 16.94 tons/yr based on 100 hours per year for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	CO <= 2.62 tons/yr based on 100 hours per year for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	SO2 <= 0.83 tons/yr based on 100 hours per year for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
17	TSP <= 0.57 tons/yr based on 100 hours per year for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

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

<b>Ref.#</b>	<b>Applicable Requirement</b>	<b>Monitoring Requirement</b>	<b>Recordkeeping Requirement</b>	<b>Submittal/Action Requirement</b>
18	PM-10 (Total) <= 0.56 tons/yr based on 100 hours per year for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
19	PM-2.5 (Total) <= 0.56 tons/yr based on 100 hours per year for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
20	Benzene <= 4.5 lb/yr based on 100 hours per year for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS1 3.83 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 3.83 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 2.3 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	TSP <= 0.91 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-10 (Total) <= 0.87 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 0.87 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 0.87 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 2.76 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	SO2 <= 0.84 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 12.68 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.



BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS2 6.38 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 6.38 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 3.8 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	TSP <= 1.51 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-10 (Total) <= 1.44 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 1.44 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 1.45 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 4.59 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	SO2 <= 1.4 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 21.11 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS3 1.09 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 1.09 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 0.65 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	TSP <= 0.26 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-10 (Total) <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 0.79 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	SO2 <= 0.24 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 3.64 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS4 1.58 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 1.58 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 0.95 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	TSP <= 0.38 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-10 (Total) <= 0.36 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 0.36 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 0.36 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 1.14 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	SO2 <= 0.35 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 5.25 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS6 3.43 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 3.43 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 2.1 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	TSP <= 0.81 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-10 (Total) <= 0.77 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 0.77 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 0.78 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 2.47 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	SO2 <= 0.76 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 11.35 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS7 4.13 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 4.13 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 2.5 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	TSP <= 0.98 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-10 (Total) <= 0.93 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 0.93 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 0.94 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 2.98 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	SO2 <= 0.91 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 13.7 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS9 1.36 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 1.36 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 0.82 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	TSP <= 0.84 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-10 (Total) <= 0.84 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 0.84 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 1.04 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 2.76 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	SO2 <= 0.84 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 12.68 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS10 1.7 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 1.7 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 1.02 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	TSP <= 0.84 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-10 (Total) <= 0.84 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 0.84 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 1.04 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 2.76 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	SO2 <= 0.84 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 12.68 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS11 2.681 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 2.68 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 1.61 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	TSP <= 0.63 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-10 (Total) <= 0.61 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 0.61 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 0.61 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 1.93 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	SO2 <= 0.59 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 8.86 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.



BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS12 3.15 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 3.15 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 1.89 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	TSP <= 0.77 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-10 (Total) <= 0.74 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 0.74 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 0.74 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 2.35 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	SO2 <= 0.72 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 10.79 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS13 10.38 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 10.38 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 6.08 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	TSP <= 0.29 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-10 (Total) <= 0.29 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 0.29 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 0.69 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 3.25 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	SO2 <= 3.06 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 42.09 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS14 8.32 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 8.32 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 4.99 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	TSP <= 0.69 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-10 (Total) <= 0.69 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 0.69 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 0.68 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 4.16 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	SO2 <= 2.42 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 18.61 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS15 2.65 MMBtu/hr engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 2.65 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 1.6 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	TSP <= 0.11 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-10 (Total) <= 0.11 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 0.11 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 0.17 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 0.95 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	SO2 <= 0.77 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 4.29 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS16 3.15 MMBtu/hr engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 3.15 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 1.89 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	TSP <= 0.82 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-10 (Total) <= 0.82 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 0.82 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 0.16 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 2.8 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	SO2 <= 0.92 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 9.3 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP180001

New Jersey Department of Environmental Protection  
Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS17 2.70 MMBtu/hr Engine, E47 (250 KW output), Subject to NSPS 40 CFR 60 Subpart IIII

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Subject Items GR4 for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum Gross Heat Input <= 2.7 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
3	Particulate Emissions <= 1.62 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	TSP <= 0.06 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 0.06 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 0.06 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	VOC (Total) <= 0.1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	CO <= 0.27 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	SO2 <= 0.07 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	NOx (Total) <= 2.25 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	Engine Emission Standards: NMHC + NOx <= 4.0 g/kW-hr. CO <= 3.5 g/kW-hr. PM <= 0.2 g/kW-hr. [40 CFR 60.4205(b)], 40 CFR 89.112 and [40 CFR 60.4202(a)(2)]	None.	Other: Keep manufacturer-supplied engine specifications, installation instructions and operating instructions for the life of the engine.[N.J.A.C. 7:27-22.16(o)].	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS18 7.95 MMBtu/hr Engine, E53 (800 KW output), Subject to NSPS 40 CFR 60 Subpart IIII

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Subject Items GR4 for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum Gross Heat Input <= 7.95 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
3	Particulate Emissions <= 4.77 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	TSP <= 0.22 lb/hr based on vendor supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 0.22 lb/hr based on vendor supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 0.22 lb/hr based on vendor supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	VOC (Total) <= 0.2 lb/hr based on vendor supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	CO <= 1.4 lb/hr based on vendor supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	SO2 <= 0.4 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	NOx (Total) <= 17.02 lb/hr based on vendor supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	Engine Emission Standards: NMHC + NOx <= 6.4 g/kW-hr. CO <= 3.5 g/kW-hr. PM <= 0.2 g/kW-hr. [40 CFR 60.4205(b)], 40 CFR 89.112 and [40 CFR 60.4202(a)(2)]	None.	Other: Keep manufacturer-supplied engine specifications, installation instructions and operating instructions for the life of the engine.[N.J.A.C. 7:27-22.16(o)].	None.

BOP180001

New Jersey Department of Environmental Protection  
Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS19 14.70 MMBtu/hr (1500 kW) Emergency Diesel Engine, Subject to NSPS IIII

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Subject Items GR4 for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum Gross Heat Input <= 14.7 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
3	Particulate Emissions <= 6.94 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	TSP <= 0.38 lb/hr based on vendor supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 0.38 lb/hr based on vendor supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 0.38 lb/hr based on vendor supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	VOC (Total) <= 0.78 lb/hr based on vendor supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	CO <= 4.07 lb/hr based on vendor supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	SO2 <= 0.74 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	NOx (Total) <= 28.98 lb/hr based on vendor supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	Benzene <= 0.014 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	Engine Emission Standards: NMHC + NOx <= 6.4 g/kW-hr. CO <= 3.5 g/kW-hr. PM <= 0.2 g/kW-hr. [40 CFR 60.4205(b)], 40 CFR 89.112 and [40 CFR 60.4202(a)(2)]	None.	Other: Keep manufacturer-supplied engine specifications, installation instructions and operating instructions for the life of the engine.[N.J.A.C. 7:27-22.16(o)].	None.



BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS20 14.7 MMBtu/hr (1500 kW) Emergency Diesel Engine, Subject to NSPS IIII

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Subject Items GR4 for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum Gross Heat Input <= 14.7 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
3	Particulate Emissions <= 6.94 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	TSP <= 0.37 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 0.37 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 0.37 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	VOC (Total) <= 0.78 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	CO <= 3.98 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	SO2 <= 0.74 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	NOx (Total) <= 29.35 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	Benzene <= 0.014 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	Engine Emission Standards: NMHC + NOx <= 6.4 g/kW-hr. CO <= 3.5 g/kW-hr. PM <= 0.2 g/kW-hr. [40 CFR 60.4205(b)], 40 CFR 89.112 and [40 CFR 60.4202(a)(2)]	None.	Other: Keep manufacturer-supplied engine specifications, installation instructions and operating instructions for the life of the engine.[N.J.A.C. 7:27-22.16(o)].	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS21 8.25 MMBtu/hr (800 kW) Emergency Diesel Engine, Subject to NSPS IIII

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Subject Items GR4 for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum Gross Heat Input <= 8.25 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
3	Particulate Emissions <= 4.95 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	TSP <= 0.21 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 0.16 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 0.16 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	VOC (Total) <= 0.29 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	CO <= 2.45 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 7.56 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Engine Emission Standards: Manufacturer supplied data: NOx <= 2.84 g/BHP-hr. CO <= 0.92 g/BHP-hr. PM <= 0.08 g/BHP-hr. VOC <= 0.11 g/BHP-hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep manufacturer-supplied engine specifications, installation instructions and operating instructions for the life of the engine.[N.J.A.C. 7:27-22.16(o)].	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS22 10.07 MMBTU/hr (HHV) Emerg. Gen. (1000 kW), Subject to NSPS IIII

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Subject Items GR4 for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum Gross Heat Input <= 10.07 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
3	Particulate Emissions <= 6.01 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	TSP <= 0.065 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 0.065 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 0.065 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	VOC (Total) <= 0.033 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	CO <= 0.42 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 16.02 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Engine Emission Standards: Manufacturer supplied data: NOx <= 4.93 g/BHP-hr. CO <= 0.13 g/BHP-hr. PM <= 0.02 g/BHP-hr. VOC <= 0.01 g/BHP-hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep manufacturer-supplied engine specifications, installation instructions and operating instructions for the life of the engine.[N.J.A.C. 7:27-22.16(o)].	None.

BOP180001

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

**Emission Unit:** U29 Emergency Generator Diesel Fuel Engines

**Operating Scenario:** OS23 17.98 MMBTU/hr (HHV) Emerg. Gen. (2000 kW), Subject to NSPS IIII

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Subject Items GR4 for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum Gross Heat Input <= 17.98 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
3	Particulate Emissions <= 7.6 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	TSP <= 0.24 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 0.24 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 0.24 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	VOC (Total) <= 1.02 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	CO <= 2.88 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 35.95 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Benzene <= 0.017 lb/hr based on AP-42 emission factor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	Engine Emission Standards: Manufacturer supplied data: NOx <= 5.99 g/BHP-hr. CO <= 0.48 g/BHP-hr. PM <= 0.04 g/BHP-hr. VOC <= 0.17 g/BHP-hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep manufacturer-supplied engine specifications, installation instructions and operating instructions for the life of the engine.[N.J.A.C. 7:27-22.16(o)].	None.

BOP180001

New Jersey Department of Environmental Protection  
 Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS24 1.638 MMBTU/hr (HHV) Emerg. Gen. (154 kW), Subject to NSPS IIII

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Subject Items GR4 for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum Gross Heat Input <= 1.64 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
3	Particulate Emissions <= 0.98 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	TSP <= 0.05 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 0.05 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 0.05 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	VOC (Total) <= 0.05 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	CO <= 0.63 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 1.48 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Engine Emission Standards: Manufacturer supplied data: NOx <= 2.83 g/BHP-hr. CO <= 1.2 g/BHP-hr. PM <= 0.09 g/BHP-hr. VOC <= 0.09 g/BHP-hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep manufacturer-supplied engine specifications, installation instructions and operating instructions for the life of the engine.[N.J.A.C. 7:27-22.16(o)].	None.

BOP180001

New Jersey Department of Environmental Protection  
Facility Specific Requirements

Emission Unit: U29 Emergency Generator Diesel Fuel Engines

Operating Scenario: OS25 7.5 MMBTU/hr (HHV) Emerg. Gen. (750 kW), Subject to NSPS IIII

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	See Subject Items GR4 for additional requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum Gross Heat Input <= 7.5 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep engine specifications.[N.J.A.C. 7:27-22.16(o)].	None.
3	Particulate Emissions <= 4.5 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	TSP <= 0.05 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 0.05 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 0.05 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	VOC (Total) <= 0.08 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	CO <= 0.63 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 13.21 lb/hr based on manufacturer supplied data. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Engine Emission Standards: Manufacturer supplied data: NOx <= 5.25 g/BHP-hr. CO <= 0.25 g/BHP-hr. PM <= 0.02 g/BHP-hr. VOC <= 0.03 g/BHP-hr. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep manufacturer-supplied engine specifications, installation instructions and operating instructions for the life of the engine.[N.J.A.C. 7:27-22.16(o)].	None.

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

**Facility Name (AIMS):** TRUSTEES OF PRINCETON UNIVERSITY      **Facility ID (AIMS):** 61014

**Street**    FACILITIES OPERATIONS  
**Address:** MACMILLAN BLDG  
              ELM DR  
              PRINCETON, NJ 08543-2158

**Mailing**   FACILITIES OPERATIONS  
**Address:** MACMILLAN BLDG  
              ELM DR  
              PRINCETON, NJ 08543-2158

**County:**     Mercer  
**Location**    Provides college education  
**Description:**

<b>State Plane Coordinates:</b>	
<b>X-Coordinate:</b>	447,878
<b>Y-Coordinate:</b>	550,048
<b>Units:</b>	Feet
<b>Datum:</b>	NAD83
<b>Source Org.:</b>	County
<b>Source Type:</b>	GPS

<b>Industry:</b>	
<b>Primary SIC:</b>	8221
<b>Secondary SIC:</b>	
<b>NAICS:</b>	

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

**Contact Type: Air Permit Information Contact**

**Organization:** Trustees of Princeton University

**Org. Type:** Private

**Name:** Robert F. Ortego, P.E.

**NJ EIN:** 00210634501

**Title:** Manager, Environmental Compliance

**Phone:** (609) 258-1841 x

**Mailing Address:** FACILITIES OPERATIONS

**Fax:** (609) 258-1508 x

MACMILLAN BUILDING

**Other:** ( ) - x

PRINCETON, NJ 08543-2158

**Type:**

**Email:** rfo@princeton.edu

---

**Contact Type: Fees/Billing Contact**

**Organization:** Trustees of Princeton University

**Org. Type:** Private

**Name:** Robert F. Ortego, P.E.

**NJ EIN:** 00210634501

**Title:** Manager, Environmental Compliance

**Phone:** (609) 258-1841 x

**Mailing Address:** FACILITIES OPERATIONS

**Fax:** (609) 258-1508 x

MACMILLAN BUILDING

**Other:** ( ) - x

PRINCETON, NJ 08543-2158

**Type:**

**Email:** rfo@princeton.edu

---

**Contact Type: General Contact**

**Organization:** Trustees of Princeton University

**Org. Type:** Private

**Name:** Robert F. Ortego, P.E.

**NJ EIN:** 00210634501

**Title:** Manager, Environmental Compliance

**Phone:** (609) 258-1841 x

**Mailing Address:** FACILITIES OPERATIONS

**Fax:** (609) 258-1508 x

MACMILLAN BUILDING

**Other:** ( ) - x

ELM DRIVE

**Type:**

PRINCETON, NJ 08543-2158

**Email:** rfo@princeton.edu



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

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

**Organization:**

**Org. Type:** Private

**Name:** Trustees of Princeton University

**NJ EIN:** 00210634501

**Title:**

**Phone:** ( ) - x

**Mailing  
Address:**

**Fax:** ( ) - x

**Other:** ( ) - x

**Type:**

**Email:**

---

**Contact Type: Responsible Official**

**Organization:** Trustees of Princeton University

**Org. Type:** Private

**Name:** Robert F. Ortego, P.E.

**NJ EIN:** 00210634501

**Title:** Manager, Environmental Compliance

**Phone:** (609) 258-1841 x

**Mailing  
Address:** FACILITIES OPERATIONS  
MACMILLAN BUILDING  
ELM DRIVE  
PRINCETON, NJ 08543-2158

**Fax:** (609) 258-1508 x

**Other:** ( ) - x

**Type:**

**Email:** rfo@princeton.edu

New Jersey Department of Environmental Protection  
Insignificant Source Emissions

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1	Fuel Oil Tanks (8) for Electric Generation, < 10,000 gal	Storage Vessel	main campus	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS2	Space Heaters (23), Firing Natural Gas, Heat Input < 1MMBtu/hr	Boiler	main campus	0.024	0.461	0.092	0.003	0.014	0.014	0.000	0.00000000	0.000
IS3	Boilers (11), Firing Natural Gas, Heat Input < 1MMBtu/hr	Boiler	main campus	0.053	3.009	0.320	0.823	0.084	0.084	0.000	0.00000000	0.000
IS4	Cogeneration Fuel Oil Tanks (5), 50,000 gal., Vapor Pressure < 0.02 psia, TXS < 0.1lbs/hr	Storage Vessel	main campus at Cogen Plant	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS5	Cathedral of Air Fuel Oil Tanks	Storage Vessel	main campus	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS6	Parts Washer (3), Garage Maintenance, Unheated, top opening < 6 sq. ft and capacity < 100 gal, TXS < 0.1 lbs/hr	Cleaning Machine (Open Top: Cold)	MacMillan Maintenance Garage	0.110	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS7	Cooling Towers, Chilled Water Plant, Raw Materials < 50 lbs/hr	Other Equipment	main campus	0.000	0.000	0.000	0.000	0.062	0.062	0.000	0.00000000	0.000

**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)
IS8	Ceramic Kiln, Direct Firing Fuel Oil, 185 Nassau Street, Heat Input < 1MMBtu/hr	Fuel Combustion Equipment (Other)	main campus	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.00000000	0.000
IS9	Spray Booth, McCormick, Cleaning < 0.5 gallons/hr	Other Equipment	main campus	0.016	0.299	0.060	0.002	0.009	0.009	0.000	0.00000000	0.000
IS10	Water Heaters, Firing Natural Gas, Heat Input < 1MMBtu/hr	Boiler	Hibbin-McGee Apts									
IS11	Commercial Boilers, Firing Natural Gas, Heat Input < 1MMBtu/hr	Boiler	Springdale Golf Course									
IS12	Emergency Generators; <1 MM BTU/hr	Emergency Generator										
Total				0.203	3.769	0.474	0.828	0.169	0.169	0.000	0.00000000	0.000

**New Jersey Department of Environmental Protection  
Equipment Inventory**

<b>Equip. NJID</b>	<b>Facility's Designation</b>	<b>Equipment Description</b>	<b>Equipment Type</b>	<b>Certificate Number</b>	<b>Install Date</b>	<b>Grand-Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>Equip. Set ID</b>
E2	Prosp boiler	120 Prospect Apts. Commercial Boiler	Boiler	118162		No		
E3	Prosp boiler	120 Prospect Apts. Commercial Boiler	Boiler	118162		No		
E4	Broadmd boil	171 Broadmead Commercial Boiler	Boiler	118161		No		
E5	Broadmd boil	171 Broadmead Commercial Boiler	Boiler	118161		No		
E9	Ch St EGen	Charleston St. Emergency Generator	Emergency Generator	121302		No		
E10	E-Quad EGen	E-Quad Garage Emergency Generator	Emergency Generator	121298		No		
E11	ForbesM EGen	Forbes Main Emergency Generator	Emergency Generator	121294		No		
E12	Grad C EGen	Graduate College Emergency Generator	Emergency Generator	121300		No		
E15	L T Lab EGen	Lewis Thomas Lab Emergency Generator	Emergency Generator	121296		No		
E16	Sch L EGen	Schultz Lab Emergency Generator	Emergency Generator	121295		No		
E19	MacM gaso tk	MacMillan Gasoline Tank	Storage Vessel	109706		No		
E20	Pt Spray Bth	MacMillan Paint Spray Booth	Surface Coating Equipment (Non-Fabric Material)	122087		No		
E21	Gas Turbine	Cogeneration Plant - Turbine	Combustion Turbine	125337		No		

**New Jersey Department of Environmental Protection  
Equipment Inventory**

<b>Equip. NJID</b>	<b>Facility's Designation</b>	<b>Equipment Description</b>	<b>Equipment Type</b>	<b>Certificate Number</b>	<b>Install Date</b>	<b>Grand-Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>Equip. Set ID</b>
E22	Duct Burner	Cogeneration Plant - Duct Burner	Duct Burner	125337		No		
E23	Aux Boiler 1	Cogeneration Plant - Auxiliary Boiler #1	Boiler	125337		No		
E24	Aux Boiler 2	Cogeneration Plant - Auxiliary Boiler #2	Boiler	125337		No		
E25	ArtsEDG	7.5 MMBTU/hr (HHV) Emerg. Gen. (750 kW)	Emergency Generator		1/1/2016			
E26	2000kW EmGen	17.98 MMBTU/hr (HHV) Emerg. Gen. (2000 kW)	Emergency Generator		11/18/2016			
E32	Turb Rm EGen	Turbine Room II - Emergency Generator	Emergency Generator	9-18-98		No		
E33	P Stad EGen	Princeton Stadium - Emergency Generator	Emergency Generator	9-18-98		No		
E39	New South	Emergency Generator	Emergency Generator	NA	3/17/2000	No		
E40	Campus Ctr	Emergency Generator	Emergency Generator	NA	12/20/1999	No	3/3/2000	
E41	Gen. Lab. EG	Genomics Lab Emergency Generator	Emergency Generator	Modification BOP030001	10/1/2003	No		
E42	200 W Rd	200 Washington RD Emergency Gnerator	Emergency Generator	Modification BOP030001	10/1/2003	No		
E43	Pack Boil 1	185 Nassau Street Package Boiler 1	Boiler	Modification BOP030001	10/1/2003	No		
E44	Pack Boil 2	185 Nassau Street Package Boiler 2	Boiler	Modification BOP030001	10/1/2003	No		

**New Jersey Department of Environmental Protection  
Equipment Inventory**

<b>Equip. NJID</b>	<b>Facility's Designation</b>	<b>Equipment Description</b>	<b>Equipment Type</b>	<b>Certificate Number</b>	<b>Install Date</b>	<b>Grand-Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>Equip. Set ID</b>
E45	Lawrence EG	Lawrence Emergency Generator	Emergency Generator			No		
E46	200 Elm Dr.	200 Elm Dr. Emergency Generator	Emergency Generator			No		
E47	87 Prospect	Emergency Generator	Emergency Generator	BOP070002	8/20/2007	No		
E48	L Apt Boil 1	Lawrence Apts. Commercial Boiler #1	Boiler		7/1/2007	No		
E49	L Apt Boil 2	Lawrence Apts. Commercial Boiler #2	Boiler		7/1/2007	No		
E50	L Apt Boil 3	Lawrence Apts. Commercial Boiler #3	Boiler		7/1/2007	No		
E51	L Apt Boil 4	Lawrence Apts. Commercial Boiler #4	Boiler		7/1/2007	No		
E53	Portable Gen	800 kW Generator	Emergency Generator	BOP080006		No		
E54	Frick Bldg	Emergency Generator (1500 kW)	Emergency Generator			No		
E55	Neuro Psych	Emergency Generator	Emergency Generator			No		
E56	HOYT EDG	Emergency Generator (800 KW)	Emergency Generator	BOP 13-0002	9/15/2013	No		
E58	Andling EDG	10.07 MMBTU/hr (HHV) Emerg. Gen. (1000 kW)	Emergency Generator		1/1/2016			
E59	Sub EDG	1.638 MMBTU/hr (HHV) Emerg. Gen. (154 kW)	Emergency Generator		12/30/2017			

Make: CP2141151

Manufacturer: Weil McLain

Model: BG488

Maximum Rated Gross Heat Input (MMBtu/hr - HHV): 1.01

Boiler Type: Package

Utility Type: Non-Utility

Output Type: Steam Only

Steam Output (lb/hr): 810.00

Fuel Firing Method:

Description (if other):

Draft Type:

Heat Exchange Type: 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?

Yes

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

No

Comments:

Make: CP2039776  
Manufacturer: Weil McLain  
Model: BG488  
Maximum Rated Gross Heat Input (MMBtu/hr - HHV): 1.01  
Boiler Type: Package  
Utility Type: Non-Utility  
Output Type: Steam Only  
Steam Output (lb/hr): 810.00  
Fuel Firing Method:  
Description (if other):  
Draft Type:  
Heat Exchange Type: 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?

Yes

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

No

Comments:



Make:

Manufacturer:

Model:

Maximum Rated Gross Heat Input (MMBtu/hr - HHV):

Boiler Type:

Utility Type:

Output Type:

Steam Output (lb/hr):

Fuel Firing Method:

Description (if other):

Draft Type:

Heat Exchange Type:

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:

Make:

Manufacturer:

Model:

Maximum Rated Gross Heat Input (MMBtu/hr - HHV):

Boiler Type:

Utility Type:

Output Type:

Steam Output (lb/hr):

Fuel Firing Method:

Description (if other):

Draft Type:

Heat Exchange Type:

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:

Make:	<input type="text" value="3505H100"/>
Manufacturer:	<input type="text" value="Catapillar"/>
Model:	<input type="text" value="D379A"/>
Maximum Rated Gross Heat Input (MMBtu/hr):	<input type="text" value="3.83"/>
Will the equipment be used in excess of 500 hours per year?	<input type="text" value="no"/>
Have you attached a diagram showing the location and/or configuration of this equipment?	<input type="text" value="yes"/>
Have you attached any manufacturer's data or specifications which may aid in the review of this application?	<input type="text"/>
Comments:	<input type="text"/>

Make:	<input type="text" value="6FA07282"/>
Manufacturer:	<input type="text" value="Catapillar"/>
Model:	<input type="text" value="PA4023-02"/>
Maximum Rated Gross Heat Input (MMBtu/hr):	<input type="text" value="6.38"/>
Will the equipment be used in excess of 500 hours per year?	<input type="text" value="no"/>
Have you attached a diagram showing the location and/or configuration of this equipment?	<input type="text" value="yes"/>
Have you attached any manufacturer's data or specifications which may aid in the review of this application?	<input type="text"/>
Comments:	<input type="text"/>

Make:	<input type="text" value="Kohler"/>
Manufacturer:	<input type="text" value="J. Deere"/>
Model:	<input type="text" value="100ROZJ71"/>
Maximum Rated Gross Heat Input (MMBtu/hr):	<input type="text" value="1.09"/>
Will the equipment be used in excess of 500 hours per year?	<input type="text" value="no"/>
Have you attached a diagram showing the location and/or configuration of this equipment?	<input type="text" value="yes"/>
Have you attached any manufacturer's data or specifications which may aid in the review of this application?	<input type="text" value="no"/>
Comments:	<input type="text"/>

Make:	<input type="text" value="Kohler"/>
Manufacturer:	<input type="text" value="J. Deere"/>
Model:	<input type="text" value="150ROZJ81"/>
Maximum Rated Gross Heat Input (MMBtu/hr):	<input type="text" value="1.58"/>
Will the equipment be used in excess of 500 hours per year?	<input type="text" value="no"/>
Have you attached a diagram showing the location and/or configuration of this equipment?	<input type="text" value="yes"/>
Have you attached any manufacturer's data or specifications which may aid in the review of this application?	<input type="text" value="no"/>
Comments:	<input type="text"/>

Make:	<input type="text" value="Onan"/>
Manufacturer:	<input type="text" value="Cummins"/>
Model:	<input type="text" value="350DFN-17R"/>
Maximum Rated Gross Heat Input (MMBtu/hr):	<input type="text" value="3.43"/>
Will the equipment be used in excess of 500 hours per year?	<input type="text" value="no"/>
Have you attached a diagram showing the location and/or configuration of this equipment?	<input type="text" value="yes"/>
Have you attached any manufacturer's data or specifications which may aid in the review of this application?	<input type="text" value="no"/>
Comments:	<input type="text"/>

Make:	<input type="text" value="Onan"/>
Manufacturer:	<input type="text" value="Cummins"/>
Model:	<input type="text" value="400DFEB"/>
Maximum Rated Gross Heat Input (MMBtu/hr):	<input type="text" value="4.13"/>
Will the equipment be used in excess of 500 hours per year?	<input type="text" value="no"/>
Have you attached a diagram showing the location and/or configuration of this equipment?	<input type="text" value="yes"/>
Have you attached any manufacturer's data or specifications which may aid in the review of this application?	<input type="text" value="no"/>
Comments:	<input type="text"/>



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

Liquids Only

Storage Vessel Type:

Tank

Design Capacity:

4,000

Units:

gallons

Ground Location:

Below Ground

Is the Shell of the Equipment

No

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Good

Shell Construction:

Welded

Is the Shell Insulated?

No

Type of Insulation:

Insulation Thickness (in):

Thermal Conductivity of Insulation [(BTU)(in)(hr)(ft<sup>2</sup>)(deg F)]:

Shape of Storage Vessel:

Cylindrical

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

Length (ft):

11.00

Width (ft):

Diameter (ft):

8.00

Other Dimension

Description:

Value:

Units:

Fill Method:

Submerged

Description (if other):

Maximum Design Fill Rate:

65.00

Units:

gal/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel have a Vapor Return Loop?

No

Does the storage vessel have a Conservation Vent?

Yes

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

Yes

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

No

Comments:

Make:	<input type="text"/>
Manufacturer:	<input type="text" value="DeVilbiss Co."/>
Model:	<input type="text" value="XDF-408"/>
Method of Application:	<input type="text" value="airless"/>
Description:	<input type="text"/>
Spray Type:	<input type="text" value="yes"/>
Have you attached a diagram showing the location and/or configuration of this equipment?	<input type="text" value="yes"/>
Have you attached any manufacturer's data or specifications which may aid in the review of this application?	<input type="text" value="yes"/>
Comments:	<input type="text"/>

Make:	<input type="text"/>
Manufacturer:	<input type="text" value="European Gas Turbine, Inc."/>
Model:	<input type="text" value="RLM-1600"/>
Type of Turbine:	<input type="text" value="Simple cycle"/>
Maximum Rated Gross Heat Input (MMBtu/hr):	<input type="text" value="174.2 (gas) 164.27 (No. 2 oil)"/>
Type of Cycle:	<input type="text" value="simple"/>
Industrial Application:	<input type="text" value="drive electrical generator"/>
Power Output:	<input type="text" value="14.3"/>
Units:	<input type="text" value="MW"/>
Is the combustion turbine using?	
A Dry Low NOx Combustor	<input type="text" value="no"/>
Steam Injection	<input type="text" value="no"/>
Steam to Fuel Ratio	<input type="text"/>
Water Injection	<input type="text" value="yes"/>
Water to Fuel Ratio	<input type="text" value="0.77 (oil) 0.88 (gas)"/>
Other	<input type="text"/>
Description:	<input type="text"/>
Is the turbine Equipped with a Duct Burner?	<input type="text" value="yes"/>
Have you attached a diagram showing the location and/or configuration of this equipment?	<input type="text" value="No"/>
Have you attached any manufacturer's data or specifications which may aid in the review of this application?	<input type="text" value="No"/>
Comments:	<input type="text"/>

Make:	Max. Fire series
Manufacturer:	Energy Recovery International
Model:	MFA-4-102SH
Equipment Type Description:	
Maximum Rated Gross Heat Input (MMBtu/hr):	150.83 (gas) 144.58 (No. 2 oil)
Have you attached a diagram showing the location and/or configuration of this equipment?	No
Have you attached any manufacturer's data or specifications which may aid in the review of this application?	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.

Make:

Manufacturer:

Model:

Maximum Rated Gross Heat Input (MMBtu/hr - HHV):

Boiler Type:

Utility Type:

Output Type:

Steam Output (lb/hr):

Fuel Firing Method:

Description (if other):

Draft Type:

Heat Exchange Type:

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:

Make:

Manufacturer:

Model:

Maximum Rated Gross Heat Input (MMBtu/hr - HHV):

Boiler Type:

Utility Type:

Output Type:

Steam Output (lb/hr):

Fuel Firing Method:

Description (if other):

Draft Type:

Heat Exchange Type:

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:

61014 TRUSTEES OF PRINCETON UNIVERSITY BOP180001 E25 (Emergency Generator)

Print Date: 6/9/2020

Make:   
Manufacturer:   
Model:

Maximum rated Gross Heat Input (MMBtu/hr-HHV):

Will the equipment be used in excess of 500 hours per year?  
 Yes  
 No

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

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

Comments:

61014 TRUSTEES OF PRINCETON UNIVERSITY BOP180001 E26 (Emergency Generator)

Print Date: 6/9/2020

Make:	<input type="text" value="Caterpillar"/>
Manufacturer:	<input type="text" value="Caterpillar (2014)"/>
Model:	<input type="text" value="3516C (2010) Model Year"/>
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	<input type="text" value="17.98"/>
Will the equipment be used in excess of 500 hours per year?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="radio"/> Yes <input checked="" type="radio"/> No
	Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? <input type="radio"/> Yes <input checked="" type="radio"/> No
Comments:	<input type="text" value="2000 kW / 2722 HP / Displacement per cylinder 4.31 L"/>



Make:	<input type="text" value="Caterpillar diesel"/>
Manufacturer:	<input type="text" value="Caterpillar"/>
Model:	<input type="text" value="3406C Dita"/>
Maximum Rated Gross Heat Input (MMBtu/hr):	<input type="text" value="1.36"/>
Will the equipment be used in excess of 500 hours per year?	<input type="text" value="no"/>
Have you attached a diagram showing the location and/or configuration of this equipment?	<input type="text" value="yes"/>
Have you attached any manufacturer's data or specifications which may aid in the review of this application?	<input type="text" value="no"/>
Comments:	<input type="text"/>

Make:	<input type="text" value="Caterpillar diesel"/>
Manufacturer:	<input type="text" value="Caterpillar"/>
Model:	<input type="text" value="3412 DT"/>
Maximum Rated Gross Heat Input (MMBtu/hr):	<input type="text" value="1.7"/>
Will the equipment be used in excess of 500 hours per year?	<input type="text" value="no"/>
Have you attached a diagram showing the location and/or configuration of this equipment?	<input type="text" value="yes"/>
Have you attached any manufacturer's data or specifications which may aid in the review of this application?	<input type="text" value="no"/>
Comments:	<input type="text"/>

Make:	250 KW Continuous Standby Generator
Manufacturer:	Caterpillar
Model:	SR4B
Maximum Rated Gross Heat Input (MMBtu/hr):	2.681
Will the equipment be used in excess of 500 hours per year?	No
Have you attached a diagram showing the location and/or configuration of this equipment?	YES
Have you attached any manufacturer's data or specifications which may aid in the review of this application?	YES
Comments:	377 BHP, 250 KW output

Make:	<input type="text" value="Caterpillar 3406 DITA"/>
Manufacturer:	<input type="text" value="Foley Power Systems"/>
Model:	<input type="text" value="Caterpillar 3406 DITA"/>
Maximum Rated Gross Heat Input (MMBtu/hr):	<input type="text" value="3.15"/>
Will the equipment be used in excess of 500 hours per year?	<input type="text" value="NO"/>
Have you attached a diagram showing the location and/or configuration of this equipment?	<input type="text" value="Yes"/>
Have you attached any manufacturer's data or specifications which may aid in the review of this application?	<input type="text" value="Yes"/>
Comments:	<input type="text"/>

Make:

Manufacturer:

Model:

Maximum Rated Gross Heat Input (MMBtu/hr - HHV):

Boiler Type:

Utility Type:

Output Type:

Steam Output (lb/hr):

Fuel Firing Method:

Description (if other):

Draft Type:

Heat Exchange Type:

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 manufacturer's data or specifications to aid the Dept. in its review of this application?

Comments:

Make:

Manufacturer:

Model:

Maximum Rated Gross Heat Input (MMBtu/hr - HHV):

Boiler Type:

Utility Type:

Output Type:

Steam Output (lb/hr):

Fuel Firing Method:

Description (if other):

Draft Type:

Heat Exchange Type:

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:

61014 TRUSTEES OF PRINCETON UNIVERSITY BOP180001 E45 (Emergency Generator)

Print Date: 6/9/2020

Make:   
Manufacturer:   
Model:

Maximum rated Gross Heat Input (MMBtu/hr-HHV):

Will the equipment be used in excess of 500 hours per year?  
 Yes  
 No

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

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

Comments:

Make:   
Manufacturer:   
Model:

Maximum rated Gross Heat Input (MMBtu/hr-HHV):

Will the equipment be used in excess of 500 hours per year?  
 Yes  
 No

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

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

Comments:



61014 TRUSTEES OF PRINCETON UNIVERSITY BOP180001 E47 (Emergency Generator)

Print Date: 6/9/2020

Make:   
Manufacturer:   
Model:

Maximum rated Gross Heat Input (MMBtu/hr-HHV):

Will the equipment be used in excess of 500 hours per year?  
 Yes  
 No

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

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

Comments:

Make:

Manufacturer:

Model:

Maximum Rated Gross Heat Input (MMBtu/hr - HHV):

Boiler Type:

Utility Type:

Output Type:

Steam Output (lb/hr):

Fuel Firing Method:

Description (if other):

Draft Type:

Heat Exchange Type:

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:

Make:

Manufacturer:

Model:

Maximum Rated Gross Heat Input (MMBtu/hr - HHV):

Boiler Type:

Utility Type:

Output Type:

Steam Output (lb/hr):

Fuel Firing Method:

Description (if other):

Draft Type:

Heat Exchange Type:

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:

Make:

Manufacturer:

Model:

Maximum Rated Gross Heat Input (MMBtu/hr - HHV):

Boiler Type:

Utility Type:

Output Type:

Steam Output (lb/hr):

Fuel Firing Method:

Description (if other):

Draft Type:

Heat Exchange Type:

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:

Make:

Manufacturer:

Model:

Maximum Rated Gross Heat Input (MMBtu/hr - HHV):

Boiler Type:

Utility Type:

Output Type:

Steam Output (lb/hr):

Fuel Firing Method:

Description (if other):

Draft Type:

Heat Exchange Type:

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:

61014 TRUSTEES OF PRINCETON UNIVERSITY BOP180001 E53 (Emergency Generator)

Print Date: 6/9/2020

Make: Standby Gen Set 800kw  
Manufacturer: Caterpillar  
Model: C27DE33

Maximum rated Gross Heat Input (MMBtu/hr-HHV): 7.95

Will the equipment be used in excess of 500 hours per year?  
 Yes  
 No

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

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

Comments:

61014 TRUSTEES OF PRINCETON UNIVERSITY BOP180001 E54 (Emergency Generator)

Print Date: 6/9/2020

Make:	<input type="text" value="Caterpillar"/>
Manufacturer:	<input type="text"/>
Model:	<input type="text" value="3512C"/>
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	<input type="text" value="14.70"/>
Will the equipment be used in excess of 500 hours per year?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="radio"/> Yes <input checked="" type="radio"/> No
	Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?
	<input type="radio"/> Yes <input checked="" type="radio"/> No
Comments:	<input type="text" value="2007 or later model year emergency diesel generator 1500 kW, 2206 BHP."/>

61014 TRUSTEES OF PRINCETON UNIVERSITY BOP180001 E55 (Emergency Generator)

Print Date: 6/9/2020

Make:   
Manufacturer:   
Model:

Maximum rated Gross Heat Input (MMBtu/hr-HHV):

Will the equipment be used in excess of 500 hours per year?  
 Yes  
 No

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

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

Comments:



61014 TRUSTEES OF PRINCETON UNIVERSITY BOP180001 E56 (Emergency Generator)

Print Date: 6/9/2020

Make:   
Manufacturer:   
Model:

Maximum rated Gross Heat Input (MMBtu/hr-HHV):

Will the equipment be used in excess of 500 hours per year?  
 Yes  
 No

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

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

Comments:

61014 TRUSTEES OF PRINCETON UNIVERSITY BOP180001 E58 (Emergency Generator)

Print Date: 6/9/2020

Make:	<input type="text" value="CATERPILLAR"/>
Manufacturer:	<input type="text" value="CATERPILLAR INC. (2013)"/>
Model:	<input type="text" value="C32 (2013) Model Year"/>
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	<input type="text" value="10.07"/>
Will the equipment be used in excess of 500 hours per year?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="radio"/> Yes <input checked="" type="radio"/> No
	Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? <input type="radio"/> Yes <input checked="" type="radio"/> No
Comments:	<input type="text" value="1000 kW / 1474 HP / Displacement per cylinder: 2.68 L"/>

61014 TRUSTEES OF PRINCETON UNIVERSITY BOP180001 E59 (Emergency Generator)

Print Date: 6/9/2020

Make:   
Manufacturer:   
Model:

Maximum rated Gross Heat Input (MMBtu/hr-HHV):

Will the equipment be used in excess of 500 hours per year?  
 Yes  
 No

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

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

Comments:

New Jersey Department of Environmental Protection  
Control Device Inventory

CD NJID	Facility's Designation	Description	CD Type	Install Date	Grand-Fathered	Last Mod. (Since 1968)	CD Set ID
CD1	U17	MacMillan Paint Booth part. filter	Particulate Filter (Other)		No		
CD2	U18	CO Oxidation Catalyst	Oxidizer (Catalytic)		No		
CD3	U18	GT Water Injection system	Other		No		
CD4	U18	Heat Recovery Boiler Low NOx	Other		No		
CD5	U18	Low Nox Burner	Other		No		
CD6	U18	Flue gas recirculation	Other		No		
CD7	U18	Low Nox Burner	Other		No		
CD8	U18	Flue gas recirculation	Other		No		

Make:	<input type="text"/>
Manufacturer:	<input type="text" value="Englehard"/>
Model:	<input type="text" value="CatCO 600"/>
Minimum Inlet Temperature (deg F):	<input type="text" value="500"/>
Maximum Inlet Temperature (deg F):	<input type="text" value="1475"/>
Minimum Outlet Temperature (deg F):	<input type="text"/>
Maximum Outlet Temperature (deg F):	<input type="text"/>
Minimum Residence Time (sec):	<input type="text"/>
Fuel Type:	<input type="text" value="N/A"/>
Maximum Rated Gross Heat Input (MMBtu/hr):	<input type="text"/>
Minimum Pressure Drop Across Catalyst (psi):	<input type="text"/>
Maximum Pressure Drop Across Catalyst (psi):	<input type="text" value="2" w.c."=""/>
Catalyst Material:	<input type="text" value="Proprietary"/>
Form of Catalyst:	<input type="text"/>
Minimum Expected Life of Catalyst:	<input type="text" value="10"/>
Units:	<input type="text" value="years"/>
Volume of Catalyst (ft3):	<input type="text"/>
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	<input type="text" value="2 (one gas turbine and one duct burner)"/>
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	<input type="text" value="CO CEM"/>
Have you attached data from recent performance testing?	<input type="text" value="No"/>
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	<input type="text" value="No"/>
Have you attached a diagram showing the location and/or configuration of this control apparatus?	<input type="text"/>
Comments:	<input type="text"/>



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.		
PT2	120 Prosp	Boiler < 5 MMBTU/hr, E2 & E3	Round	10	50	12	360.0	252.0	468.0	376.0	263.0	489.0	Up	
PT3	171 Broad	Boiler < 5 MMBTU/hr, E4 & E5	Square	12	50	63	475.0	333.0	618.0	754.0	528.0	980.0	Up	
PT4	185 Nass	Boiler < 5 MMBTU/hr, E43 & E44	Square	20	45	70	360.0	252.0	468.0	1,800.0	800.0	2,000.0	Up	
PT5	L. Apts	Boiler < 5 MMBTU/hr, E48, E49, E50 & E51	Square	24	14	248	550.0	385.0	715.0	1,920.0	1,344.0	2,496.0	Up	
PT6	Charles	Emergency Generator, E9	Round	8	12	50	885.0	620.0	1,151.0	3,400.0	2,380.0	4,420.0	Horizontal	
PT7	E-Quad	Emergency Generator, E10	Round	9	26	400	963.0	674.0	1,252.0	750.0	525.0	975.0	Horizontal	
PT8	Forbes Main	Emergency Generator, E11	Round	4		300	1,045.0	732.0	1,359.0	750.0	525.0	975.0	Up	
PT9	Grad	Emergency Generator, E12	Round	4	35	500	1,015.0	711.0	1,320.0	1,480.0	1,036.0	1,924.0	Up	
PT12	L.T.L.	Emergency Generator, E15	Round	5	79	750	1,000.0	700.0	1,300.0	1,100.0	770.0	1,430.0	Horizontal	
PT13	Schultz	Emergency Generator, E16	Round	5	76	650	956.0	669.0	1,243.0	3,545.0	2,482.0	4,609.0	Horizontal	
PT16	Mac G	Gasoline Storage Tank, E19	Round	2	12	500	70.0	49.0	91.0				Up	
PT17	Mac P.S.B.	Paint Spray Booth, E20	Round	24	38	500	70.0	49.0	91.0	5,712.0	3,998.0	7,426.0	Up	
PT18	Co-Gen T	Co-Gen Turbine, E21 & E22	Round	78	100	340	340.0	334.0	978.0	124,800.0	78,600.0	220,600.0	Up	
PT19	Aux B1	189 MMBTU/hr Auxiliary Boiler, E23	Round	60	100	340	270.0	240.0	309.0	31,500.0	11,900.0	52,500.0	Up	
PT20	Aux B2	189 MMBTU/hr Auxiliary Boiler, E24	Round	60	100	340	270.0	240.0	309.0	31,500.0	11,900.0	52,500.0	Up	
PT21	ArtsEDG	Emerg. Gen. E25 Stack	Round	8	7	110			950.0			5,611.5	Up	
PT22	Emerg Gen	Emerg. Gen. E26 Stack	Round	12	14	100			729.8			14,338.0	Up	

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.		
PT24	Turbine II	Emergency Generator, E32	Round	8	45	500	865.0	565.0	1,063.0	1,794.0	855.0	3,404.0	Up	
PT25	Stadium	Emergency Generator, E33	Round	10	10	900	899.0	498.0	1,187.0	2,465.0	1,299.0	4,548.0	Up	
PT26	Tank	Fuel Oil Storage Tanks for Co-Gen Plant, E34-E38	Round	60	5	150	70.0	56.0	90.0				Up	
PT27	New South Bu	Emergency Generator, E39	Round	8	8	130	1,020.0	1,020.0	1,020.0	2,150.0	2,150.0	2,150.0	Up	
PT28	Campus Ctr.	Emergency Generator, E40	Round	6	10	83	1,002.0	65.0	1,002.0	2,452.0	0.0	2,452.0	Up	
PT29	Gen. Lab. EG	Genomics Laboratory Emergency Generator, E41	Round	20	66	100	800.0	700.0	900.0	7,700.0	6,500.0	8,500.0	Up	
PT30	HOYT BLDG E	Frick Building Emergency Generator, E42	Round	8	10	40	1,000.0	900.0	1,100.0	7,000.0	6,000.0	8,000.0	Up	
PT31	Lawrence EG	Lawrence Emergency Generator, E45	Round	4	10	248		740.0	1,000.0		1,000.0	2,170.0	Up	
PT32	200 Elm Dr.	200 Elm Emergency Generator, E46	Round	5	15	600		565.0	1,000.0		710.0	2,450.0	Horizontal	
PT33	87 Prospect	Emergency Generator, E47	Round	7	7	160	853.9	800.0	900.0	2,242.5	0.0	2,500.0	Up	
PT35	Portable gen	Portable Generator 800 kw	Round	8	14	340	851.0	545.0	955.0	3,704.0	1,720.0	6,046.0	Up	
PT36	NewChemistry	Emergency Generator, E54	Round	8	16	450	763.5	0.0	800.0	11,060.6	0.0	12,000.0	Up	
PT37	Neuro Psych	Emergency Generator, E55	Round	8	16	150	764.0	0.0	800.0	11,060.0	0.0	12,000.0	Up	
PT38	HOYT EDG	Emergency Generator, E56	Round	8	7	100			870.0			4,870.0	Up	
PT58	Andling EDG	Emerg. Gen. E58 Stack	Round	8	7	110			890.0			8,065.0	Up	
PT59	Sub EDG	Emerg. Gen. E59 Stack	Round	6	6	25			950.0			1,197.0	Up	



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

**U 2 120 Prosp St Two 1.01 MMBTU/hr Boilers at 120 Prospect Street, Firing Natural Gas**

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	boiler E2	E2 - Firing Natural Gas	Normal - Steady State	E2		PT2	1-05-002-06	8,760.0	8,760.0		263.0	489.0	252.0	468.0
OS2	boiler E3	E3 - Firing Natural Gas	Normal - Steady State	E3		PT2	1-05-002-06	8,760.0	8,760.0		263.0	489.0	252.0	468.0

**U 3 171 Broadmd Two 2.1 MMBTU/hr Boilers at 171 Broadmead Street, Firing Natural Gas**

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	boiler E4	E4 - Firing Natural Gas	Normal - Steady State	E4		PT3	1-05-002-06	8,760.0	8,760.0		528.0	980.0	333.0	618.0
OS2	boiler E5	E5 - Firing Natural Gas	Normal - Steady State	E5		PT3	1-05-002-06	8,760.0	8,760.0		528.0	980.0	333.0	618.0

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

**U 4 185 Nassau Two 2.4 MMBtu/hr Nassau Street Boilers, Firing Natural Gas**

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	Pack Boil 1	Package Boiler 1	Normal - Steady State	E43		PT4		0.0	8,760.0		800.0	1,000.0	250.0	470.0
OS2	Pack Boil 2	Package Boiler 2	Normal - Steady State	E44		PT4		0.0	8,760.0		800.0	1,000.0	250.0	470.0

**U 5 L Apts Four 1.43 MMBTU/hr Boilers at Lawrence Apartments, Firing Natural Gas**

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	L Apt Boil 1	Lawrence Apartments Boiler #1 Firing Natural Gas	Normal - Steady State	E48		PT5	1-05-002-06	0.0	8,760.0		1,344.0	2,496.0	305.0	715.0
OS2	L Apt Boil 2	Lawrence Apartments Boiler #2 Firing Natural Gas	Normal - Steady State	E49		PT5	1-05-002-06	0.0	8,760.0		1,344.0	2,496.0	305.0	715.0
OS3	L Apt Boil 3	Lawrence Apartments Boiler #3 Firing Natural Gas	Normal - Steady State	E50		PT5	1-05-002-06	0.0	8,760.0		1,344.0	2,496.0	305.0	715.0
OS4	L Apt Boil 4	Lawrence Apartments Boiler #4 Firing Natural Gas	Normal - Steady State	E51		PT5	1-05-002-06	0.0	8,760.0		1,344.0	2,496.0	305.0	715.0

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

U 16 Mac Gasoline 4,000 gallons Underground Unleaded Gasoline Storage Tank at MacMillan Building

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	Gas Tk E19	Tank E19	Normal - Steady State	E19		PT16	A25-01-050-120	0.0	8,760.0		0.0	1.0	49.0	91.0

U 17 Spray Bth Paint Spray Booth at MacMillan Building for Furniture Touch Up

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	E20	E20 - Spray Paint Items (Touch Up Furniture)	Normal - Steady State	E20	CD1 (P)	PT17	4-02-888-22	0.0	1,210.0		3,998.0	7,426.0	49.0	91.0

U 18 Cogen Plant Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiesel and two Auxiliary Boilers firing Natural Gas, No. 2 Fuel Oil or Biodiesel

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	E21 Turb NG	174 MM BTU/hr Turbine, Firing Natural Gas	Normal - Steady State	E21	CD2 (S) CD3 (P)	PT18	2-03-008-09	0.0	7,884.0		78,600.0	220,600.0	334.0	978.0

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

U 18 Cogen Plant Turbine with Duct Burner firing Natural Gas, No. 2 Fuel Oil or Biodiesel and two Auxiliary Boilers firing Natural Gas, No. 2 Fuel Oil or Biodiesel

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS2	Tur/DB -gas	174 MM BTU/hr Turbine, Firing Natural Gas and 151 MM Btu/hr Duct Burner firing Natural gas	Normal - Steady State	E21	CD2 (P) CD3 (P) CD4 (P)	PT18	2-03-008-09	0.0	2,880.0		78,600.0	220,600.0	334.0	978.0
OS3	E21 Turb oil	164 MM BTU/hr Turbine, Firing No. 2 Fuel Oil or Biodiesel	Normal - Steady State	E21	CD2 (S) CD3 (P)	PT18	2-03-008-09	0.0	876.0		78,600.0	220,600.0	334.0	978.0
OS5	Tur-oil/DB g	164 MM BTU/hr Turbine Firing No. 2 Fuel Oil or Biodiesel and Duct Burner Firing Natural gas	Normal - Steady State	E21	CD2 (S) CD3 (P)	PT18	2-03-008-09	0.0	876.0		78,600.0	220,600.0	334.0	978.0
OS6	Aux B11-gas	189 MM BTU/hr Auxiliary Boiler 1 firing Natural gas	Normal - Steady State	E23	CD5 (P) CD6 (S)	PT19	1-05-002-06	0.0	8,760.0		11,900.0	52,500.0	240.0	309.0
OS7	Aux B11-oil	179 MM BTU/hr Auxiliary Boiler 1, Firing No. 2 Fuel Oil or Biodiesel	Normal - Steady State	E23	CD5 (P) CD6 (S)	PT19	1-05-002-05	0.0	8,760.0		11,900.0	52,500.0	240.0	309.0
OS8	Aux B12-gas	189 MM BTU/hr Auxiliary Boiler 2 firing Natural gas	Normal - Steady State	E24	CD7 (P) CD8 (S)	PT20	1-05-002-06	0.0	8,760.0		11,900.0	52,500.0	240.0	309.0
OS9	Aux B12-oil	179 MM BTU/hr Auxiliary Boiler 2, Firing No. 2 Fuel Oil or Biodiesel	Normal - Steady State	E24	CD7 (P) CD8 (S)	PT20	1-05-002-05	0.0	8,760.0		11,900.0	52,500.0	240.0	309.0

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

U 29 Emerg Gens Emergency Generator Diesel Fuel Engines

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	Em. Gen E9	3.83 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.	Normal - Steady State	E9		PT6		0.0	500.0		2,380.0	4,420.0	620.0	1,151.0
OS2	Em. Gen E10	6.38 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.	Normal - Steady State	E10		PT7		0.0	500.0		525.0	975.0	674.0	1,252.0
OS3	Em. Gen E11	1.09 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.	Normal - Steady State	E11		PT8		0.0	500.0		525.0	975.0	732.0	1,359.0
OS4	Em. Gen E12	1.58 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.	Normal - Steady State	E12		PT9		0.0	500.0		1,036.0	1,924.0	711.0	1,320.0
OS6	Em. Gen E15	3.43 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.	Normal - Steady State	E15		PT12		0.0	500.0		770.0	1,430.0	700.0	1,300.0
OS7	Em. Gen E16	4.13 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.	Normal - Steady State	E16		PT13		0.0	500.0		2,482.0	4,609.0	669.0	1,243.0
OS9	Em. Gen E32	1.36 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.	Normal - Steady State	E32		PT24		0.0	500.0		855.0	3,404.0	565.0	1,063.0
OS10	Em. Gen E33	1.7 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.	Normal - Steady State	E33		PT25		0.0	500.0		1,299.0	4,548.0	498.0	1,187.0

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

U 29 Emerg Gens Emergency Generator Diesel Fuel Engines

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.
OS11	New South	2.681 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.	Normal - Steady State	E39		PT27		0.0	500.0		2,150.0	2,150.0	1,020.0	1,020.0
OS12	Campus Ctr	3.15 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.	Normal - Steady State	E40		PT28		0.0	500.0		0.0	2,452.0	65.0	1,002.0
OS13	Em. Gen E41	10.38 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.	Normal - Steady State	E41		PT29		0.0	500.0		6,500.0	8,500.0	700.0	900.0
OS14	EM. Gen E42	8.32 MMBtu/hr Engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.	Normal - Steady State	E42		PT30		0.0	500.0		6,000.0	8,000.0	900.0	1,100.0
OS15	Em. Gen. 45	2.65 MMBtu/hr engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.	Normal - Steady State	E45		PT31		0.0	500.0		1,000.0	2,170.0	740.0	1,000.0
OS16	Em. Gen. 46	3.15 MMBtu/hr engine firing diesel fuel. Not subject to 40 CFR 63 Subpart ZZZZ.	Normal - Steady State	E46		PT32		0.0	500.0		710.0	2,450.0	570.0	1,000.0
OS17	Em. Gen E47	2.70 MMBtu/hr Engine, E47 (250 KW output), Subject to NSPS 40 CFR 60 Subpart III	Normal - Steady State	E47		PT33	2-03-001-01	0.0	100.0		0.0	2,500.0	800.0	900.0
OS18	Portable Gen	7.95 MMBtu/hr Engine, E53 (800 KW output), Subject to NSPS 40 CFR 60 Subpart III	Normal - Steady State	E53		PT35		0.0	100.0		1,720.0	6,046.0	545.0	955.0



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

**Group NJID:** GR1 U18 OS1-OS5

**Members:**

Type	ID	OS	Step
U	U 18	OS1 E21 Turb NG	
U	U 18	OS2 Tur/DB -gas	
U	U 18	OS3 E21 Turb oil	
U	U 18	OS5 Tur-oil/DB g	

**Formal Reason(s) for Group/Cap:**

Other

**Other (explain):** Avoid duplication

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

**Operating Circumstances:**



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

**Group NJID:** GR3 U18 OS6-OS9

**Members:**

Type	ID	OS	Step
U	U 18	OS6 Aux B11-gas	
U	U 18	OS7 Aux B11-oil	
U	U 18	OS8 Aux B12-gas	
U	U 18	OS9 Aux B12-oil	

**Formal Reason(s) for Group/Cap:**

Other

**Other (explain):** Aux. Boiler #1 or #2 on Natural Gas (189 MMBTU/hr), No.2 Fuel Oil or Biodiesel (179 MMBTU/hr)

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

**Operating Circumstances:**

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

**Group NJID:** GR4 U29 /OS17-20

**Members:**

Type	ID	OS	Step
U	U 29	OS17 Em. Gen E47	
U	U 29	OS18 Portable Gen	
U	U 29	OS19 NewChemistry	
U	U 29	OS20 Neuro Psych	
U	U 29	OS21 HOYT EDG	
U	U 29	OS22 Andling EDG	
U	U 29	OS23 2000kW EmGen	
U	U 29	OS24 SubSta EDG	
U	U 29	OS25 ArtsEDG	

**Formal Reason(s) for Group/Cap:**

Other

**Other (explain):** NSPS IIII and NESHAP ZZZZ requirements applicable to the listed emergency engines

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

**Operating Circumstances:**

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

**Group NJID:** GR13 U18 OS6-OS9

**Members:**

Type	ID	OS	Step
U	U 18	OS6 Aux B11-gas	
U	U 18	OS7 Aux B11-oil	
U	U 18	OS8 Aux B12-gas	
U	U 18	OS9 Aux B12-oil	

**Formal Reason(s) for Group/Cap:**

Other

**Other (explain):** Aux. Boiler #1 or #2 on Natural Gas (189 MMBTU/hr), No. 2 Fuel Oil or Biodiesel (179 MMBTU/hr)

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

**Operating Circumstances:**