



State of New Jersey

Department of Environmental Protection
Air, Energy and Materials 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

SHAWN M. LATOURETTE
COMMISSIONER

Air Pollution Control Operating Permit Renewal with Significant Modification

Permit Activity Number: BOP190001

Program Interest Number: 83405

Mailing Address	Plant Location
Ronald F. Miller DIRECTOR - OPERATIONS TENNESSEE GAS PIPELINE CO 8 ANNGINA DR ENFIELD, CT 06082	TENNESSEE GAS PIPELINE COMPANY LLC 164 Libertyville Rd Rt 650 Wantage Twp Sussex County

Initial Operating Permit Approval Date: October 30, 2000

Operating Permit Approval Date: Proposed

Operating Permit Expiration Date:

AUTHORITY AND APPLICABILITY

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

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

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

PERMIT SHIELD

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

COMPLIANCE SCHEDULES

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

COMPLIANCE CERTIFICATIONS AND DEVIATION REPORTS

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

ACCESSING PERMITS

The facility's current approved operating permit and any previously issued permits (e.g. superseded, expired, or terminated) are available for download in PDF format at: <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 Michael Hogan at (609) 633-1124.

Approved by:

Aliya M. Khan

Enclosure

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

Facility Name: TENNESSEE GAS PIPELINE COMPANY LLC
Program Interest Number: 83405
Permit Activity Number: BOP190001

TABLE OF CONTENTS

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

Section A

Facility Name: TENNESSEE GAS PIPELINE COMPANY LLC
Program Interest Number: 83405
Permit Activity Number: BOP190001

POLLUTANT EMISSIONS SUMMARY

Table 1: Total emissions from all Significant Source Operations¹ at the facility.

Facility's Potential Emissions from all Significant Source Operations (tons per year)										
Source Categories	VOC (total)	NO _x	CO	SO ₂	TSP (total)	PM ₁₀ (total)	PM _{2.5} (total)	Pb	HAPs* (total)	CO ₂ e ²
Emission Units Summary	31.5	62.8	74.5	19.2	5.86	8.99	8.99	N / A	5.61	
Batch Process Summary	N / A	N / A	N / A	N / A	N / A	N / A	N / A	N / A	N / A	
Group Summary	N / A	N / A	N / A	N / A	N / A	N / A	N / A	N / A	N / A	
Total Emissions	31.5	62.8	74.5	19.2	5.86	8.99	8.99	N / A	5.61	173,845

Table 2: Estimate of total emissions from all Insignificant Source Operations¹ and total emissions from Non-Source Fugitives at the facility.

Emissions from all Insignificant Source Operations and Non-Source Fugitive Emissions (tons per year)									
Source Categories	VOC (total)	NO _x	CO	SO ₂	TSP (total)	PM ₁₀ (total)	PM _{2.5} (total)	Pb	HAPs (total)
Insignificant Source Operations	0.833	0.034	0.029	0.005	0.001	0.003	0.003	N / A	0.005
Non-Source Fugitive Emissions	6.14	N / A	N / A	N / A	N / A	N / A	N / A	N / A	N / A

VOC: Volatile Organic Compounds

NO_x: Nitrogen Oxides

CO: Carbon Monoxide

SO₂: Sulfur Dioxide

N/A: Indicates the pollutant is not emitted or is emitted below the reporting threshold specified in N.J.A.C. 7:27-22, Appendix, Table A and N.J.A.C. 7:27-17.9(a).

TSP: Total Suspended Particulates

Other: Any other air contaminant

regulated under the Federal CAA

PM₁₀: Particulates under 10 microns

PM_{2.5}: Particulates under 2.5 microns

Pb: Lead

HAPs: Hazardous Air Pollutants

CO₂e: Carbon Dioxide equivalent

*Emissions of individual HAPs are provided in Table 3 on the next page.

Emissions of "Other" air contaminants are provided in Table 4 on the next page.

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

² Total CO₂e emissions for the facility.

Section A

Facility Name: TENNESSEE GAS PIPELINE COMPANY LLC
Program Interest Number: 83405
Permit Activity Number: BOP190001

POLLUTANT EMISSIONS SUMMARY

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

HAP	TPY
Acetaldehyde	0.160
Acrolein	0.0295
Benzene	0.0481
Cadmium	0.0000305
Ethylbenzene	0.128
Formaldehyde	5.13
Naphthalene	0.00105
PAH	0.00179
Propylene Oxide	0.116

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

Other Air Contaminant	TPY
Methane	3.00

Table 5: Summary of “Other” air contaminants emissions from Insignificant Source Operations:

Other Air Contaminant	TPY
Methane	415

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

Section B

Facility Name: TENNESSEE GAS PIPELINE COMPANY LLC
Program Interest Number: 83405
Permit Activity Number: BOP190001

GENERAL PROVISIONS AND AUTHORITIES

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

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

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

Administrative Amendments [N.J.A.C. 7:27-22.20(c)];
Seven-Day Notice changes [N.J.A.C. 7:27-22.22(e)];
Minor Modifications [N.J.A.C. 7:27-22.23(e)];
Significant Modifications [N.J.A.C. 7:27-22.24(e)]; and
Renewals [N.J.A.C. 7:27-22.30(b)].
20. The operating permit renewal application consists of a RADIUS application and the application attachment available at the Department's website <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: TENNESSEE GAS PIPELINE COMPANY LLC

Program Interest Number: 83405

Permit Activity Number: BOP190001

STATE-ONLY APPLICABLE REQUIREMENTS

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

STATE-ONLY APPLICABLE REQUIREMENTS

The following applicable requirements are not federally enforceable:

<u>SECTION</u>	<u>SUBJECT ITEM</u>	<u>ITEM #</u>	<u>REF. #</u>
B	---	1	---
B	---	10b	---
D	FC	---	3
D	FC	---	9

Section D

Facility Name: TENNESSEE GAS PIPELINE COMPANY LLC
Program Interest Number: 83405
Permit Activity Number: BOP190001

FACILITY SPECIFIC REQUIREMENTS AND INVENTORIES

FACILITY SPECIFIC REQUIREMENTS PAGE INDEX

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

Facility (FC):

FC	1
----	---

Insignificant Sources (IS):

IS NJID	IS Description	
IS1	Natural Gas Fired Hot Water Heaters (<1.00 MMBtu/hr)	7
IS8	Purge of Taurus 70 Compressor (TXS < 0.1 lb/hr)	8
IS9	Shutdown Venting of Taurus 70 Compressor (TXS < 0.1 lb/hr)	9
IS11	Pipeline Inspection Gauge (Pig) Launcher Equipment (TXS < 0.1 lb/hr)	10
IS12	Pipeline Inspection Gauge (Pig) Receiver Equipment (TXS < 0.1 lb/hr)	10
IS16	Annual Station Emergency Shutdown (ESD) Test (TXS < 0.1 lb/hr)	11
IS18	Pipeline Venting (TXS < 0.1 lb/hr)	12
IS19	Purge of Titan 130 Centrifugal Compressor with Tandem Dry Gas Seals (TXS < 0.1 lb/hr)	14
IS20	Shutdown Venting of Titan 130 Centrifugal Compressor with Tandem Dry Gas Seals (TXS < 0.1 lb/hr)	15
IS21	Pipeline Liquids Tank (<2,000 gallons) & Truck Loading	16

Groups (GR):

GR NJID	GR Designation	GR Description	
GR1	NSPS OOOOa	Collection of fugitive emissions components at a compressor station	17

Emission Units (U):

U NJID	U Designation	U Description	
U3	1.89 Boiler	1.89 MMBtu/hr Gas-fired Peerless Boiler, Series 211-10WP used to heat water for domestic plant use	25
U7	GT7	94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression (GT7)	30
U8	GT8	94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression (GT8)	30
U9	316 kW Gen	316 kW (3.82 MMBtu/hr) Emergency Generator to be used during electrical service disruption	67
U10	GT10	172.22 MMBtu/hr Solar Titan 130 Gas Turbine used for natural gas compression (GT10)	81
U11	Em Gen	Emergency Generator	128

U12	4.6 Boiler	4.6 MMBtu/hr Gas-fired Parker Boiler	142
-----	------------	--------------------------------------	-----

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

Permit Being Modified

Permit Class: BOP **Number:** 180001

Description of Modifications: This is a renewal of Tennessee Gas Pipeline Company L.L.C. PI # 83405 Title V Operating Permit.

Significant Modification BOP200001 is also included in this renewal to incorporate the following new sources in the permit:

- 1) (1) 172.22 MMBtu/hr natural gas-fired turbine (U10)
- 2) (1) 11.4 MMBtu/hr natural gas-fired emergency generator (U11); Existing emergency generator (U9) to be removed from the facility once U11 is installed and operational.
- 3) (1) 4.6 MMBtu/hr natural gas-fired hot water boiler (U12); Existing boiler (U3) to be removed from the facility once U12 is installed and operational.
- 4) The following insignificant sources:
 - a) Purge of compressor powered by new turbine (IS19);
 - b) Shutdown venting of compressor powered by new turbine (IS20);
 - c) Pipeline Liquid Storage Tank & Truck loading (IS21)

Additional Changes to Permit:

- 1) Remove IS2 (parts washer) from the permit; it has been removed from the facility.
- 2) Remove IS6 (starting equipment) from the permit; these units are now electric.
- 3) Remove IS17 (pipeline blowdown event) from the permit; this was a duplication of IS18 that was inadvertently included in the permit.
- 4) Remove N.J.A.C.7:27-16.21 (Control and Prohibition of Air Pollution by VOCs: Natural Gas Pipelines) requirements from IS9 (Taurus 70 Compressor Shutdown Venting) because this rule does not apply to compressors only pipelines.
- 5) Reduce the CO annual emission limit for the boiler (U3) from 0.8 tpy to 0.677 tpy; this value was previously miscalculated.
- 6) Add hourly and annual methane emission limits for the turbines (U7/U8), pursuant to the Departments current policy, because potential emissions exceed the reporting threshold.
- 7) Add hourly and annual HAP emission limits, throughout the permit (U3: Cadmium; U7/U8 Acetaldehyde, Acrolein, Benzene, Ethylbenzene and Propylene Oxide; U9: Acrolein and Formaldehyde), because potential emissions exceed the post 2018 reporting thresholds (N.J.A.C. 7:27-17.9). Formaldehyde limits were already included for U7/U8.
- 8) Add a new operating scenario for Startup (OS3) and Shutdown (OS4) for the turbines (U7/U8); Include hourly emission limits that are appropriate for SU/SD. These values differ from emissions during OS1 and OS2 for NOx, CO, VOC and HAPs.
- 9) Increase annual emissions of CO and VOC to account for higher emissions during startup and shutdown (SU/SD).
- 10) Add a permit condition to require emergency generator (U9) to cease operation once (U11) is available for operation and boiler (U3) to cease operation once (U12) is available for operation.
- 11) Revise natural gas limits and emission limits, where applicable, to update value of natural gas heat content from 1050 MMBtu/MMScf to 1027 MMBtu/MMScf and maximum sulfur content of natural gas from 0.008% to 5 grains / 100 scf (U3, U7, U8, U9).
- 12) Round all permit limits to 3 significant digits, pursuant to current DEP policy.
- 13) Add summary of all applicable Federal regulations to OSS for each emission unit.
- 14) Clarify that VOC mass emission limits include formaldehyde emissions (U7/U8).
- 15) The expiration date of the renewed operating permit will be 5 years after the approval

New Jersey Department of Environmental Protection
Reason for Application

date of the renewed operating permit, rather than 5 years after the expiration date of the current permit.

16) Renewal stack testing language, in the permit, has been changed to require stack testing "every 5 years, based on the completion date of the last stack test", rather than "every permit term".

BOP190001

**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.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Compliance Certification: The permittee shall submit an annual Compliance Certification for each applicable requirement, pursuant to N.J.A.C. 7:27-22.19(f). [N.J.A.C. 7:27-22]	None.	None.	Submit an Annual Compliance Certification: Annually to the Department and to EPA within 60 days after the end of each calendar year during which this permit was in effect. The Compliance Certification shall be certified pursuant to N.J.A.C. 7:27-1.39 by the responsible official and submitted electronically through the NJDEP online web portal. The certification should be printed for submission to EPA. The NJDEP online web portal can be accessed at: http://www.state.nj.us/dep/online/ . The Compliance Certification forms and instructions for submitting to EPA are available by selecting Documents and Forms and then Periodic Compliance Certification. [N.J.A.C. 7:27-22]
8	Prevention of Air Pollution from Consumer Products and Architectural Coatings: The permittee shall comply with all applicable provisions of N.J.A.C. 7:27-24 and [N.J.A.C. 7:27-23]	None.	None.	None.
9	Any operation of equipment which causes off-property effects, including odors, or which might reasonably result in citizen's complaints shall be reported to the Department to the extent required by the Air Pollution Control Act, N.J.S.A. 26:2C-19(e). [N.J.S.A. 26: 2C-19(e)]	Other: Observation of plant operations. [N.J.S.A. 26: 2C-19(e)].	Other: Maintain a copy of all information submitted to the Department. [N.J.S.A. 26: 2C-19(e)].	Notify by phone: Upon occurrence of event. A person who causes a release of air contaminants in a quantity or concentration which poses a potential threat to public health, welfare or the environment or which might reasonably result in citizen complaints shall immediately notify the Department. Such notification shall be made by calling the Environmental Action Hotline at (877) 927-6337. [N.J.S.A. 26: 2C-19(e)]
10	Prevention of Significant Deterioration: The permittee shall comply with all applicable provisions of Prevention of Significant Deterioration (PSD). [40 CFR 52.21]	None.	None.	None.

BOP190001

**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]

BOP190001

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

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

BOP190001

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

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

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	If an operating permit has expired, the conditions of the operating permit, including the requirements for stack testing, remain enforceable until the operating permit is reissued.[N.J.A.C. 7:27-22.30(j)] and [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
22	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.

BOP190001

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

Subject Item: IS1 Natural Gas Fired Hot Water Heaters (<1.00 MMBtu/hr)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input < 1 MMBTU/hr (HHV). Pursuant to paragraph 1 of the definition of "insignificant source operation" and paragraph 11 of the definition of "significant source operation", commercial fuel burning equipment that has a maximum rated heat input of less than 1 MMBtu/hr (HHV) are insignificant source operations. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain documentation showing maximum heat input rating. [N.J.A.C. 7:27-22.16(o)].	None.
2	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.
3	Space heater fuel limited to natural gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP190001

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

Subject Item: IS8 Purge of Taurus 70 Compressor (TXS < 0.1 lb/hr)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The potential emission of any Group 1 or Group 2 TXS (or any combination thereof) shall not exceed 0.1 pounds during any 1 hour of operation. Pursuant to paragraph 1 of the definition of "insignificant source operation" and paragraph 16 of the definition of "significant source operation", a source is an insignificant source operation unless the source has the potential to emit any Group 1 or Group 2 TXS (or any combination thereof) at a rate greater than 0.1 pounds per hour (lb/hr) [N.J.A.C. 7:27-22.1]	None.	None.	None.
2	TSP <= 0.5 lb/hr. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
3	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
4	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Maximum number of compressor purge events shall not exceed 1 (for each unit, 3A and 4A) in any 1 hour period. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by observation 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. Maintain a record of each compressor purge event (for each unit 3A and 4A). Log the date and time that each event occurs. [N.J.A.C. 7:27-22.16(o)]	None.
6	Maximum number of compressor purge events shall not exceed 150 (for each unit, 3A and 4A) in any calendar year. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by observation 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. Maintain a record of total compressor purge events (for each unit 3A and 4A) each calendar year. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Subject Item: IS9 Shutdown Venting of Taurus 70 Compressor (TXS < 0.1 lb/hr)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The potential emission of any Group 1 or Group 2 TXS (or any combination thereof) shall not exceed 0.1 pounds during any 1 hour of operation. Pursuant to paragraph 1 of the definition of "insignificant source operation" and paragraph 16 of the definition of "significant source operation", a source is an insignificant source operation unless the source has the potential to emit any Group 1 or Group 2 TXS (or any combination thereof) at a rate greater than 0.1 pounds per hour (lb/hr) [N.J.A.C. 7:27-22.1]	None.	None.	None.
2	TSP <= 0.5 lb/hr. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
3	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
4	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Maximum number of compressor shutdown venting events shall not exceed 1 (for each unit, 3A and 4A) in any 1 hour period. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by observation 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. Maintain a record of each compressor shutdown venting event (for each unit 3A and 4A). Log the date and time that each event occurs. [N.J.A.C. 7:27-22.16(o)]	None.
6	Maximum number of compressor shutdown venting events shall not exceed 150 (for each unit, 3A and 4A) in any calendar year. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by observation 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. Maintain a record of total compressor shutdown venting events (for each unit, 3A and 4A) each calendar year. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Subject Item: IS11 Pipeline Inspection Gauge (Pig) Launcher Equipment (TXS < 0.1 lb/hr), IS12 Pipeline Inspection Gauge (Pig) Receiver Equipment (TXS < 0.1 lb/hr)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The potential emission of any Group 1 or Group 2 TXS (or any combination thereof) shall not exceed 0.1 pounds during any 1 hour of operation. Pursuant to paragraph 1 of the definition of "insignificant source operation" and paragraph 16 of the definition of "significant source operation", a source is an insignificant source operation unless the source has the potential to emit any Group 1 or Group 2 TXS (or any combination thereof) at a rate greater than 0.1 pounds per hour (lb/hr) [N.J.A.C. 7:27-22.1]	None.	None.	None.
2	TSP <= 0.5 lb/hr. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
3	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
4	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Maximum number of pig launching and pig receiving events shall not exceed 1 each in any 1 hour period. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by observation 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. Maintain a record of each pig launching and pig receiving event. Log the date and time that each event occurs. [N.J.A.C. 7:27-22.16(o)]	None.
6	Maximum number of pig launching and pig receiving events shall not exceed 6 each in any calendar year. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by observation 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. Maintain a record of total pig launching and pig receiving events each calendar year. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Subject Item: IS16 Annual Station Emergency Shutdown (ESD) Test (TXS < 0.1 lb/hr)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The potential emission of any Group 1 or Group 2 TXS (or any combination thereof) shall not exceed 0.1 pounds during any 1 hour of operation. Pursuant to paragraph 1 of the definition of "insignificant source operation" and paragraph 16 of the definition of "significant source operation", a source is an insignificant source operation unless the source has the potential to emit any Group 1 or Group 2 TXS (or any combination thereof) at a rate greater than 0.1 pounds per hour (lb/hr) [N.J.A.C. 7:27-22.1]	None.	None.	None.
2	TSP <= 0.5 lb/hr. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
3	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
4	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Maximum number of station ESD test events shall not exceed 1 in any 1 hour period. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by observation 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. Maintain a record of each station ESD test event. Log the date and time that each event occurs. [N.J.A.C. 7:27-22.16(o)]	None.
6	Maximum number of station ESD test events shall not exceed 1 in any calendar year. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by observation 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. Maintain a record of total station ESD test events each calendar year. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Subject Item: IS18 Pipeline Venting (TXS < 0.1 lb/hr)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The potential emission of any Group 1 or Group 2 TXS (or any combination thereof) shall not exceed 0.1 pounds during any 1 hour of operation. Pursuant to paragraph 1 of the definition of "insignificant source operation" and paragraph 16 of the definition of "significant source operation", a source is an insignificant source operation unless the source has the potential to emit any Group 1 or Group 2 TXS (or any combination thereof) at a rate greater than 0.1 pounds per hour (lb/hr) [N.J.A.C. 7:27-22.1]	None.	None.	None.
2	TSP <= 0.5 lb/hr. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
3	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
4	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Maximum number of pipeline venting events shall not exceed 1 in any 24 hour period. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by observation 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. Maintain a record of each pipeline venting event. Log the date and time that each event occurs. [N.J.A.C. 7:27-22.16(o)]	None.
6	Maximum number of pipeline venting events shall not exceed 1 in any calendar year. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by observation 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. Maintain a record of total pipeline venting events each calendar year. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	<p>On or before March 1st of each year, submit a report of each blowdown event that occurred during the preceding year to the Northern Regional Enforcement Office.</p> <p>The report should include the location, date, and duration of each blowdown event, a description of the emissions reduction procedures and technology used, and a quantification of the amount of VOC emission reductions achieved for each event.</p> <p>A "blowdown event" is defined as the non-emergency release of natural gas from a pipeline for the purpose of inspection, maintenance or repair and where, in the absence of control, more than 2,000 pounds of VOC could be released to the atmosphere. [N.J.A.C. 7:27-16.21(c)]</p>	None.	None.	Submit a report: Annually to the Northern Regional Office before March 1 of each year. [N.J.A.C. 7:27-16.21(c)]
8	<p>A copy of the Control Measure Plan required by N.J.A.C. 7:27-16.21(a) shall be maintained at the office having operating responsibility for the section of pipeline in which the blowdown event(s) will occur. A copy of such plan shall be provided to the Department within three days of receipt of a written request from the Department. [N.J.A.C. 7:27-16.21(d)]</p>	None.	Other: Maintain the Control Measure Plan at the office having operating responsibility for the section of pipeline in which the blowdown event(s) will occur.[N.J.A.C. 7:27-16.21(d)].	None.

BOP190001

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

Subject Item: IS19 Purge of Titan 130 Centrifugal Compressor with Tandem Dry Gas Seals (TXS < 0.1 lb/hr)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The potential emission of any Group 1 or Group 2 TXS (or any combination thereof) shall not exceed 0.1 pounds during any 1 hour of operation. Pursuant to paragraph 1 of the definition of "insignificant source operation" and paragraph 16 of the definition of "significant source operation", a source is an insignificant source operation unless the source has the potential to emit any Group 1 or Group 2 TXS (or any combination thereof) at a rate greater than 0.1 pounds per hour (lb/hr) [N.J.A.C. 7:27-22.1]	None.	None.	None.
2	TSP <= 0.5 lb/hr. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
3	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
4	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Maximum number of compressor purge events shall not exceed 1 in any 1 hour period. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by observation 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. Maintain a record of each compressor purge event. Log the date and time that each event occurs. [N.J.A.C. 7:27-22.16(o)]	None.
6	Maximum number of compressor purge events shall not exceed 60 in any calendar year. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by observation 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. Maintain a record of total compressor purge events each calendar year. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Subject Item: IS20 Shutdown Venting of Titan 130 Centrifugal Compressor with Tandem Dry Gas Seals (TXS < 0.1 lb/hr)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The potential emission of any Group 1 or Group 2 TXS (or any combination thereof) shall not exceed 0.1 pounds during any 1 hour of operation. Pursuant to paragraph 1 of the definition of "insignificant source operation" and paragraph 16 of the definition of "significant source operation", a source is an insignificant source operation unless the source has the potential to emit any Group 1 or Group 2 TXS (or any combination thereof) at a rate greater than 0.1 pounds per hour (lb/hr) [N.J.A.C. 7:27-22.1]	None.	None.	None.
2	TSP <= 0.5 lb/hr. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
3	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
4	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Maximum number of compressor shutdown venting events shall not exceed 1 in any 1 hour period. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by observation 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. Maintain a record of each compressor shutdown venting event. Log the date and time that each event occurs. [N.J.A.C. 7:27-22.16(o)]	None.
6	Maximum number of compressor shutdown venting events shall not exceed 60 in any calendar year. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by observation 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. Maintain a record of total compressor shutdown venting events each calendar year. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Subject Item: IS21 Pipeline Liquids Tank (<2,000 gallons) & Truck Loading

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Storage Tank Capacity < 2,000 gallons Pursuant to paragraph 1 of the definition of "insignificant source operation" and paragraph 8 of the definition of "significant source operation", any stationary storage tank with a capacity of less than 2,000 gallons which is used for the storage of a VOC or a mixture of VOCs having a vapor pressure or sum of partial pressures of 0.02 pounds per square inch absolute, is an insignificant source. [N.J.A.C. 7:27-22.1]	None.	None.	None.
2	The material stored shall be pipeline liquids only. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Truck loading is defined as the transfer of pipeline liquids from the pipeline liquids tank to a truck for removal from the facility. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP190001

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

Subject Item: GR1 Collection of fugitive emissions components at a compressor station

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	At all times, including periods of startup, shutdown and malfunction, the permittee shall maintain and operate the fugitive emission components including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions of methane and VOC. [40 CFR 60.5370a(b)]	Other: 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 operating and maintenance procedures, and inspection of the source.[40 CFR 60.5370a(b)].	None.	None.
2	The permittee shall develop an emissions monitoring plan that covers the collection of fugitive emissions components at compressor stations within each company-defined area. [40 CFR 60.5397a(b)]	None.	None.	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<p>Fugitive emissions monitoring plans shall include the following at a minimum:</p> <p>(1) Frequency for conducting surveys. Conduct at least as frequently as required by 40 CFR 60.5397a(f)(2) and (g)(2).</p> <p>(2) Technique for determining fugitive emissions of VOC and methane (i.e., Method 21 at 40 CFR 60, appendix A-7, or optical gas imaging).</p> <p>(3) Manufacturer and model number of fugitive emissions detection equipment to be used.</p> <p>(4) Procedures and timeframes for identifying and repairing fugitive emissions components from which fugitive emissions are detected, including timeframes for fugitive emission components that are unsafe to repair. The repair schedule shall meet the requirements of 40 CFR 60.5397a(h) at a minimum.</p> <p>(5) Procedures and timeframes for verifying fugitive emission component repairs.</p> <p>(6) Records that will be kept and the length of time records will be kept. [40 CFR 60.5397a(c)]</p>	None.	None.	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	<p>If optical gas imaging (OGI) is used, the fugitive emissions monitoring plan shall also include:</p> <p>(i) Verification that the OGI equipment meets these specifications:</p> <p>(A) The OGI equipment must be capable of imaging gases in the spectral range for the compound of highest concentration in the potential fugitive emissions.</p> <p>(B) The OGI equipment must be capable of imaging a gas that is half methane, half propane at a concentration of 10,000 ppmv at a flow rate of ≤ 60g/hr from a 0.25-inch diameter orifice.</p> <p>(ii) Procedure for a daily verification check.</p> <p>(iii) Procedure for determining the operator's maximum viewing distance from the equipment and how the operator will ensure that this distance is maintained.</p> <p>(iv) Procedure for determining maximum wind speed during which monitoring can be performed and how the operator will ensure monitoring occurs only at lower wind speeds.</p> <p>(v) Procedures for conducting surveys, including:</p> <p>(A) How the operator will ensure an adequate thermal background is present.</p> <p>(B) How the operator will deal with adverse monitoring conditions, such as wind.</p> <p>(C) How the operator will deal with interferences (e.g., steam).</p> <p>(vi) Training and experience needed prior to performing surveys.</p> <p>(vii) Procedures for calibration and maintenance. At a minimum, procedures must comply with manufacturer's recommendations. [40 CFR 60.5397a(c)(7)]</p>	None.	None.	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	<p>If using Method 21 of appendix A-7 of 40 CFR 60, the fugitive emissions monitoring plan shall also include:</p> <p>(i) Verification that the monitoring equipment meets the requirements specified in Section 6.0 of Method 21 at 40 CFR 60, appendix A-7. For purposes of instrument capability, the fugitive emissions definition shall be 500 ppm or greater methane using a FID-based instrument. If using an analyzer other than a FID-based instrument, develop a site-specific fugitive emission definition that would be equivalent to 500 ppm methane using a FID-based instrument (e.g., 10.6 eV PID with a specified isobutylene concentration as the fugitive emission definition would provide equivalent response to the compound of interest).</p> <p>(ii) Procedures for conducting surveys. At a minimum, the procedures shall ensure that the surveys comply with the relevant sections of Method 21 at 40 CFR 60, appendix A-7, including Section 8.3.1.</p> <p>(iii) Procedures for Calibration. See "PROCEDURES FOR CALIBRATION" below.</p> <p>[40 CFR 60.5397a(c)(8)]</p>	None.	None.	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	<p>PROCEDURES FOR CALIBRATION. The instrument must be calibrated daily before use pursuant to Method 21 at 40 CFR60, appendix A-7 (M21, A-7). At a minimum, precision tests must be conducted pursuant to M21, A-7, Section 8.1.2, and a calibration drift assessment conducted at the end of each monitoring day, using the same calibration gas that was used to calibrate the instrument before use. Follow the procedures specified in M21, A-7, Section 10.1, but do not adjust the meter readout to correspond to the calibration gas value. If multiple scales are used, record the instrument reading for each scale used. Divide the arithmetic difference of the initial and post-test calibration response by the corresponding calibration gas value for each scale and multiply by 100 to express the calibration drift as a percentage.</p> <p>For a negative drift of more than 10 percent, all equipment with instrument readings between the fugitive emission definition multiplied by (100 minus the percent of negative drift/divided by 100) and the fugitive emission definition that was monitored since the last calibration must be re-monitored.</p> <p>For a positive drift of more than 10 percent from the initial calibration value, at the owner/operator's discretion, all equipment with instrument readings above the fugitive emission definition and below the fugitive emission definition multiplied by (100 plus the percent of positive drift/divided by 100) monitored since the last calibration may be re-monitored. [40 CFR 60.5397a(c)(8)(iii)]</p>	None.	None.	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Each fugitive emissions monitoring plan shall include the following, at a minimum, as applicable: (1) Sitemap. (2) A defined observation path that ensures that all fugitive emissions components are within sight of the path. The observation path shall account for interferences. (3) If using Method 21, the plan shall also include a list of fugitive emissions components to be monitored and method for determining location of fugitive emissions components to be monitored in the field (e.g. tagging, identification on a process and instrumentation diagram, etc.). (4) The plan shall also include the written plans developed for all of the fugitive emission components designated as difficult-to-monitor in accordance with 40 CFR 60.5397a(g)(3)(i), and the written plan for fugitive emission components designated as unsafe-to monitor in accordance with 40 CFR 60.5397a(g)(3)(ii). [40 CFR 60.5397a(d)]	None.	None.	None.
8	The permittee shall conduct an initial monitoring survey within 60 days of the startup of a new compressor station for each new collection of fugitive emissions components at the new compressor station or by June 3, 2017, whichever is later. For a modified collection of fugitive components at a compressor station, the initial monitoring survey shall be conducted within 60 days of the modification or by June 3, 2017, whichever is later. [40 CFR 60.5397a(f)(2)]	Other: The permittee shall observe each fugitive emissions component, as defined in 40 CFR 60.5430a, for fugitive emissions. Fugitive emissions are defined as: Any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 ppmv or greater using Method 21. [40 CFR 60.5397a(a)] & [40 CFR 60.5397a(e)].	Other: The permittee shall maintain records as specified at 40 CFR 60.5420a(c)(15). [40 CFR 60.5410a(j)(3)].	Submit a report: Once initially no later than 90 days after the end of the initial compliance period as determined according to 40 CFR 60.5410a. The initial annual report shall include the general facility information and certification per 40 CFR 60.5420a(b)(1) and the records of the initial monitoring survey per 40 CFR 60.5420a(b)(7)(i) through (xii). Multiple collection of fugitive emissions components at a compressor station may be included in a single report. [40 CFR 60.5410a(j)(5)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	A monitoring survey of the collection of fugitive emissions components at a compressor station within a company-defined area must be conducted at least quarterly after the initial survey. Consecutive quarterly monitoring surveys must be conducted at least 60 days apart. [40 CFR 60.5397a(g)(2)]	Monitored by periodic emission monitoring quarterly: once per quarter; quarters shall begin on January 1, April 1, July 1, and October 1 of each year. The permittee shall observe each fugitive emissions component at least quarterly, as defined in 40 CFR 60.5430a, for fugitive emissions of VOC. Fugitive emissions are defined as: Any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 ppmv or greater using Method 21. [40 CFR 60.5397a(a)] &. [40 CFR 60.5397a(e)]	Recordkeeping by manual logging of parameter or storing data in a computer data system quarterly: once per quarter; quarters shall begin on January 1, April 1, July 1, and October 1 of each year. The permittee shall maintain records as specified at 40 CFR 60.5420a(c)(15) for at least 5 years. [40 CFR 60.5397a(i)]	Submit a report: Annually. Annual reports shall include the general facility information and certification per 40 CFR 60.5420a(b)(1) and the records of each monitoring survey per 40 CFR 60.5420a(b)(7)(i) through (xii). Multiple collection of fugitive emissions components at a compressor station may be included in a single annual report. The annual reports are due no later than same date each year as the initial annual report. [40 CFR 60.5397a(j)] &. [40 CFR 60.5420a(b)]
10	Fugitive emissions components that cannot be monitored without elevating the monitoring personnel more than two meters above the surface may be designated as difficult-to-monitor, and must meet the following specifications: (i) A written plan shall be developed for all of the fugitive emissions components designated difficult-to-monitor. This written plan shall be incorporated into the fugitive emissions monitoring plan required by 40 CFR 60.5397a(b), (c), and (d). (ii) The plan shall include the identification and location of each fugitive emissions component designated as difficult-to-monitor. (iii) The plan shall include an explanation of why each fugitive emissions component designated as difficult-to-monitor is difficult-to-monitor. (iv) The plan shall include a schedule for monitoring the difficult-to-monitor fugitive emissions components at least once per calendar year. [40 CFR 60.5397a(g)(3)]	Other: The permittee shall observe each fugitive emissions component, as defined in 40 CFR 60.5430a, for fugitive emissions. Fugitive emissions are defined as: Any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 ppmv or greater using Method 21. [40 CFR 60.5397a(a)] &[40 CFR 60.5397a(e)].	Other: The permittee shall maintain records as specified at 40 CFR 60.5420a(c)(15).[40 CFR 60.5397a(i)].	Submit a report: Annually. Annual reports shall include the general facility information and certification per 40 CFR 60.5420a(b)(1) and the records of each monitoring survey per 40 CFR 60.5420a(b)(7)(i) through (xii). Multiple collection of fugitive emissions components at a compressor station may be included in a single annual report. The annual reports are due no later than same date each year as the initial annual report. [40 CFR 60.5397a(j)] &. [40 CFR 60.5420a(b)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	<p>Fugitive emissions components that cannot be monitored because monitoring personnel would be exposed to immediate danger while conducting a monitoring survey may be designated as unsafe-to-monitor, and must meet the following specifications:</p> <p>(i) A written plan shall be developed for all of the fugitive emissions components designated unsafe-to-monitor. This written plan shall be incorporated into the fugitive emissions monitoring plan required by 40 CFR 60.5397a(b), (c), and (d).</p> <p>(ii) The plan shall include the identification and location of each fugitive emissions component designated as unsafe-to-monitor.</p> <p>(iii) The plan shall include an explanation of why each fugitive emissions component designated as unsafe-to-monitor is unsafe-to-monitor.</p> <p>(iv) The plan shall include a schedule for monitoring the fugitive emissions components designated as unsafe-to-monitor. [40 CFR 60.5397a(g)(4)]</p>	<p>Other: The permittee shall observe each fugitive emissions component, as defined in 40 CFR 60.5430a, for fugitive emissions. Fugitive emissions are defined as: Any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 ppmv or greater using Method 21. [40 CFR 60.5397a(a)] & [40 CFR 60.5397a(e)].</p>	<p>Other: The permittee shall maintain records as specified at 40 CFR 60.5420a(c)(15). [40 CFR 60.5397a(i)].</p>	<p>Submit a report: Annually. Annual reports shall include the general facility information and certification per 40 CFR 60.5420a(b)(1) and the records of each monitoring survey per 40 CFR 60.5420a(b)(7)(i) through (xii). Multiple collection of fugitive emissions components at a compressor station may be included in a single annual report. The annual reports are due no later than same date each year as the initial annual report. [40 CFR 60.5397a(j)] & [40 CFR 60.5420a(b)]</p>
12	<p>Each identified source of fugitive emissions shall be repaired or replaced as soon as practicable, but no later than 30 calendar days after detection of the fugitive emissions. If the repair or replacement is technically infeasible, would require a vent blowdown, a compressor station shutdown, a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit, the repair or replacement must be completed during the next scheduled compressor station shutdown, well shutdown, well shut-in, after a planned vent blowdown or within two years, whichever is earlier. [40 CFR 60.5397a(h)(1)] & [40 CFR 60.5397a(h)(2)]</p>	<p>Other: A fugitive emissions component is repaired when:</p> <p>(1) the Method 21 instrument indicates a concentration of less than 500 ppmv VOC as methane above background or when no soap bubbles are observed when the alternative screening procedures specified in section 8.3.3 of Method 21 are used; or</p> <p>(2) the optical gas imaging instrument shows no indication of visible emissions. [40 CFR 60.5397a(h)(3)(iii)] & [40 CFR 60.5397a(h)(3)(iv)].</p>	<p>Other: The permittee shall maintain records as specified at 40 CFR 60.5420a(c)(15). [40 CFR 60.5397a(i)].</p>	<p>Repair equipment: Upon occurrence of event. Each repaired or replaced fugitive emissions component shall be resurveyed as soon as practicable, but no later than 30 days after being repaired.</p> <p>For repairs that cannot be made during the monitoring survey when the fugitive emissions are initially found, the permittee shall resurvey the repaired fugitive emissions components using Method 21 or optical gas imaging.</p> <p>For each repair that cannot be made during the monitoring survey when the fugitive emissions were initially found, a digital photograph (including date and location) shall be taken of that component or the component shall be tagged for identification purposes. [40 CFR 60.5397a(h)(3)]</p>

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	<p>For each collection of fugitive emissions components at a compressor station, the permittee shall demonstrate continuous compliance with the fugitive emission standards specified in 40 CFR 60.5397a.</p> <p>(1) The permittee shall conduct periodic monitoring surveys as required in 40 CFR 60.5397a(g).</p> <p>(2) The permittee shall repair or replace each identified source of fugitive emissions as required in 40 CFR 60.5397a(h).</p> <p>(3) The permittee shall maintain records as specified in 40 CFR 60.5420a(c)(15).</p> <p>(4) The permittee shall submit annual reports for each collection of fugitive emissions components at a compressor station as required in 40 CFR 60.5420a(b)(1) and (7). [40 CFR 60.5415a(h)]</p>	None.	None.	<p>Submit a report: Annually. Annual reports shall include the general facility information and certification per 40 CFR 60.5420a(b)(1) and the records of each monitoring survey per 40 CFR 60.5420a(b)(7)(i) through (xii). Multiple collection of fugitive emissions components at a compressor station may be included in a single annual report. The annual reports are due no later than same date each year as the initial annual report. [40 CFR 60.5397a(j)] &. [40 CFR 60.5420a(b)]</p>

BOP190001

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

Emission Unit: U3 1.89 MMBtu/hr Gas-fired Peerless Boiler, Series 211-10WP used to heat water for domestic plant use

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Boiler (U3) shall permanently cease operation when the new Boiler (U12) is available for operation. [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 shall record the date of initial operation of the new Boiler (U12, E12). [N.J.A.C. 7:27-22.16(o)]	Submit notification: As per the approved schedule. The permittee shall notify the Northern Regional Office (NRO), at least 60 days prior to removal of the equipment and provide the Department the opportunity to inspect the equipment at least 30 days before it is dismantled. [N.J.A.C. 7:27-18]
2	Natural Gas Usage \leq 16.1 MMft ³ per any 12 consecutive month period, rolling one month basis. Annual natural gas consumption limit for boiler. Based on combustion of natural gas for 8760 hr/yr with a natural gas heating value of 1027 MMBtu/MMScf and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	NOx (Total) \leq 0.806 tons/yr. Annual emission limit based on permitted hourly emission rate and combustion of natural gas for 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations once initially. [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 once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
4	CO \leq 0.677 tons/yr. Annual emission limit based on permitted hourly emission rate and combustion of natural gas for 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
5	HAPs (Total) \leq 0.00000887 tons/yr. Annual emission limit, based on the sum of all permitted HAPs (those with a PTE above the N.J.A.C. 7:27-17 reporting threshold). [N.J.A.C. 7:27-22.16(a)]	HAPs (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	HAPs (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Cadmium Emissions \leq 0.00000887 tons/yr. Annual emission limit, based on AP-42 (table 1.4-4) emission factor and combustion of all permitted natural gas. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Emission Unit: U3 1.89 MMBtu/hr Gas-fired Peerless Boiler, Series 211-10WP used to heat water for domestic plant use

Operating Scenario: OS1 G.F. Boiler

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. NOTE: This requirement applies during all operation of the boiler, including periods of start-up and shut down. [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.
2	Particulate Emissions \leq 1.13 lb/hr. Particulate emission limit from the combustion of natural gas based on rated heat input of the source (1.89 MMBtu/hr). [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Boiler fuel limited to Natural Gas. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	Maximum Gross Heat Input \leq 1.89 MMBTU/hr (HHV) . [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain documentation showing the maximum heat input rating.[N.J.A.C. 7:27-22.16(o)].	None.
5	NO _x (Total) \leq 0.184 lb/hr. Hourly emission limit based on AP-42 (Table 1.4-1) emission factor, natural gas heating value of 1027 MMBtu/MMScf and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	NO _x (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	NO _x (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
6	CO \leq 0.155 lb/hr. Hourly emission limit based on AP-42 (Table 1.4-1) emission factor, natural gas heating value of 1027 MMBtu/MMScf and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	VOC (Total): Hourly emission limit is below the reporting threshold of 0.05 lb/hr, in N.J.A.C. 7:27-22 (Appendix A). [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
8	SO ₂ : Hourly emission limit is below the reporting threshold of 0.05 lb/hr, in N.J.A.C. 7:27-22 (Appendix A). [N.J.A.C. 7:27-22.16(e)]	SO ₂ : Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO ₂ : Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
9	TSP: Hourly emission limit is below the reporting threshold of 0.05 lb/hr, in N.J.A.C. 7:27-22 (Appendix A). [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
10	PM-10 (Total): Hourly emission limit is below the reporting threshold of 0.05 lb/hr, in N.J.A.C. 7:27-22 (Appendix A). [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
11	PM-2.5 (Total): Hourly emission limit is below the reporting threshold of 0.05 lb/hr, in N.J.A.C. 7:27-22 (Appendix A). [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
12	Cadmium Emissions <= 0.00000202 lb/hr. Hourly emission limit based on AP-42 (Table 1.4-4), natural gas heating value of 1027 MMBtu/MMScf and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP190001

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U7 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression (GT7), U8 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression (GT8)

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR 60 Subpart A; and Subpart KKKK of [40 CFR 60]	None.	None.	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<p>RENEWAL STACK TESTING SUMMARY: (NOx and CO)</p> <p>The permittee shall conduct a stack test no later than every 5 years (see General Provisions) from the last stack test using an approved protocol to demonstrate compliance with emission limits for NOx and CO as specified in the compliance plan for OS Summary and OS1. 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 with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>The permittee may propose, in the stack test protocol, to use CEMS data to satisfy the stack testing requirements, for NOx and/or CO, with EMS approval. In order for EMS to approve using CEMS data at the time of the stack test, the CEMS must be certified and be in compliance with all daily, quarterly and annual quality assurance requirements. The CEMS shall monitor and record emissions in units identical to those required by the applicable stack testing conditions of this permit. CEMS data, if allowed by this permit, shall be taken at the same worst case conditions as described above. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitoring as required under the applicable operating scenario(s).</p> <p>In accordance with N.J.A.C. 7:27-19.15(a)2, any NOx testing conducted pursuant to this section shall be conducted concurrently with CO testing. The applicable NOx emission limits in N.J.A.C. 7:27-19 will not be considered to have been met unless the concurrent CO testing demonstrates compliance with the CO limit in N.J.A.C. 7:27-16 or the permit limit for CO, whichever is more stringent, is also met.[N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 no later than 12 months prior to the completion of the five year period since the last stack test. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: https://www.epa.gov/chief.</p> <p>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>

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<p>ANNUAL STACK TESTING SUMMARY: (NOx and CO)</p> <p>The permittee shall conduct an annual stack test required by NSPS 40CFR 60 Subpart KKKK and NJDEP using a protocol approved by the Department to demonstrate compliance with emission limits for NOx and CO as specified in the compliance plan for OS Summary and OS1. The permittee shall provide EMS with the turbine load performance curve with the protocol. Renewal stack testing conducted for NOx and CO shall fulfill the requirement of this annual stack test, for the calendar year in which it was conducted.</p> <p>Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitoring as required under the applicable operating scenario(s) and NSPS KKKK.</p> <p>In accordance with N.J.A.C. 7:27-19.15(a)2, any NOx testing conducted pursuant to this section shall be conducted concurrently with CO testing. The applicable NOx emission limits in N.J.A.C. 7:27-19 will not be considered to have been met unless the concurrent CO testing demonstrates compliance with the CO limit in N.J.A.C. 7:27-16 or the permit limit for CO, whichever is more stringent, is also met.[N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 no later than 180 days prior to the testing due date or request from EMS, in writing, to use a previously approved protocol no later than 90 days prior to the testing due date. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: https://www.epa.gov/chief.</p> <p>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).</p> <p>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>CO <= 250 ppmvd @ 15% O2. VOC RACT rule emission limit applies during all operation of the combustion turbine. [N.J.A.C. 7:27-16.9(b)]</p>	<p>CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-16.22(o)]</p>	<p>CO: Recordkeeping by stack test results upon occurrence of event. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [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. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.19(d)]</p>

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	VOC (Total) <= 50 ppmvd @ 15% O ₂ . VOC RACT rule emission limit applies during all operation of the combustion turbine. [N.J.A.C. 7:27-16.9(c)]	None.	None.	None.
6	NO _x (Total) <= 42 ppm @ 15% O ₂ . NO _x RACT rule emission limit applies during all operation of the combustion turbine. [N.J.A.C. 7:27-19.5(l)]	NO _x (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NO _x (Total): Recordkeeping by stack test results upon occurrence of event. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]
7	The owner or operator of a stationary combustion turbine that has a maximum gross heat input rate of 25 million BTU per hour or more and associated duct burner (if a duct burner is installed) shall adjust the combustion process in accordance with the procedure set forth at N.J.A.C. 7:27-19.16(g) and in accordance with the manufacturer's recommended procedures and maintenance schedules for those sources. [N.J.A.C. 7:27-22.16(a)], [N.J.A.C. 7:27-16.9(f)] and [N.J.A.C. 7:27-19.5(e)]	Other: Monitored by continuous emission monitoring (CEMS) or by periodic emission monitoring upon performing combustion adjustment. If not using a certified CEMS, monitoring shall be performed in accordance with the specific procedures for combustion adjustment monitoring specified in NJDEP Technical Manual 1005. [N.J.A.C. 7:27-19.16(g)].	Recordkeeping by data acquisition system (DAS) / electronic data storage upon performing combustion adjustment or by manual logging of parameter or storing data in a computer data system. The permittee shall record the following information for each adjustment in a log book or computer data system: 1. The date and times the adjustment began and ended; 2. The name, title, and affiliation of the person who performed the procedure and adjustment; 3. The type of procedure and maintenance performed; 4. The concentration of NO _x , CO, and O ₂ measured before and after the adjustment was made; and 5. The type and amount of fuel use since the last combustion adjustment was performed. The records shall be kept for a minimum of 5 years and be readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(h)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	An exceedance of an emission limit that occurs during an adjustment of the combustion process under N.J.A.C. 7:27-19.16(g) is not a violation of this subchapter if it occurs as a result of the adjustment. After the combustion adjustment has been completed, the maximum emission rate of any contaminant shall not exceed the maximum allowable emission rate applicable under this subchapter or under an operating permit issued pursuant to N.J.A.C. 7:27-22 or an applicable certificate issued pursuant to N.J.A.C. 7:27-8. [N.J.A.C. 7:27-19.16(f)]	None.	None.	None.
9	Natural Gas Usage $\leq 679.6 \text{ MMft}^3$ per any 12 consecutive month period, rolling one month basis. Annual natural gas consumption limit for each turbine (U7, U8). Based on a natural gas heating value of 1027 MMBtu/MMScf, 8660 hr/yr of natural gas combustion with ambient temperature $= / > 0$ degrees F (OS1) and 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	<p>Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis).</p> <p>The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications.</p> <p>The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current / voltage output. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage each month during operation. Maintain a record of the fuel use in CUFT each calendar month.</p> <p>Cubic Feet of natural gas consumed during any consecutive 12 month period shall be calculated by adding the cubic feet of natural gas consumed during a given month to the total cubic feet of natural gas consumed during the immediately preceding 11 calendar months. [N.J.A.C. 7:27-22.16(o)]</p>	None.
10	NOx (Total) ≤ 19.5 tons/yr. Annual emission limit based on 8585 hr/yr of natural gas combustion with ambient temperature $= / > 0$ degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations once initially. [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 once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	CO <= 32.4 tons/yr. Annual emission limit based on 8585 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
12	VOC (Total) <= 13.7 tons/yr. Annual emission limit. This limit includes Formaldehyde emissions. Based on 8585 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
13	SO2 <= 4.85 tons/yr. Annual emission limit based on 8660 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); and 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
14	TSP <= 2.3 tons/yr. Annual emission limit based on 8660 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); and 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
15	PM-10 (Total) <= 2.3 tons/yr. Annual emission limit based on 8660 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); and 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	PM-2.5 (Total) \leq 2.3 tons/yr. Annual emission limit based on PM-10 emission limit. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
17	Methane \leq 0.769 tons/yr. Annual emission limit based on 8660 hr/yr of natural gas combustion with ambient temperature \geq 0 degrees F (OS1); and 100 hr/yr of natural gas combustion with ambient temperature $<$ 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
18	HAPs (Total) \leq 1.86 tons/yr. Annual emission limit, based on the sum of all permitted HAPs (those with a PTE above the N.J.A.C. 7:27-17 reporting threshold). [N.J.A.C. 7:27-22.16(a)]	HAPs (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	HAPs (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
19	Acetaldehyde \leq 0.0638 tons/yr. Annual emission limit based on 8585 hr/yr of natural gas combustion with ambient temperature \geq 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature $<$ 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
20	Acrolein \leq 0.0102 tons/yr. Annual emission limit based on 8585 hr/yr of natural gas combustion with ambient temperature \geq 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature $<$ 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	Benzene <= 0.0192 tons/yr. Annual emission limit based on 8585 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
22	Ethylbenzene <= 0.0511 tons/yr. Annual emission limit based on 8585 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
23	Formaldehyde <= 1.67 tons/yr. Annual emission limit based on 8585 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
24	Propylene oxide <= 0.0463 tons/yr. Annual emission limit based on 8585 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
25	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
26	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)]
27	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)]
28	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)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
29	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)]
30	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)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
31	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.
32	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.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
33	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.
34	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.
35	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.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
36	The owner or operator shall operate and maintain the subject stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown and malfunction. [40 CFR 60.4333(a)]	None.	None.	None.
37	To demonstrate continuous compliance with NOx limit, the owner or operator of the turbine that does not use water or steam injection shall perform annual performance NOx tests in accordance with 40 CFR 60.4400. If the NOx test result is less than or equal to 75% of the NOx emission limit the frequency of subsequent testing may be reduced to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75% of the NOx limit, an annual performance testing must be resumed. [40 CFR 60.4340(a)]	Monitored by stack emission testing annually, based on the average of three Department validated stack test runs. Test methods and procedures shall be consistent with the requirements of 40 CFR 60.4400 . [40 CFR 60.4400]	Recordkeeping by stack test results annually. [40 CFR 60.4400]	None.

BOP190001

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

Emission Unit: U7 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression (GT7)

Operating Scenario: OS1 Firing Natural Gas at full range of load conditions when Ambient Temp = / > 0 deg F, in SoLoNOx mode

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	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.
2	Opacity <= 10 % , exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Particulate Emissions <= 14.7 lb/hr. Particulate emission limit from the combustion of natural gas, based on rated heat input of the source (94.6 MMBtu/hr). [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	Turbine fuel limited to Natural Gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Maximum Gross Heat Input <= 94.6 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain documentation showing the maximum heat input rating. [N.J.A.C. 7:27-22.16(o)].	None.
6	Dry Low-NOx combustor (SoLoNOx) shall be used on the Gas Turbine at all times except during start-up, shutdown, and operating at temperatures below 0 F (Diffusion Flame Mode). [N.J.A.C. 7:27-22.16(a)]	<p>Monitored by parametric monitoring system continuously The turbine shall be equipped with instrumentation which shall continuously monitor the manufacturer's recommended operational parameters and continuously indicate whether the turbine is operating in SoLoNOx (Low NOx) mode.</p> <p>The permittee shall install, calibrate and maintain the system in accordance with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(o)]</p>	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Maintain records and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	NOx (Total) <= 25 ppmvd @ 15% O ₂ . Maximum emission rate, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on SOTA. [N.J.A.C. 7:27-22.35]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]
8	NOx (Total) <= 5.17 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on manufacturer's performance data. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]
9	CO <= 50 ppmvd @ 15% O ₂ . Maximum emission rate, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on SOTA. [N.J.A.C. 7:27-22.35]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]
10	CO <= 5.25 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on manufacturer's performance data. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "RENEWAL STACK TESTING SUMMARY" and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]
11	VOC (Total) <= 25 ppmvd @ 15% O ₂ . Maximum emission rate, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on SOTA. [N.J.A.C. 7:27-22.35]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
12	VOC (Total) <= 3.01 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. This limit includes Formaldehyde emissions. Based on manufacturer's performance data. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

U7 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression

OS1

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	SO ₂ ≤ 1.32 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on natural gas heating value of 1027 MMBtu/MMScf, natural gas sulfur content of 5 grains / 100 scf and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	SO ₂ : Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO ₂ : Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
14	TSP ≤ 0.624 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on AP-42 (Table 3.1-2a) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
15	PM-10 (Total) ≤ 0.624 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on AP-42 (Table 3.1-2a) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
16	PM-2.5 (Total) ≤ 0.624 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on PM-10 emission limit. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
17	Methane ≤ 0.209 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on 40 CFR Part 98, Subpart C, Table C-2 emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
18	Acetaldehyde ≤ 0.00378 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	Acrolein <= 0.000605 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
20	Benzene <= 0.00114 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
21	Ethylbenzene <= 0.00303 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
22	Formaldehyde <= 0.272 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on emission factor of 2.88E-3 lb/MMBtu (based on manufacturer's information) and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
23	Propylene oxide <= 0.00274 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
24	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
25	NOx (Total) <= 25 ppmvd @ 15% O2. This limit applies to a turbine that has heat input at peak load greater than 50 MMBtu/hr (HHV) but less or equal to 850 MMBtu/hr (HHV) firing natural gas and which commenced construction after February 18, 2005. [40 CFR 60.4320(a)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The owner or operator shall conduct an initial performance test as required in 40 CFR 60.8. The subsequent testing shall only be conducted if choosing to comply with 40 CFR 60.4340(a). Test methods and procedures shall be consistent with the requirements of 40 CFR 60.4400 or, if a NOx diluent CEMS is installed, consistent with 40 CFR 60.4405. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Alternatively, the testing might be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. For turbines with supplemental duct burner NOx measurements shall be taken after the duct burner, which has to be in operation during the performance test. See "ANNUAL STACK TESTING SUMMARY" in OS Summary. [40 CFR 60.4400]	NOx (Total): Recordkeeping by stack test results at the approved frequency. [40 CFR 60.4400]	Submit a report: As per the approved schedule. The owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.4375(b)]
26	SO2 <= 0.06 lb/MMBTU. No owner or operator shall burn any fuel which contains total potential sulfur emissions in excess of specified limit. If the turbine simultaneously fires multiple fuels, each fuel must meet this requirement. [40 CFR 60.4330(a)(2)]	Other: The permittee shall demonstrate that the potential sulfur emissions from each type of fuel do not exceed potential sulfur emissions of 0.060 lb SO2 per MMBtu heat input using sources of information listed in 40 CFR 60.4365(a) or perform representative fuel sampling as described in 60.4365(b). [40 CFR 60.4365].	None.	Submit documentation of compliance: Once initially. The permittee shall furnish the Administrator and NJDEP a written report of the results. The permittee shall demonstrate that the potential sulfur emissions from each type of fuel do not exceed potential sulfur emissions of 0.060 lb SO2 per MMBtu heat input using sources of information listed in 40 CFR 60.4365(a) or perform representative fuel sampling as described in 60.4365(b). [40 CFR 60.8(a)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
27	The owner or operator may elect not to monitor the total sulfur content of the fuel combusted in the turbine if the fuel is demonstrated not to exceed potential sulfur emissions of 0.060 lb SO ₂ /MMBtu heat input for units located in continental areas. [40 CFR 60.4365]	Other: The required demonstration that the total sulfur content of the fuel does not exceed potential sulfur emissions of 0.060 lb SO ₂ /MMBtu shall be made using a current valid purchase contract, tariff sheet or transportation contract specifying that in continental areas the maximum total sulfur content for oil use is 0.05 weight percent (500 ppmw) and for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365(a)].	Recordkeeping by fuel certification receipts at the approved frequency. The owner or operator shall keep copies of valid purchase contracts, tariff sheets or transportation contracts specifying that in continental areas the maximum total sulfur content for oil use is 0.05 weight percent (500 ppmw) and for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365]	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 60.4365(a) showing the maximum total sulfur content for continental areas for oil use at 0.05 weight percent or less and for natural gas at 20 grains of sulfur or less per 100 standard cubic feet or to demonstrate that fuel has potential sulfur emissions of less than 0.060 lb SO ₂ /MMBtu heat input. [40 CFR 60.4365(a)]

BOP190001

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

Emission Unit: U7 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression (GT7)

Operating Scenario: OS2 Firing Natural Gas when Ambient Temp < 0 deg F, in Diffusion Flame mode

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	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.
2	Opacity <= 10 % , exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Particulate Emissions <= 14.7 lb/hr. Particulate emission limit from the combustion of natural gas, based on rated heat input of the source (94.6 MMBtu/hr). [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	Turbine fuel limited to Natural Gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Maximum Gross Heat Input <= 94.6 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain documentation showing the maximum heat input rating. [N.J.A.C. 7:27-22.16(o)].	None.
6	Total Hours of Operation <= 100 hr/yr , when ambient temperature is < 0 degrees F. [N.J.A.C. 7:27-22.16(a)]	Total Hours of Operation: Monitored by hour/time monitor upon occurrence of event. Duration of operation when ambient temperatures are < 0 degrees F shall be measured by the turbine's instrumentation which continuously tracks turbine operation and ambient temperature data. [N.J.A.C. 7:27-22.16(o)]	Total Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The Permittee shall record the following information: 1) The date and time at which ambient temperatures fall below 0 degrees F, 2) Duration of the event, 3) The exact ambient temperature, and 4) Total hours of operation when the ambient temperature falls below 0 degrees F. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	NOx (Total) <= 15.3 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on manufacturer's performance data. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations once initially. [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 once initially. Maintain turbine manufacturer's performance data and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
8	CO <= 22.2 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on manufacturer's performance data. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
9	VOC (Total) <= 6.35 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. This limit includes Formaldehyde emissions. Based on manufacturer's performance data. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
10	SO2 <= 1.32 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on natural gas heating value of 1027 MMBtu/MMScf, natural gas sulfur content of 5 grains / 100 scf and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
11	TSP <= 0.624 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-2a) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
12	PM-10 (Total) <= 0.624 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-2a) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

U7 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	PM-2.5 (Total) \leq 0.624 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on PM-10 emission limit. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
14	Methane \leq 0.209 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on 40 CFR Part 98, Subpart C, Table C-2 emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
15	Acetaldehyde \leq 0.00378 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
16	Acrolein \leq 0.000605 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
17	Benzene \leq 0.00114 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
18	Ethylbenzene \leq 0.00303 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	Formaldehyde ≤ 0.272 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on emission factor of $2.88E-3$ lb/MMBtu (based on manufacturer's performance data) and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
20	Propylene oxide ≤ 0.00274 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
21	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
22	NO _x (Total) ≤ 150 ppmvd @ 15% O ₂ . This limit applies to a turbine that has output at or less than 30 MW which is operating at less than 75 percent of peak load or at temperatures less than 0 degrees F. [40 CFR 60.4320(a)]	NO _x (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The owner or operator shall conduct an initial performance test as required in 40 CFR 60.8. The subsequent testing shall only be conducted if choosing to comply with 40 CFR 60.4340(a). Test methods and procedures shall be consistent with the requirements of 40 CFR 60.4400 or, if a NO _x diluent CEMS is installed, consistent with 40 CFR 60.4405. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Alternatively, the testing might be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. For turbines with supplemental duct burner NO _x measurements shall be taken after the duct burner, which has to be in operation during the performance test. [40 CFR 60.4400]	NO _x (Total): Recordkeeping by stack test results at the approved frequency. [40 CFR 60.4400]	Submit a report: As per the approved schedule. The owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.4375(b)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
23	SO ₂ ≤ 0.06 lb/MMBTU. No owner or operator shall burn any fuel which contains total potential sulfur emissions in excess of specified limit. If the turbine simultaneously fires multiple fuels, each fuel must meet this requirement. [40 CFR 60.4330(a)(2)]	Other: The permittee shall demonstrate that the potential sulfur emissions from each type of fuel do not exceed potential sulfur emissions of 0.060 lb SO ₂ per MMBtu heat input using sources of information listed in 40 CFR 60.4365(a) or perform representative fuel sampling as described in 60.4365(b). [40 CFR 60.4365].	None.	Submit documentation of compliance: Once initially. The permittee shall furnish the Administrator and NJDEP a written report of the results. The permittee shall demonstrate that the potential sulfur emissions from each type of fuel do not exceed potential sulfur emissions of 0.060 lb SO ₂ per MMBtu heat input using sources of information listed in 40 CFR 60.4365(a) or perform representative fuel sampling as described in 60.4365(b). [40 CFR 60.8(a)]
24	The owner or operator may elect not to monitor the total sulfur content of the fuel combusted in the turbine if the fuel is demonstrated not to exceed potential sulfur emissions of 0.060 lb SO ₂ /MMBTu heat input for units located in continental areas. [40 CFR 60.4365]	Other: The required demonstration that the total sulfur content of the fuel does not exceed potential sulfur emissions of 0.060 lb SO ₂ /MMBTu shall be made using a current valid purchase contract, tariff sheet or transportation contract specifying that in continental areas the maximum total sulfur content for oil use is 0.05 weight percent (500 ppmw) and for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365(a)].	Recordkeeping by fuel certification receipts at the approved frequency. The owner or operator shall keep copies of valid purchase contracts, tariff sheets or transportation contracts specifying that in continental areas the maximum total sulfur content for oil use is 0.05 weight percent (500 ppmw) and for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365]	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 60.4365(a) showing the maximum total sulfur content for continental areas for oil use at 0.05 weight percent or less and for natural gas at 20 grains of sulfur or less per 100 standard cubic feet or to demonstrate that fuel has potential sulfur emissions of less than 0.060 lb SO ₂ /MMBTu heat input. [40 CFR 60.4365(a)]

BOP190001

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

Emission Unit: U7 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression (GT7)

Operating Scenario: OS3 Startup of GT-7

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>Start-up Period <= 15 minutes.</p> <p>Startup is defined as the period that begins with the initiation of continuous fuel flow to the combustion turbine and ends when SoLoNOx active mode is initiated, as indicated by the SoLoNOx indicator on the turbine control panel.</p> <p>The duration of start-up shall not exceed 15 minutes. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Start-up Period: Monitored by hour/time monitor upon occurrence of event. Duration of startup shall be measured by an automated system which tracks fuel flow and SoLoNOx operation.</p> <p>The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Start-up Period: Recordkeeping by data acquisition system (DAS) / electronic data storage upon occurrence of event.</p> <p>Each record shall include: 1) Start-up start time; 2) Start-up end time 3) Date; and 4) Total start-up duration [N.J.A.C. 7:27-22.16(o)]</p>	None.
2	<p>Maximum number of startup events shall not exceed 150 in any 365 day period. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitored by observation upon occurrence of event, based on a consecutive 365 day period (rolling 1 day basis)[N.J.A.C. 7:27-22.16(o)].</p>	<p>Recordkeeping by data acquisition system (DAS) / electronic data storage upon occurrence of event. Maintain a record of each startup event and total startup events per each 365 day period. [N.J.A.C. 7:27-22.16(o)]</p>	None.
3	<p>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]</p>	None.	None.	None.
4	<p>Particulate Emissions <= 14.7 lb/hr. Particulate emission limit from the combustion of natural gas, based on rated heat input of the source (94.6 MMBtu/hr). [N.J.A.C. 7:27- 4.2(a)]</p>	None.	None.	None.
5	<p>Turbine fuel limited to Natural Gas. [N.J.A.C. 7:27-22.16(a)]</p>	None.	None.	None.
6	<p>Maximum Gross Heat Input <= 94.6 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]</p>	None.	<p>Other: Maintain documentation showing the maximum heat input rating.[N.J.A.C. 7:27-22.16(o)].</p>	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	NOx (Total) <= 12.5 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information for (1) 15-minute start-up and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations once initially. [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 once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
8	CO <= 105 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information for (1) 15-minute start-up and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). . [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
9	VOC (Total) <= 22.8 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. This limit includes Formaldehyde emissions. Based on manufacturer's information for (1) 15-minute start-up and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). . [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
10	SO2 <= 1.32 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on 1-hour of combusting natural gas (OS1 or OS2) Note: maximum emission rate does not vary with ambient temperature nor during start-up/shutdown. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
11	TSP <= 0.624 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on 1-hour of combusting natural gas (OS1 or OS2). Note: maximum emission rate does not vary with ambient temperature nor during start-up/shutdown. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	PM-10 (Total) \leq 0.624 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on 1-hour of combusting natural gas (OS1 or OS2). Note: maximum emission rate does not vary with ambient temperature nor during start-up/shutdown. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
13	PM-2.5 (Total) \leq 0.624 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on PM-10 emission limit. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
14	Methane \leq 0.209 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on 1-hour of combusting natural gas (OS1 or OS2). Note: emissions do not vary with ambient temperature nor during start-up/shutdown. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
15	Acetaldehyde \leq 0.346 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute start-up and 45 minutes of combusting natural gas (OS1 or OS2). Note: emissions do not vary with ambient temperature. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
16	Acrolein \leq 0.0553 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute start-up and 45 minutes of combusting natural gas (OS1 or OS2). Note: emissions do not vary with ambient temperature. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	Benzene <= 0.104 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute start-up and 45 minutes of combusting natural gas (OS1 or OS2) Note: emissions do not vary with ambient temperature. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
18	Ethylbenzene <= 0.277 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute start-up and 45 minutes of combusting natural gas (OS1 or OS2). Note: emissions do not vary with ambient temperature. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
19	Formaldehyde <= 4.76 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information for (1) 15-minute start-up and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
20	Propylene oxide <= 0.251 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute start-up and 45 minutes of combusting natural gas (OS1 or OS2). Note: emissions do not vary with ambient temperature. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
21	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U7 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression

BOP190001

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

Emission Unit: U7 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression (GT7)

Operating Scenario: OS4 Shut Down of GT-7

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>Shutdown Period <= 15 minutes.</p> <p>Shutdown is defined as the period that begins when SoLoNOx active mode is terminated, as indicated by the SoLoNOx indicator on the turbine control panel, with the intent to cease operation of the unit, and ends with the termination of continuous fuel flow to the combustion turbine.</p> <p>The duration of shutdown shall not exceed 15 minutes. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Shutdown Period: Monitored by hour/time monitor upon occurrence of event. Duration of shutdown shall be measured by an automated system which tracks fuel flow and SoLoNOx operation.</p> <p>The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Shutdown Period: Recordkeeping by data acquisition system (DAS) / electronic data storage upon occurrence of event.</p> <p>Each record shall include: 1) Shutdown start time; 2) Shutdown end time 3) Date; and 4) Total shutdown duration . [N.J.A.C. 7:27-22.16(o)]</p>	None.
2	<p>Maximum number of shutdown events shall not exceed 150 in any 365 day period. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitored by observation upon occurrence of event, based on a consecutive 365 day period (rolling 1 day basis)[N.J.A.C. 7:27-22.16(o)].</p>	<p>Recordkeeping by data acquisition system (DAS) / electronic data storage upon occurrence of event. Maintain a record of each shutdown event and total shutdown events per each 365 day period. [N.J.A.C. 7:27-22.16(o)]</p>	None.
3	<p>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]</p>	None.	None.	None.
4	<p>Particulate Emissions <= 14.7 lb/hr. Particulate emission limit from the combustion of natural gas, based on rated heat input of the source (94.6 MMBtu/hr). [N.J.A.C. 7:27- 4.2(a)]</p>	None.	None.	None.
5	<p>Turbine fuel limited to Natural Gas. [N.J.A.C. 7:27-22.16(a)]</p>	None.	None.	None.
6	<p>Maximum Gross Heat Input <= 94.6 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]</p>	None.	<p>Other: Maintain documentation showing the maximum heat input rating.[N.J.A.C. 7:27-22.16(o)].</p>	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	NOx (Total) <= 12.5 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information for (1) 15-minute shutdown and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations once initially. [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 once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
8	CO <= 94.7 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information for (1) 15-minute shutdown and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
9	VOC (Total) <= 21.8 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. This limit includes Formaldehyde emissions. Based on manufacturer's information for (1) 15-minute shutdown and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
10	SO2 <= 1.32 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on 1-hour of combusting natural gas (OS1 or OS2). Note: maximum emission rate does not vary with ambient temperature nor during start-up/shutdown. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
11	TSP <= 0.624 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on 1-hour of combusting natural gas (OS1 or OS2). Note: maximum emission rate does not vary with ambient temperature nor during start-up/shutdown. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	PM-10 (Total) \leq 0.624 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on 1-hour of combusting natural gas (OS1 or OS2). Note: maximum emission rate does not vary with ambient temperature nor during start-up/shutdown. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
13	PM-2.5 (Total) \leq 0.624 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on PM-10 emission limit. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
14	Methane \leq 0.209 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on 1-hour of combusting natural gas (OS1 or OS2). Note: emissions do not vary with ambient temperature nor during start-up/shutdown. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
15	Acetaldehyde \leq 0.327 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute shutdown and 45 minutes of combusting natural gas (OS1 or OS2). Note: emissions do not vary with ambient temperature. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
16	Acrolein \leq 0.0523 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute shutdown and 45 minutes of combusting natural gas (OS1 or OS2). Note: emissions do not vary with ambient temperature. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	Benzene <= 0.098 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute shutdown and 45 minutes of combusting natural gas (OS1 or OS2). Note: emissions do not vary with ambient temperature. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
18	Ethylbenzene <= 0.261 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute shutdown and 45 minutes of combusting natural gas (OS1 or OS2). Note: emissions do not vary with ambient temperature. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
19	Formaldehyde <= 4.64 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information for (1) 15-minute shutdown and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
20	Propylene oxide <= 0.237 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute shutdown and 45 minutes of combusting natural gas (OS1 or OS2). Note: emissions do not vary with ambient temperature. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
21	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U7 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression

BOP190001

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

Emission Unit: U8 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression (GT8)

Operating Scenario: OS1 Firing Natural Gas at full range of load conditions when Ambient Temp = / > 0 deg F, in SoLoNOx mode

The requirements for this item are identical to those for: U7 OS1

BOP190001

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

Emission Unit: U8 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression (GT8)

Operating Scenario: OS2 Firing Natural Gas when Ambient Temp < 0 deg F, in Diffusion Flame mode

The requirements for this item are identical to those for: U7 OS2

BOP190001

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

Emission Unit: U8 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression (GT8)

Operating Scenario: OS3 Startup of GT-8

The requirements for this item are identical to those for: U7 OS3

BOP190001

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

Emission Unit: U8 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression (GT8)

Operating Scenario: OS4 Shut Down of GT-8

The requirements for this item are identical to those for: U7 OS4

BOP190001

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

Emission Unit: U9 316 kW (3.82 MMBtu/hr) Emergency Generator to be used during electrical service disruption

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR 60 Subpart A; 40 CFR 60 Subpart JJJJ; and Subpart ZZZZ of [40 CFR 63]	None.	None.	None.
2	Emergency Generator (U9) shall permanently cease operation when the new Emergency Generator (U11) is available for operation. [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 shall record the date of initial operation of the new Emergency Generator (U11, E11). [N.J.A.C. 7:27-22.16(o)]	Submit notification: As per the approved schedule. The permittee shall notify the Northern Regional Office (NRO), at least 60 days prior to removal of the equipment and provide the Department the opportunity to inspect the equipment at least 30 days before it is dismantled. [N.J.A.C. 7:27-18]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<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 fuel flow/firing rate instrument 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 (Cubic feet per month) = (Hours of operation per month) x (Maximum emergency generator fuel usage rate in cubic feet 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 (cubic feet 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> <p>i. The reason for its operation;</p> <p>ii. The date(s) of operation and the start up and shut down time;</p> <p>iii. The total operating time for testing or maintenance based on the generator's hour meter; and</p> <p>iv. The name of the operator; and</p> <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 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.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	<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 http://airnow.gov/, as supplemented or amended and incorporated herein by reference, unless required in writing by a Federal or State law or regulation. Procedures for determining the air quality forecasts for New Jersey are available at the Department's air quality permitting web site at http://www.state.nj.us/dep/aqpp/aqforecast; and</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.

BOP190001

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

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

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	NOx (Total) <= 0.0933 tons/yr. Annual emission limit based on combustion of natural gas for 100 hr/yr for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations once initially. [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 once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
7	CO <= 0.187 tons/yr. Annual emission limit based on combustion of natural gas for 100 hr/yr for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
8	VOC (Total) <= 0.0466 tons/yr. Annual emission limit based on combustion of natural gas for 100 hr/yr for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
9	SO2 <= 0.0266 tons/yr. Annual emission limit based on combustion of natural gas for 100 hr/yr for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
10	HAPs (Total) <= 0.0111 tons/yr. Annual emission limit, based on the sum of all permitted HAPs (those with a PTE above the N.J.A.C.7:27-17 reporting threshold). [N.J.A.C. 7:27-22.16(a)]	HAPs (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	HAPs (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
11	Acrolein <= 0.000982 tons/yr. Annual emission limit, based on combustion of natural gas for 100 hr/yr for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	Formaldehyde <= 0.0101 tons/yr. Annual emission limit, based on combustion of natural gas for 100 hr/yr for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
13	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	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)]
15	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)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	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.
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.

BOP190001

**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 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)]
20	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.
21	The owner or operator of stationary spark ignition internal combustion engine (SI ICE) must operate and maintain SI ICE that achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine. [40 CFR 60.4234]	Other: Monitored by engine manufacturer data. [N.J.A.C. 7:27-22.16(o)] or [N.J.A.C. 7:27- 8.13(a)].	Other: The owner or operator must keep records of the documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4)].	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	Emergency stationary spark ignition internal combustion engine (SI ICE) may be operated for the purpose of maintenance checks and readiness testing limited to 100 hours per year, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. [40 CFR 60.4243(d)(2)(i)]	Other: Monitored by hours of operation. [40 CFR 60.4245(b)].	Other: The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 60.4245(b)].	None.
23	Owners and operators of all stationary spark ignition internal combustion engines (SI ICE) must keep records of the information in 40 CFR 60.4245(a)(1) through (4) as follows: All notification submitted to comply with 40 CFR 60 Subpart JJJJ and all documentation supporting any notification; maintenance conducted on the engine; for a certified engine, keep documentation from the manufacturer that the engine is certified; if engine is not a certified engine or is a certified engine operating in a non-certified manner, documentation that the engine meets the emission standards. [40 CFR 60.4245(a)]	None.	Other: The owner or operators of all SI ICE must keep records of the information in 40 CFR 60.4245(a)(1) through (4) as follows: (1) All notification submitted to comply with 40 CFR 60 Subpart JJJJ and all documentation supporting any notification; (2) maintenance conducted on the engine; (3) for a certified engine, keep documentation from the manufacturer that the engine is certified; (4) if engine is not a certified engine or is a certified engine operating in a non-certified manner, documentation that the engine meets the emission standards. [40 CFR 60.4245(a)].	None.
24	The owner or operator of stationary spark ignition internal combustion engine (SI ICE) shall comply with the applicable General Provisions in 40 CFR 60 Subpart A as listed in Table 3 in 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]	None.	None.	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
25	A new or reconstructed stationary reciprocating internal combustion engine (RICE) located at an area HAP source must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60 Subpart IIII, for compression ignition engines or 40 CFR 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR 63. [40 CFR 63.6590(c)]	Other: Comply with all applicable provisions at NSPS JJJJ. [40 CFR 63].	Other: Comply with all applicable provisions at NSPS JJJJ. [40 CFR 63].	None.

BOP190001

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

Emission Unit: U9 316 kW (3.82 MMBtu/hr) Emergency Generator to be used during electrical service disruption

Operating Scenario: OS1 Natural Gas Fired Operation

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	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.
2	Particulate Emissions <= 2.29 lb/hr. Particulate emission limit from the combustion of natural gas based on rated heat input of the source (3.82 MMBtu/hr). [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Generator fuel limited to natural gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Maximum Gross Heat Input <= 3.82 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain documentation showing the maximum heat input rating. [N.J.A.C. 7:27-22.16(o)].	None.
5	Hours of Operation <= 100 hr/yr for testing and maintenance. The limit on the allowable hours for testing and maintenance in accordance with the documentation from manufacturer, the vendor, or the insurance company associated with the engine. [N.J.A.C. 7:27-22.16(a)]	<p>Hours of Operation: Monitored by hour/time monitor continuously.</p> <p>The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications.</p> <p>The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current / voltage output. [N.J.A.C. 7:27-22.16(o)]</p>	<p>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:</p> <p>For each time the emergency generator is specifically operated for testing or maintenance:</p> <ul style="list-style-type: none"> 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.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	NOx (Total) <= 1.87 lb/hr. Hourly emission limit based on 40 CFR 60, subpart JJJJ emission factor of 2 g/hp-hr and a rated horsepower of 423 hp. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations once initially. [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 once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
7	CO <= 3.73 lb/hr. Hourly emission limit based on 40 CFR 60, subpart JJJJ emission factor of 4 g/hp-hr and a rated horsepower of 423 hp. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
8	VOC (Total) <= 0.933 lb/hr. Hourly emission limit based on 40 CFR 60, subpart JJJJ emission factor of 1 g/hp-hr and a rated horsepower of 423 hp. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
9	SO2 <= 0.053 lb/hr. Hourly emission limit based on natural gas heating value of 1027 MMBtu/MMScf, natural gas sulfur content of 5 grains / 100 scf and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
10	TSP: Hourly emission limit is below the reporting threshold of 0.05 lb/hr, in N.J.A.C. 7:27-22 (Appendix A). [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
11	PM-10 (Total): Hourly emission limit is below the reporting threshold of 0.05 lb/hr, in N.J.A.C. 7:27-22 (Appendix A). [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	PM-2.5 (Total): Hourly emission limit is below the reporting threshold of 0.05 lb/hr, in N.J.A.C. 7:27-22 (Appendix A). [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
13	Acrolein <= 0.0196 lb/hr. Hourly emission limit based on AP-42 emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
14	Formaldehyde <= 0.202 lb/hr. Hourly emission limit based on AP-42 emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
15	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	The owner or operator of the new emergency stationary spark ignition internal combustion engine (SI ICE) with a maximum engine power of HP >= 130 combusting natural gas or lean burn Liquefied Petroleum Gas (LPG), manufactured on or after January 1, 2009 must comply with the emissions standards in Table 1 to 40 CFR 60 Subpart JJJJ as follows, in units either g/HP-hr or ppmvd at 15 percent O ₂ : NO _x <= 2.0 g/HP-hr, CO <= 4.0 g/HP-hr, VOC <= 1.0 g/HP-hr or NO _x <= 160 ppmvd at 15% O ₂ , CO <= 540 ppmvd at 15% O ₂ , VOC <= 86 ppmvd at 15% O ₂ . [40 CFR 60.4233(e)]	Other: Monitored by engine manufacturer data. [N.J.A.C. 7:27-22.16(o)] or [N.J.A.C. 7:27- 8.13(a)].	Other: The owner or operator of a SI ICE engine must keep documentation demonstrating compliance with the applicable emission standards. [40 CFR 60.4245(a)(4)].	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	Testing of the emergency generator shall not occur during start-up, shut down or shakedown of any turbine [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.

BOP190001

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

Emission Unit: U10 172.22 MMBtu/hr Solar Titan 130 Gas Turbine used for natural gas compression (GT10)

Subject Item: CD10 Unit 10 Oxidation Catalyst

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>The Catalytic Oxidizer (CD10) shall be operated at all times that the turbine is operating except during start-up, shutdown and shakedown, as follows:</p> <p>During startup and shut down the Catalytic Oxidizer may or may not operate, pursuant to the manufacturer's recommendation.</p> <p>During commissioning of the turbine within the shake down period (operating scenario U10, OS5), the turbine may be operated without Catalytic Oxidizer for up to a maximum of 120 hours. [N.J.A.C. 7:27-22.16(a)]</p>	Monitored by hour/time monitor continuously. The permittee shall monitor the time and duration of the operation of both the gas turbine and the catalytic oxidizer unit. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The permittee shall continuously record the time and duration of the operation of both the gas turbine and the catalytic oxidizer unit. [N.J.A.C. 7:27-22.16(o)]	None.
2	<p>Design Control Efficiency $\geq 90\%$ for CO. The Catalytic Oxidizer (CD10) shall be used to destroy carbon monoxide (CO) resulting from the combustion of fuel in the turbine at the recommended manufacturer's operating flue gas flowrate range, as shall be determined during normal on-site operations.</p> <p>The minimum CO destruction efficiency shall correspond to 90%, such that CO emissions limits, as established in this permit, are met. [N.J.A.C. 7:27-22.16(a)]</p>	Design Control Efficiency: Monitored by documentation of construction once initially, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	Other: The permittee shall maintain Catalytic Oxidizer system manufacturer's documentation, as built performance guarantee, specifications, and operation & maintenance manual (O&M) on-site.[N.J.A.C. 7:27-22.16(o)].	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<p>Design VOC Control Efficiency $\geq 20\%$. The Catalytic Oxidizer (CD10) shall be used to destroy volatile organic compounds (VOC) resulting from the combustion of fuel in the turbine at the recommended manufacturer's operating flue gas flowrate range, as shall be determined during normal on-site operations.</p> <p>The minimum VOC destruction efficiency shall correspond to 20%, such that VOC emission limit, as established in this permit, are met. [N.J.A.C. 7:27-22.16(a)]</p>	Design VOC Control Efficiency: Monitored by documentation of construction once initially, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	Other: The permittee shall maintain Catalytic Oxidizer system manufacturer's documentation, as built performance guarantee, specifications, and operation & maintenance manual (O&M) on-site. [N.J.A.C. 7:27-22.16(o)].	None.
4	<p>Minimum Operating Temperature at the Inlet of the Catalytic Oxidizer ≥ 600 and Minimum Operating Temperature at the Inlet of the Catalytic Oxidizer $\leq 1,150$ degrees F, except during periods of turbine startup/shutdown, as defined in this permit.</p> <p>The temperature shall be measured at the inlet to the catalyst bed and shall be maintained within the specified temperature range. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Minimum Operating Temperature at the Inlet of the Catalytic Oxidizer: Monitored by temperature instrument continuously, based on 1 minute intervals.</p> <p>An alarm or other operational warning system shall be installed, properly shielded from direct contact with the flame and shall be designed to sound when temperatures outside of the permitted operating temperature range are detected at any time.</p> <p>The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Minimum Operating Temperature at the Inlet of the Catalytic Oxidizer: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously.</p> <p>All records created in a calendar year shall be maintained on site for five additional calendar years, and made available to the Department for review, upon request. [N.J.A.C. 7:27-22.16(o)]</p>	None.
5	The Catalytic Oxidizer (CD10) array(s) shall be maintained and replaced in accordance with the recommendations and schedules of the manufacturer, based on usage rate and CO emission levels, indicated through Stack Testing. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by documentation of maintenance and catalyst replacement 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. The permittee shall maintain the catalyst maintenance and replacement records on-site. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Emission Unit: U10 172.22 MMBtu/hr Solar Titan 130 Gas Turbine used for natural gas compression (GT10)

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR 60 Subpart A; 40 CFR 60 Subpart KKKK; and Subpart OOOOa of [40 CFR 60]	None.	None.	None.
2	<p>INITIAL STACK TESTING SUMMARY : (NO_x, CO, VOC, SO₂, TSP, PM-10, PM-2.5 and Formaldehyde):</p> <p>The permittee shall conduct a stack test using a protocol approved by the Department to demonstrate compliance with emission limits for NO_x, CO and VOC as specified in the compliance plan for OS Summary and for NO_x, CO, VOC, SO₂, TSP, PM-10, PM-2.5 and Formaldehyde as specified in the compliance plan for OS1. 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 with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>THIS STACK TEST IS SUBJECT TO THE SIGNIFICANT MODIFICATION SUPPLEMENTAL FEES PURSUANT TO N.J.A.C. 7:27-22.31. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: The stack test must be conducted either within 180 days from the date of the approved initial operating permit BOP190001 OR, for new or modified source, within 180 days after initial startup of the new or modified source or within 60 days of approval of a timely submitted protocol, whichever comes later.</p> <p>If a source is subject to NSPS, extending the testing date beyond 180 days after the source's initial startup requires prior approval from US EPA. [N.J.A.C. 7:27-22.18] and [N.J.A.C. 7:27-22.16(o)].</p>	Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 within 60 days from the date of the approved initial (or modified) 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: https://www.epa.gov/chief. 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>

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<p>RENEWAL STACK TESTING SUMMARY: (NOx and CO)</p> <p>The permittee shall conduct a stack test no later than every 5 years (see General Provisions) from the last stack test using an approved protocol to demonstrate compliance with emission limits for NOx and CO as specified in the compliance plan for OS Summary and OS1. 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 with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>The permittee may propose, in the stack test protocol, to use CEMS data to satisfy the stack testing requirements, for NOx and/or CO, with EMS approval. In order for EMS to approve using CEMS data at the time of the stack test, the CEMS must be certified and be in compliance with all daily, quarterly and annual quality assurance requirements. The CEMS shall monitor and record emissions in units identical to those required by the applicable stack testing conditions of this permit. CEMS data, if allowed by this permit, shall be taken at the same worst case conditions as described above.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitoring as required under the applicable operating scenario(s).</p> <p>In accordance with N.J.A.C. 7:27-19.15(a)2, any NOx testing conducted pursuant to this section shall be conducted concurrently with CO testing. The applicable NOx emission limits in N.J.A.C. 7:27-19 will not be considered to have been met unless the concurrent CO testing demonstrates compliance with the CO limit in N.J.A.C. 7:27-16 or the permit limit for CO, whichever is more stringent, is also met.[N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 no later than 12 months prior to the completion of the five year period since the last stack test. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: https://www.epa.gov/chief.</p> <p>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>

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	<p>ANNUAL STACK TESTING SUMMARY: (NOx and CO)</p> <p>The permittee shall conduct an annual stack test required by NSPS 40CFR 60 Subpart KKKK and NJDEP using a protocol approved by the Department to demonstrate compliance with emission limits for NOx and CO as specified in the compliance plan for OS Summary and OS1. The permittee shall provide EMS with the turbine load performance curve with the protocol. Renewal stack testing conducted for NOx and CO shall fulfill the requirement of this annual stack test, for the calendar year in which it was conducted.</p> <p>Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitoring as required under the applicable operating scenario(s) and NSPS KKKK.</p> <p>In accordance with N.J.A.C. 7:27-19.15(a)2, any NOx testing conducted pursuant to this section shall be conducted concurrently with CO testing. The applicable NOx emission limits in N.J.A.C. 7:27-19 will not be considered to have been met unless the concurrent CO testing demonstrates compliance with the CO limit in N.J.A.C. 7:27-16 or the permit limit for CO, whichever is more stringent, is also met.[N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 no later than 180 days prior to the testing due date or request from EMS, in writing, to use a previously approved protocol no later than 90 days prior to the testing due date. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: https://www.epa.gov/chief.</p> <p>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).</p> <p>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>

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	<p>PERIODIC EMISSION MONITORING SUMMARY: (NOx and CO)</p> <p>Periodic Monitoring Procedure (PMP) shall be performed monthly to measure NOx, CO and O₂, in accordance with Technical Manual 1005. This data shall be used to demonstrate compliance with emission limits for NOx and CO as specified in the compliance plan for OS Summary and OS1. Stack testing conducted for NOx and CO shall fulfill the requirement of this monthly PMP, for the month in which it was conducted.</p> <p>The minimum duration between PMP tests shall be 15 calendar days. If the PMP test result exceeds the permit limit, the permittee shall do the following:</p> <p>(1) Verify that the equipment and/or control device is operating according to manufacturer's specifications and the operating permit compliance plan. If the equipment or control device is not operating properly, the permittee shall take corrective action immediately to eliminate the excess emissions.</p> <p>(2) If the corrective action taken in step (1) does not correct the problem within 24 hours, the applicant shall repeat PMP test. This PMP test shall be conducted each day until compliance with the applicable requirement is achieved. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Monitored by periodic emission monitoring each month during operation.</p> <p>Periodic emission monitoring for NOx, CO and O₂ shall be consistent with the requirements specified in NJDEP Technical Manual 1005 posted on AQPP webpage at http://www.state.nj.us/dep/aqpp. The permittee shall use reference method or site specific method testing provided in the Technical Manual 1005 as part of any periodic monitoring procedure. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event.</p> <p>Maintain the following records:</p> <p>(1) Date and time of PMP;</p> <p>(2) PMP results and calculations in accordance with the procedure specified in the latest version of EPA CTM-034. PMP results must be recorded in the same units as permit limits;</p> <p>(3) Description of corrective action taken if needed;</p> <p>(4) Date and time of corrective action taken, if applicable. [N.J.A.C. 7:27-22.16(o)]</p>	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	The initial Periodic Monitoring Procedure (PMP) frequency may be reduced from monthly to quarterly, after 24 consecutive monthly test results demonstrate emissions that are no higher than 75% of each applicable permit limit. The minimum duration between PMP tests shall be 15 calendar days. The permittee may request a reduction in PMP frequency by submitting an operating permit modification. [N.J.A.C. 7:27-22]	None.	None.	None.
7	CO ≤ 250 ppmvd @ 15% O ₂ . VOC RACT rule emission limit applies during all operation of the combustion turbine. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-16.22(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.19(d)]
8	CO ≤ 250 ppmvd @ 15% O ₂ . VOC RACT rule emission limit applies during all operation of the combustion turbine. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by periodic emission monitoring each month during operation. See "PERIODIC EMISSION MONITORING SUMMARY" in OS Summary. [N.J.A.C. 7:27-16.22(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. See "PERIODIC EMISSION MONITORING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	None.
9	VOC (Total) ≤ 50 ppmvd @ 15% O ₂ . VOC RACT rule emission limit applies during all operation of the combustion turbine. [N.J.A.C. 7:27-16.9(c)]	VOC (Total): Monitored by stack emission testing once initially. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]
10	NO _x (Total) ≤ 42 ppm @ 15% O ₂ . NO _x RACT rule emission limit applies during all operation of the combustion turbine. [N.J.A.C. 7:27-19.5(l)]	NO _x (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NO _x (Total): Recordkeeping by stack test results upon occurrence of event. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	NOx (Total) <= 42 ppm @ 15% O2. NOx RACT rule emission limit applies during all operation of the combustion turbine. [N.J.A.C. 7:27-19.5(l)]	NOx (Total): Monitored by periodic emission monitoring each month during operation. See "PERIODIC EMISSION MONITORING SUMMARY" in OS Summary. [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 upon occurrence of event. See "PERIODIC EMISSION MONITORING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	None.
12	The owner or operator of a stationary combustion turbine that has a maximum gross heat input rate of 25 million BTU per hour or more and associated duct burner (if a duct burner is installed) shall adjust the combustion process in accordance with the procedure set forth at N.J.A.C. 7:27-19.16(g) and in accordance with the manufacturer's recommended procedures and maintenance schedules for those sources. [N.J.A.C. 7:27-22.16(a)], [N.J.A.C. 7:27-16.9(f)] and [N.J.A.C. 7:27-19.5(e)]	Other: Monitored by continuous emission monitoring (CEMS) or by periodic emission monitoring upon performing combustion adjustment. If not using a certified CEMS, monitoring shall be performed in accordance with the specific procedures for combustion adjustment monitoring specified in NJDEP Technical Manual 1005. [N.J.A.C. 7:27-19.16(g)].	Recordkeeping by data acquisition system (DAS) / electronic data storage upon performing combustion adjustment or by manual logging of parameter or storing data in a computer data system. The permittee shall record the following information for each adjustment in a log book or computer data system: 1. The date and times the adjustment began and ended; 2. The name, title, and affiliation of the person who performed the procedure and adjustment; 3. The type of procedure and maintenance performed; 4. The concentration of NOx, CO, and O2 measured before and after the adjustment was made; and 5. The type and amount of fuel use since the last combustion adjustment was performed. The records shall be kept for a minimum of 5 years and be readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(h)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	An exceedance of an emission limit that occurs during an adjustment of the combustion process under N.J.A.C. 7:27-19.16(g) is not a violation of this subchapter if it occurs as a result of the adjustment. After the combustion adjustment has been completed, the maximum emission rate of any contaminant shall not exceed the maximum allowable emission rate applicable under this subchapter or under an operating permit issued pursuant to N.J.A.C. 7:27-22 or an applicable certificate issued pursuant to N.J.A.C. 7:27-8. [N.J.A.C. 7:27-19.16(f)]	None.	None.	None.
14	Natural Gas Usage \leq 1,291 MMft ³ per any 12 consecutive month period, rolling one month basis. Annual natural gas consumption limit for the turbine (U10). Based on a natural gas heating value of 1027 MMBtu/MMScf and combustion of natural gas for 8190 hr/yr with ambient temperature \geq 0 degrees F (OS1); 100 hr/yr with ambient temperature $<$ 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). [N.J.A.C. 7:27-22.16(a)]	<p>Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis).</p> <p>The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications.</p> <p>The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current / voltage output. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage each month during operation. Maintain a record of the fuel use in CUFT each calendar month.</p> <p>Cubic Feet of natural gas consumed during any consecutive 12 month period shall be calculated by adding the cubic feet of natural gas consumed during a given month to the total cubic feet of natural gas consumed during the immediately preceding 11 calendar months. [N.J.A.C. 7:27-22.16(o)]</p>	None.
15	NOx (Total) \leq 22.4 tons/yr. Annual emission limit based on 8190 hr/yr of natural gas combustion with ambient temperature \geq 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature $<$ 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations once initially. [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 once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	CO ≤ 6.35 tons/yr. Annual emission limit based on 8190 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). Assumes 90% emission control by oxidation catalyst, during all operation, except Startups and Shutdowns. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
17	VOC (Total) ≤ 3.93 tons/yr. Annual emission limit. This limit includes Formaldehyde emissions. Based on 8190 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). Based on 20% emission control by oxidation catalyst, during all operation, except Startups and Shutdowns. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
18	SO2 ≤ 9.22 tons/yr. Annual emission limit based on 8190 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
19	TSP ≤ 1.26 tons/yr. Annual emission limit based on 8190 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	PM-10 (Total) <= 4.38 tons/yr. Annual emission limit based on 8190 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
21	PM-2.5 (Total) <= 4.38 tons/yr. Annual emission limit based on PM-10 emission limit. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
22	Methane <= 1.46 tons/yr. Annual emission limit based on 8190 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
23	HAPs (Total) <= 1.85 tons/yr. Annual emission limit, based on the sum of all permitted HAPs (those with a PTE above the N.J.A.C.7:27-17 reporting threshold). [N.J.A.C. 7:27-22.16(a)]	HAPs (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	HAPs (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
24	Acetaldehyde <= 0.0325 tons/yr. Annual emission limit based on 8190 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). Based on 20% emission control by oxidation catalyst, during all operation, except Startups and Shutdowns. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
25	Acrolein <= 0.00519 tons/yr. Annual emission limit based on 8190 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). Based on 20% emission control by oxidation catalyst, during all operation, except Startups and Shutdowns. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
26	Benzene <= 0.00974 tons/yr. Annual emission limit based on 8190 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). Based on 20% emission control by oxidation catalyst, during all operation, except Startups and Shutdowns. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
27	Ethylbenzene <= 0.026 tons/yr. Annual emission limit based on 8190 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). Based on 20% emission control by oxidation catalyst, during all operation, except Startups and Shutdowns. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
28	Formaldehyde <= 1.75 tons/yr. Annual emission limit based on 8190 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). Based on 20% emission control by oxidation catalyst, during all operation, except Startups and Shutdowns. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
29	Naphthalene <= 0.00105 tons/yr. Annual emission limit based on 8190 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). Based on 20% emission control by oxidation catalyst, during all operation, except Startups and Shutdowns. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
30	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00179 tons/yr. Annual emission limit based on 8190 hr/yr of natural gas combustion with ambient temperature = / > 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature < 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). Based on 20% emission control by oxidation catalyst, during all operation, except Startups and Shutdowns. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
31	Propylene oxide \leq 0.0235 tons/yr. Annual emission limit based on 8190 hr/yr of natural gas combustion with ambient temperature \geq 0 degrees F (OS1); 100 hr/yr of natural gas combustion with ambient temperature $<$ 0 degrees F (OS2); 150 Startups (OS3); and 150 Shut Downs (OS4). Based on 20% emission control by oxidation catalyst, during all operation, except Startups and Shutdowns. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
32	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
33	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)]
34	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)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
35	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)]
36	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)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
37	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)]
38	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)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
39	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.
40	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)]
41	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.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
42	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.
43	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.
44	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.
45	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.
46	The NSPS opacity standard shall apply at all times except during periods of startup, shutdown, malfunctions and as otherwise specified in the applicable standard. [40 CFR 60.11(c)]	None.	None.	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
47	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.
48	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.
49	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.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
50	The owner or operator shall operate and maintain the subject stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown and malfunction. [40 CFR 60.4333(a)]	None.	None.	None.
51	To demonstrate continuous compliance with NOx limit, the owner or operator of the turbine that does not use water or steam injection shall perform annual performance NOx tests in accordance with 40 CFR 60.4400. If the NOx test result is less than or equal to 75% of the NOx emission limit the frequency of subsequent testing may be reduced to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75% of the NOx limit, an annual performance testing must be resumed. [40 CFR 60.4340(a)]	Monitored by stack emission testing annually, based on the average of three Department validated stack test runs. Test methods and procedures shall be consistent with the requirements of 40 CFR 60.4400 . [40 CFR 60.4400]	Recordkeeping by stack test results annually. [40 CFR 60.4400]	None.

BOP190001

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

Emission Unit: U10 172.22 MMBtu/hr Solar Titan 130 Gas Turbine used for natural gas compression (GT10)

Operating Scenario: OS1 Firing Natural Gas at full range of load conditions when Ambient Temp = / > 0 deg F, in SoLoNOx mode

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	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.
2	Opacity <= 10 % , exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Particulate Emissions <= 18.9 lb/hr. Particulate emission limit from the combustion of natural gas, based on rated heat input of the source (169.47 MMBtu/hr). [N.J.A.C. 7:27- 4.2(a)]	Particulate Emissions: Monitored by stack emission testing once initially, based on each of three Department validated stack test runs. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27- 4.4]	Particulate Emissions: Recordkeeping by stack test results upon occurrence of event. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27- 4.4]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27- 4.4]
4	Turbine fuel limited to Natural Gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Maximum Gross Heat Input <= 169.47 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain documentation showing the maximum heat input rating. [N.J.A.C. 7:27-22.16(o)].	None.
6	Dry Low-NOx combustor (SoLoNOx) shall be used on the Gas Turbine at all times except during start-up, shutdown, and operating at temperatures below 0 F (Diffusion Flame Mode). [N.J.A.C. 7:27-22.16(a)]	Monitored by parametric monitoring system continuously The turbine shall be equipped with instrumentation which shall continuously monitor the manufacturer's recommended operational parameters and continuously indicate whether the turbine is operating in SoLoNOx (Low NOx) mode. The permittee shall install, calibrate and maintain the system in accordance with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Maintain records and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Oxidation Catalyst shall be used to control emissions from the gas turbine at all times except during start-up and shutdown. See CD-10 for requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	NOx (Total) <= 9 ppmvd @ 15% O ₂ . Maximum emission rate while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on manufacturer's performance data / SOTA. N.J.A.C. 7:27-22.16(a). [N.J.A.C. 7:27-22.35]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]
9	NOx (Total) <= 9 ppmvd @ 15% O ₂ . Maximum emission rate while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on manufacturer's performance data / SOTA. N.J.A.C. 7:27-22.16(a). [N.J.A.C. 7:27-22.35]	NOx (Total): Monitored by periodic emission monitoring each month during operation. See "PERIODIC EMISSION MONITORING SUMMARY" in OS Summary. [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 upon occurrence of event. See "PERIODIC EMISSION MONITORING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	None.
10	NOx (Total) <= 5.48 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on manufacturer's performance data. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]
11	NOx (Total) <= 5.48 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on manufacturer's performance data. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by periodic emission monitoring each month during operation. See "PERIODIC EMISSION MONITORING SUMMARY" in OS Summary. [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 upon occurrence of event. See "PERIODIC EMISSION MONITORING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	CO ≤ 2.5 ppmvd @ 15% O ₂ . Maximum emission rate, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on manufacturer's performance data and 90% control by oxidation catalyst / SOTA. N.J.A.C. 7:27-22.16(a). [N.J.A.C. 7:27-22.35]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	CO ≤ 2.5 ppmvd @ 15% O ₂ . Maximum emission rate, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on manufacturer's performance data and 90% control by oxidation catalyst / SOTA. N.J.A.C. 7:27-22.16(a). [N.J.A.C. 7:27-22.35]	CO: Monitored by periodic emission monitoring each month during operation. See "PERIODIC EMISSION MONITORING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. See "PERIODIC EMISSION MONITORING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	None.
14	CO ≤ 0.927 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on manufacturer's performance data and 90% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "INITIAL STACK TESTING SUMMARY", "RENEWAL STACK TESTING SUMMARY", and "ANNUAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]
15	CO ≤ 0.927 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on manufacturer's performance data and 90% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by periodic emission monitoring each month during operation. See "PERIODIC EMISSION MONITORING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. See "PERIODIC EMISSION MONITORING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	None.
16	VOC (Total) ≤ 4 ppmvd @ 15% O ₂ . Maximum emission rate, while combusting natural gas when ambient temperature is = or > 0 degrees F. Based on manufacturer's performance data and 20% control by oxidation catalyst / SOTA. N.J.A.C. 7:27-22.16(a). [N.J.A.C. 7:27-22.35]	VOC (Total): Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	VOC (Total) \leq 0.85 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is \leq or $>$ 0 degrees F. This limit includes Formaldehyde emissions, which shall be measured by initial stack testing of formaldehyde. Based on manufacturer's performance data and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. See "INITIAL STACK TESTING SUMMARY" in OS Summary. VOC (total) emissions shall be calculated by adding the VOC emissions, obtained during initial VOC stack testing and the Formaldehyde emissions, obtained during initial Formaldehyde stack testing. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See "INITIAL STACK TESTING SUMMARY" in OS Summary. VOC (total) emissions shall be calculated by adding the VOC emissions, obtained during initial VOC stack testing and the Formaldehyde emissions, obtained during initial Formaldehyde stack testing. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]
18	SO ₂ \leq 2.36 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is \leq or $>$ 0 degrees F. Based on natural gas heating value of 1027 MMBtu/MMScf, natural gas sulfur content of 5 grains / 100 scf and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	SO ₂ : Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	SO ₂ : Recordkeeping by stack test results upon occurrence of event. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]
19	TSP \leq 0.322 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is \leq or $>$ 0 degrees F. Based on AP-42 (Table 3.1-2a) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]
20	PM-10 (Total) \leq 1.12 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is \leq or $>$ 0 degrees F. Based on AP-42 (Table 3.1-2a) emission factor and maximum permitted heat input. [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. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]
21	PM-2.5 (Total) \leq 1.12 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is \leq or $>$ 0 degrees F. Based on PM-10 emission limit. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by stack test results upon occurrence of event. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	Methane \leq 0.374 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is \leq or $>$ 0 degrees F. Based on 40 CFR Part 98, Subpart C, Table C-2 emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
23	Acetaldehyde \leq 0.00542 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is \leq or $>$ 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
24	Acrolein \leq 0.000868 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is \leq or $>$ 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
25	Benzene \leq 0.00163 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is \leq or $>$ 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
26	Ethylbenzene \leq 0.00434 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is \leq or $>$ 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
27	Formaldehyde \leq 0.39 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is \geq 0 degrees F. Based on emission factor determined by manufacturer's performance data, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by stack test results upon occurrence of event. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See "INITIAL STACK TESTING SUMMARY" in OS Summary. [N.J.A.C. 7:27-22.16(o)]
28	Naphthalene \leq 0.000176 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is \geq 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
29	Polynuclear aromatic hydrocarbons (PAHs) \leq 0.000298 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is \geq 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
30	Propylene oxide \leq 0.00393 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is \geq 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
31	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
32	NOx (Total) <= 25 ppmvd @ 15% O2. This limit applies to a turbine that has heat input at peak load greater than 50 MMBtu/hr (HHV) but less or equal to 850 MMBtu/hr (HHV) firing natural gas and which commenced construction after February 18, 2005. [40 CFR 60.4320(a)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The owner or operator shall conduct an initial performance test as required in 40 CFR 60.8. The subsequent testing shall only be conducted if choosing to comply with 40 CFR 60.4340(a). Test methods and procedures shall be consistent with the requirements of 40 CFR 60.4400 or, if a NOx diluent CEMS is installed, consistent with 40 CFR 60.4405. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Alternatively, the testing might be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. For turbines with supplemental duct burner NOx measurements shall be taken after the duct burner, which has to be in operation during the performance test. See "ANNUAL STACK TESTING SUMMARY" in OS Summary. [40 CFR 60.4400]	NOx (Total): Recordkeeping by stack test results at the approved frequency. [40 CFR 60.4400]	Submit a report: As per the approved schedule. The owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.4375(b)]
33	SO2 <= 0.06 lb/MMBTU. No owner or operator shall burn any fuel which contains total potential sulfur emissions in excess of specified limit. If the turbine simultaneously fires multiple fuels, each fuel must meet this requirement. [40 CFR 60.4330(a)(2)]	Other: The permittee shall demonstrate that the potential sulfur emissions from each type of fuel do not exceed potential sulfur emissions of 0.060 lb SO2 per MMBtu heat input using sources of information listed in 40 CFR 60.4365(a) or perform representative fuel sampling as described in 60.4365(b). [40 CFR 60.4365].	None.	Submit documentation of compliance: Once initially. The permittee shall furnish the Administrator and NJDEP a written report of the results. The permittee shall demonstrate that the potential sulfur emissions from each type of fuel do not exceed potential sulfur emissions of 0.060 lb SO2 per MMBtu heat input using sources of information listed in 40 CFR 60.4365(a) or perform representative fuel sampling as described in 60.4365(b). [40 CFR 60.8(a)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
34	The owner or operator may elect not to monitor the total sulfur content of the fuel combusted in the turbine if the fuel is demonstrated not to exceed potential sulfur emissions of 0.060 lb SO ₂ /MMBtu heat input for units located in continental areas. [40 CFR 60.4365]	Other: The required demonstration that the total sulfur content of the fuel does not exceed potential sulfur emissions of 0.060 lb SO ₂ /MMBtu shall be made using a current valid purchase contract, tariff sheet or transportation contract specifying that in continental areas the maximum total sulfur content for oil use is 0.05 weight percent (500 ppmw) and for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365(a)].	Recordkeeping by fuel certification receipts at the approved frequency. The owner or operator shall keep copies of valid purchase contracts, tariff sheets or transportation contracts specifying that in continental areas the maximum total sulfur content for oil use is 0.05 weight percent (500 ppmw) and for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365]	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 60.4365(a) showing the maximum total sulfur content for continental areas for oil use at 0.05 weight percent or less and for natural gas at 20 grains of sulfur or less per 100 standard cubic feet or to demonstrate that fuel has potential sulfur emissions of less than 0.060 lb SO ₂ /MMBtu heat input. [40 CFR 60.4365(a)]

BOP190001

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

Emission Unit: U10 172.22 MMBtu/hr Solar Titan 130 Gas Turbine used for natural gas compression (GT10)

Operating Scenario: OS2 Firing Natural Gas when Ambient Temp <0 degrees F, in Diffusion Flame mode

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	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.
2	Opacity <= 10 % , exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Particulate Emissions <= 19 lb/hr. Particulate emission limit from the combustion of natural gas, based on rated heat input of the source (172.22 MMBtu/hr). [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	Turbine fuel limited to Natural Gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Maximum Gross Heat Input <= 172.22 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain documentation showing the maximum heat input rating. [N.J.A.C. 7:27-22.16(o)].	None.
6	Total Hours of Operation <= 100 hr/yr , when ambient temperature is < 0 degrees F. [N.J.A.C. 7:27-22.16(a)]	Total Hours of Operation: Monitored by hour/time monitor upon occurrence of event. Duration of operation when ambient temperatures are < 0 degrees F shall be measured by the turbine's instrumentation which continuously tracks turbine operation and ambient temperature data. [N.J.A.C. 7:27-22.16(o)]	Total Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The Permittee shall record the following information: 1) The date and time at which ambient temperatures fall below 0 degrees F, 2) Duration of the event, 3) The exact ambient temperature, and 4) Total hours of operation when the ambient temperature falls below 0 degrees F. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Oxidation Catalyst shall be used on the Gas Turbine at all times except during start-up and shutdown. See CD-10 for requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	NOx (Total) <= 42 ppmvd @ 15% O ₂ . Maximum emission rate, while combusting natural gas when ambient temperature is < 0 degrees F. Based on manufacturer's performance data / SOTA. N.J.A.C. 7:27-22.16(a). [N.J.A.C. 7:27-22.35]	NOx (Total): Monitored by calculations once initially. [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 once initially. Maintain turbine manufacturer's performance data and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
9	NOx (Total) <= 26 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on manufacturer's performance data. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations once initially. [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 once initially. Maintain turbine manufacturer's performance data and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
10	CO <= 10 ppmvd @ 15% O ₂ . Maximum emission rate, while combusting natural gas when ambient temperature is < 0 degrees F. Based on manufacturer's performance data and 90% control by oxidation catalyst / SOTA. N.J.A.C. 7:27-22.16(a). [N.J.A.C. 7:27-22.35]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
11	CO <= 3.76 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on manufacturer's performance data and 90% emission control from oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
12	VOC (Total) <= 8 ppmvd @ 15% O ₂ . Maximum emission rate, while combusting natural gas when ambient temperature is < 0 degrees F. Based on manufacturer's performance data and 20% control by oxidation catalyst / SOTA. N.J.A.C. 7:27-22.16(a). [N.J.A.C. 7:27-22.35]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	VOC (Total) \leq 1.73 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. This limit includes Formaldehyde emissions. Based on manufacturer's performance data and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
14	SO ₂ \leq 2.4 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on natural gas heating value of 1027 MMBtu/MMScf, natural gas sulfur content of 5 grains / 100 scf and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	SO ₂ : Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO ₂ : Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
15	TSP \leq 0.327 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-2a) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
16	PM-10 (Total) \leq 1.14 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-2a) emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
17	PM-2.5 (Total) \leq 1.14 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on PM-10 emission limit. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
18	Methane \leq 0.38 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on 40 CFR Part 98, Subpart C, Table C-2 emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	Acetaldehyde <= 0.00551 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
20	Acrolein <= 0.000882 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
21	Benzene <= 0.00165 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
22	Ethylbenzene <= 0.00441 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
23	Formaldehyde <= 0.397 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on emission factor determined by manufacturer's information, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
24	Naphthalene \leq 0.000179 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
25	Polynuclear aromatic hydrocarbons (PAHs) \leq 0.000303 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
26	Propylene oxide \leq 0.004 lb/hr. Hourly emission limit, while combusting natural gas when ambient temperature is < 0 degrees F. Based on AP-42 (Table 3.1-3) emission factor, maximum permitted heat input and 20% control by oxidation catalyst. [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
27	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
28	NO _x (Total) ≤ 150 ppmvd @ 15% O ₂ . This limit applies to a turbine that has output at or less than 30 MW which is operating at less than 75 percent of peak load or at temperatures less than 0 degrees F. [40 CFR 60.4320(a)]	NO _x (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The owner or operator shall conduct an initial performance test as required in 40 CFR 60.8. The subsequent testing shall only be conducted if choosing to comply with 40 CFR 60.4340(a). Test methods and procedures shall be consistent with the requirements of 40 CFR 60.4400 or, if a NO _x diluent CEMS is installed, consistent with 40 CFR 60.4405. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Alternatively, the testing might be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. For turbines with supplemental duct burner NO _x measurements shall be taken after the duct burner, which has to be in operation during the performance test. [40 CFR 60.4400]	NO _x (Total): Recordkeeping by stack test results at the approved frequency. [40 CFR 60.4400]	Submit a report: As per the approved schedule. The owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.4375(b)]
29	SO ₂ ≤ 0.06 lb/MMBTU. No owner or operator shall burn any fuel which contains total potential sulfur emissions in excess of specified limit. If the turbine simultaneously fires multiple fuels, each fuel must meet this requirement. [40 CFR 60.4330(a)(2)]	Other: The permittee shall demonstrate that the potential sulfur emissions from each type of fuel do not exceed potential sulfur emissions of 0.060 lb SO ₂ per MMBtu heat input using sources of information listed in 40 CFR 60.4365(a) or perform representative fuel sampling as described in 60.4365(b). [40 CFR 60.4365].	None.	Submit documentation of compliance: Once initially. The permittee shall furnish the Administrator and NJDEP a written report of the results. The permittee shall demonstrate that the potential sulfur emissions from each type of fuel do not exceed potential sulfur emissions of 0.060 lb SO ₂ per MMBtu heat input using sources of information listed in 40 CFR 60.4365(a) or perform representative fuel sampling as described in 60.4365(b). [40 CFR 60.8(a)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
30	The owner or operator may elect not to monitor the total sulfur content of the fuel combusted in the turbine if the fuel is demonstrated not to exceed potential sulfur emissions of 0.060 lb SO ₂ /MMBtu heat input for units located in continental areas. [40 CFR 60.4365]	Other: The required demonstration that the total sulfur content of the fuel does not exceed potential sulfur emissions of 0.060 lb SO ₂ /MMBtu shall be made using a current valid purchase contract, tariff sheet or transportation contract specifying that in continental areas the maximum total sulfur content for oil use is 0.05 weight percent (500 ppmw) and for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365(a)].	Recordkeeping by fuel certification receipts at the approved frequency. The owner or operator shall keep copies of valid purchase contracts, tariff sheets or transportation contracts specifying that in continental areas the maximum total sulfur content for oil use is 0.05 weight percent (500 ppmw) and for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365]	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 60.4365(a) showing the maximum total sulfur content for continental areas for oil use at 0.05 weight percent or less and for natural gas at 20 grains of sulfur or less per 100 standard cubic feet or to demonstrate that fuel has potential sulfur emissions of less than 0.060 lb SO ₂ /MMBtu heat input. [40 CFR 60.4365(a)]

BOP190001

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

Emission Unit: U10 172.22 MMBtu/hr Solar Titan 130 Gas Turbine used for natural gas compression (GT10)

Operating Scenario: OS3 Startup of GT-10

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>Start-up Period <= 15 minutes.</p> <p>Startup is defined as the period that begins with the initiation of continuous fuel flow to the combustion turbine and ends when the following conditions are met</p> <p>1) SoLoNOx active mode is initiated, as indicated by the SoLoNOx indicator on the turbine control panel; and</p> <p>2) The temperature at the oxidation catalyst bed = / > 600 degrees F.</p> <p>The duration of start-up shall not exceed 15 minutes. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Start-up Period: Monitored by hour/time monitor upon occurrence of event. Duration of startup shall be measured by an automated system which tracks fuel flow and SoLoNOx operation.</p> <p>The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Start-up Period: Recordkeeping by data acquisition system (DAS) / electronic data storage upon occurrence of event.</p> <p>Each record shall include:</p> <p>1) Start-up start time;</p> <p>2) Start-up end time</p> <p>3) Date; and</p> <p>4) Total start-up duration . [N.J.A.C. 7:27-22.16(o)]</p>	None.
2	<p>Maximum number of startup events shall not exceed 150 in any 365 day period. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitored by observation upon occurrence of event, based on a consecutive 365 day period (rolling 1 day basis)[N.J.A.C. 7:27-22.16(o)].</p>	<p>Recordkeeping by data acquisition system (DAS) / electronic data storage upon occurrence of event. Maintain a record of each startup event and total startup events per each 365 day period. [N.J.A.C. 7:27-22.16(o)]</p>	None.
3	<p>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]</p>	None.	None.	None.
4	<p>Particulate Emissions <= 19 lb/hr Particulate emission limit from the combustion of natural gas, based on rated heat input of the source (172.22 MMBtu/hr). [N.J.A.C. 7:27-4.2(a)]</p>	None.	None.	None.
5	<p>Turbine fuel limited to Natural Gas. [N.J.A.C. 7:27-22.16(a)]</p>	None.	None.	None.
6	<p>Maximum Gross Heat Input <= 172.22 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]</p>	None.	<p>Other: Maintain documentation showing the maximum heat input rating.[N.J.A.C. 7:27-22.16(o)].</p>	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	NO _x (Total) ≤ 20.5 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information for (1) 15-minute start-up and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	NO _x (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	NO _x (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
8	CO ≤ 18.8 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information for (1) 15-minute start-up and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
9	VOC (Total) ≤ 5.3 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. This limit includes Formaldehyde emissions. Based on manufacturer's information for (1) 15-minute start-up and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
10	SO ₂ ≤ 2.4 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on 1-hour of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	SO ₂ : Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO ₂ : Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
11	TSP ≤ 0.327 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on 1-hour of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	PM-10 (Total) \leq 1.14 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on 1-hour of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
13	PM-2.5 (Total) \leq 1.14 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on PM-10 emission limit. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
14	Methane \leq 0.38 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on 1-hour of combusting natural gas when ambient temperature is < 0 degrees F (OS2). Note: emissions do not vary during start-up/shutdown. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
15	Acetaldehyde \leq 0.0803 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute start-up and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
16	Acrolein \leq 0.0129 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute start-up and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	Benzene <= 0.0241 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute start-up and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
18	Ethylbenzene <= 0.0643 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute start-up and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
19	Formaldehyde <= 1.74 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information for (1) 15-minute start-up and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
20	Naphthalene <= 0.00261 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute start-up and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	Polynuclear aromatic hydrocarbons (PAHs) <= 0.00442 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute start-up and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
22	Propylene oxide <= 0.0582 lb/hr. Hourly emission limit, during any hour in which a start-up occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute start-up and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during startup and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
23	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP190001

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

Emission Unit: U10 172.22 MMBtu/hr Solar Titan 130 Gas Turbine used for natural gas compression (GT10)

Operating Scenario: OS4 Shut Down of GT-10

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>Shutdown Period <= 15 minutes.</p> <p>Shutdown is defined as the period that begins when SoLoNOx active mode is terminated, as indicated by the SoLoNOx indicator on the turbine control panel, with the intent to cease operation of the unit, and ends with the termination of continuous fuel flow to the combustion turbine.</p> <p>The duration of shutdown shall not exceed 15 minutes. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Shutdown Period: Monitored by hour/time monitor upon occurrence of event. Duration of shutdown shall be measured by an automated system which tracks fuel flow and SoLoNOx operation.</p> <p>The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Shutdown Period: Recordkeeping by data acquisition system (DAS) / electronic data storage upon occurrence of event.</p> <p>Each record shall include: 1) Shutdown start time; 2) Shutdown end time 3) Date; and 4) Total shutdown duration [N.J.A.C. 7:27-22.16(o)]</p>	None.
2	<p>Maximum number of shutdown events shall not exceed 150 in any 365 day period. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitored by observation upon occurrence of event, based on a consecutive 365 day period (rolling 1 day basis)[N.J.A.C. 7:27-22.16(o)].</p>	<p>Recordkeeping by data acquisition system (DAS) / electronic data storage upon occurrence of event. Maintain a record of each shutdown event and total shutdown events per each 365 day period. [N.J.A.C. 7:27-22.16(o)]</p>	None.
3	<p>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]</p>	None.	None.	None.
4	<p>Particulate Emissions <= 19 lb/hr Particulate emission limit from the combustion of natural gas, based on rated heat input of the source (172.22 MMBtu/hr). [N.J.A.C. 7:27-4.2(a)]</p>	None.	None.	None.
5	<p>Turbine fuel limited to Natural Gas. [N.J.A.C. 7:27-22.16(a)]</p>	None.	None.	None.
6	<p>Maximum Gross Heat Input <= 172.22 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]</p>	None.	<p>Other: Maintain documentation showing the maximum heat input rating.[N.J.A.C. 7:27-22.16(o)].</p>	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	NOx (Total) <= 20.5 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information for (1) 15-minute shutdown and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations once initially. [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 once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
8	CO <= 21.8 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information for (1) 15-minute shutdown and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
9	VOC (Total) <= 5.3 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. This limit includes Formaldehyde emissions. Based on manufacturer's information for (1) 15-minute shutdown and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
10	SO2 <= 2.4 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on 1-hour of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
11	TSP <= 0.327 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on 1-hour of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	PM-10 (Total) \leq 1.14 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on 1-hour of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
13	PM-2.5 (Total) \leq 1.14 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on PM-10 emission limit. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
14	Methane \leq 0.38 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on 1-hour of combusting natural gas when ambient temperature is < 0 degrees F (OS2). Note: emissions do not vary during start-up/shutdown. [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
15	Acetaldehyde \leq 0.0803 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute shutdown and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Acetaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acetaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
16	Acrolein \leq 0.0129 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute shutdown and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	Benzene <= 0.0241 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute shutdown and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
18	Ethylbenzene <= 0.0643 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute shutdown and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Ethylbenzene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
19	Formaldehyde <= 1.98 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information for (1) 15-minute shutdown and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain turbine manufacturer's performance data and calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
20	Naphthalene <= 0.00261 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute shutdown and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Naphthalene: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	Polynuclear aromatic hydrocarbons (PAHs) ≤ 0.00442 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute shutdown and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Polynuclear aromatic hydrocarbons (PAHs): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Polynuclear aromatic hydrocarbons (PAHs): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
22	Propylene oxide ≤ 0.0582 lb/hr. Hourly emission limit, during any hour in which a shutdown occurs. Based on manufacturer's information and AP-42 (Table 3.1-3 and 2a) emission factors for (1) 15-minute shutdown and 45 minutes of combusting natural gas when ambient temperature is < 0 degrees F (OS2). [N.J.A.C. 7:27-22.16(a)]	Propylene oxide: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Propylene oxide: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain calculations showing the derivation of the emission limit during shutdown and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
23	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP190001

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

Emission Unit: U10 172.22 MMBtu/hr Solar Titan 130 Gas Turbine used for natural gas compression (GT10)

Operating Scenario: OS5 Shakedown of GT-10

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	This "Shakedown" operating scenario applies only to operation of the turbine during the "shakedown period". The "shakedown period" shall be defined as the period beginning with initial ignition of fuel in the turbine and ending when the initial performance testing is conducted, or 180 calendar days after initial combustion in the turbine, whichever comes first. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit notification: Upon occurrence of event. Notify the Department upon commencement of "shakedown" period. Notify the Department upon completion of "shakedown" period. [N.J.A.C. 7:27-22.16(o)]
2	During the shakedown period the facility shall be allowed to operate the combustion turbine without the required Oxidation Catalyst for a period of no more than 120 hours. Please see requirements for Oxidation Catalyst at CD10. [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. Maintain a record of all periods of turbine operation during the shakedown period. Each record shall include: 1) Date; 2) Time that turbine started combusting fuel; 3) Time that turbine ceased combusting fuel; 4) Total duration of operation; and 5) Name of operator making the entry. [N.J.A.C. 7:27-22.16(o)]	None.
3	Opacity <= 20 % , exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
4	Particulate Emissions <= 19 lb/hr Particulate emission limit from the combustion of natural gas, based on rated heat input of the source (172.22 MMBtu/hr). [N.J.A.C. 7:27-4.2(a)]	None.	None.	None.
5	Turbine fuel limited to Natural Gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Maximum Gross Heat Input <= 172.22 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain documentation showing the maximum heat input rating.[N.J.A.C. 7:27-22.16(o)].	None.

BOP190001

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

Emission Unit: U11 Emergency Generator**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR 60 Subpart A; 40 CFR 60 Subpart JJJJ; and Subpart ZZZZ of [40 CFR 63]	None.	None.	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<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.</p> <p>This emergency generator shall be operated only:</p> <ol style="list-style-type: none"> 1. During the performance of normal testing and maintenance procedures, as recommended in writing by the manufacturer and/or as required in writing by a Federal or State law or regulation; 2. When there is power outage or the primary source of mechanical or thermal energy fails because of an emergency, or when the power disruption resulted from construction, repair, or maintenance activity (CRM) at the facility. Operation of the emergency generator under construction, repair, or maintenance activity is limited to 30 days in any calendar year; or 3. When there is a voltage reduction issued by PJM and posted on the PJM internet website (www.pjm.com) under the "emergency procedures" menu. [N.J.A.C. 7:27-19.1] 	<p>Monitored by hour/time monitor continuously. The owner or operator shall install, calibrate and maintain a non-resettable hour meter in accordance with the manufacturer's specifications.</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 (Cubic feet per month) = (Hours of operation per month) x (Maximum emergency generator fuel usage rate in cubic feet 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> <ol style="list-style-type: none"> 1. Once per month, the total operating time from the generator's hour meter, the fuel usage (cubic feet per month), and the monthly hours of operation for emergency use and during power disruption from CRM. Document if the emergency use was due to internal or external loss of primary source of energy, or due to a fire or flood. If internal loss at the facility, document the emergency and/or CRM that occurred, the damages to the primary source of energy and the amount of time needed for repairs. 2. For each time the emergency generator is specifically operated for testing or maintenance: <ol style="list-style-type: none"> i. The reason for its operation; ii. The date(s) of operation and the start up and shut down time; iii. The total operating time for testing or maintenance based on the generator's hour meter; and iv. The name of the operator; and 3. If a voltage reduction is the reason for the use of the emergency generator, a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction. <p>The owner or operator 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.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<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 http://airnow.gov/, as supplemented or amended and incorporated herein by reference, unless required in writing by a Federal or State law or regulation. Procedures for determining the air quality forecasts for New Jersey are available at the Department's air quality permitting web site at http://www.state.nj.us/dep/aqpp/aqforecast; and</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.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	The Emergency Generator may be operated at other locations (within the State of New Jersey) only in the event of an emergency, as defined at N.J.A.C. 7:27-19.1. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor upon occurrence of event. [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)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	NOx (Total) <= 0.324 tons/yr. Annual emission limit based on combustion of natural gas for 100 hr/yr for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations once initially. [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 once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
6	CO <= 0.647 tons/yr. Annual emission limit based on combustion of natural gas for 100 hr/yr for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
7	VOC (Total) <= 0.162 tons/yr. Annual emission limit based on combustion of natural gas for 100 hr/yr for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
8	SO2 <= 0.00793 tons/yr. Annual emission limit based on combustion of natural gas for 100 hr/yr for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
9	PM-10 (Total) <= 0.00569 tons/yr. Annual emission limit based on combustion of natural gas for 100 hr/yr for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
10	PM-2.5 (Total) <= 0.00569 tons/yr. Annual emission limit based on combustion of natural gas for 100 hr/yr for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	HAPs (Total) <= 0.033 tons/yr. Annual emission limit based on the sum of all permitted HAPs (those with a PTE above the N.J.A.C.7:27-17 reporting threshold). [N.J.A.C. 7:27-22.16(a)]	HAPs (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	HAPs (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
12	Acrolein <= 0.00293 tons/yr. Annual emission limit based on combustion of natural gas for 100 hr/yr for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
13	Formaldehyde <= 0.0301 tons/yr. Annual emission limit based on combustion of natural gas for 100 hr/yr for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
14	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	All requests, reports, applications, submittals, and other communications to the Administrator pursuant to Part 60 shall be submitted in duplicate to the Regional Office of US Environmental Protection Agency. Submit information to: Director, Division of Enforcement & Compliance Assistance, US EPA, Region 2, 290 Broadway, New York, NY 10007-1866. [40 CFR 60.4(a)]	None.	None.	Submit a report: As per the approved schedule to EPA Region 2 as required by 40 CFR 60. [40 CFR 60.4(a)]
16	Copies of all information submitted to EPA pursuant to 40 CFR Part 60, must also be submitted to the appropriate Regional Enforcement Office of NJDEP. [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)]

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	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.
18	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.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	No owner or operator subject to NSPS standards in Part 60, shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]	None.	None.	None.
20	The owner or operator shall notify the Administrator of the proposed replacement of components, upon triggering reconstruction as defined at 40 CFR 60.15. [40 CFR 60.15]	None.	None.	Submit notification: At a common schedule agreed upon by the operator and the Administrator. The notification shall include information listed under 40 CFR Part 60.15(d). The notification shall be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced. [40 CFR 60.15(d)]
21	Changes in time periods for submittal of information and postmark deadlines set forth in this subpart, may be made only upon approval by the Administrator and shall follow procedures outlined in 40 CFR Part 60.19. [40 CFR 60.19]	None.	None.	None.
22	The owner or operator of stationary spark ignition internal combustion engine (SI ICE) must operate and maintain SI ICE that achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine. [40 CFR 60.4234]	Other: Monitored by engine manufacturer data. [N.J.A.C. 7:27-22.16(o)] or [N.J.A.C. 7:27- 8.13(a)].	Other: The owner or operator must keep records of the documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4)].	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
23	Emergency stationary spark ignition internal combustion engine (SI ICE) may be operated for the purpose of maintenance checks and readiness testing limited to 100 hours per year, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. [40 CFR 60.4243(d)(2)(i)]	Other: Monitored by hours of operation. [40 CFR 60.4245(b)].	Other: The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 60.4245(b)].	None.
24	Owners and operators of all stationary spark ignition internal combustion engines (SI ICE) must keep records of the information in 40 CFR 60.4245(a)(1) through (4) as follows: All notification submitted to comply with 40 CFR 60 Subpart JJJJ and all documentation supporting any notification; maintenance conducted on the engine; for a certified engine, keep documentation from the manufacturer that the engine is certified; if engine is not a certified engine or is a certified engine operating in a non-certified manner, documentation that the engine meets the emission standards. [40 CFR 60.4245(a)]	None.	Other: The owner or operators of all SI ICE must keep records of the information in 40 CFR 60.4245(a)(1) through (4) as follows: (1) All notification submitted to comply with 40 CFR 60 Subpart JJJJ and all documentation supporting any notification; (2) maintenance conducted on the engine; (3) for a certified engine, keep documentation from the manufacturer that the engine is certified; (4) if engine is not a certified engine or is a certified engine operating in a non-certified manner, documentation that the engine meets the emission standards. [40 CFR 60.4245(a)].	None.
25	The owner or operator of stationary spark ignition internal combustion engine (SI ICE) shall comply with the applicable General Provisions in 40 CFR 60 Subpart A as listed in Table 3 in 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]	None.	None.	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
26	A new or reconstructed stationary reciprocating internal combustion engine (RICE) located at an area HAP source must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60 Subpart IIII, for compression ignition engines or 40 CFR 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR 63. [40 CFR 63.6590(c)]	Other: Comply with all applicable provisions at NSPS JJJJ. [40 CFR 63].	Other: Comply with all applicable provisions at NSPS JJJJ. [40 CFR 63].	None.

BOP190001

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

Emission Unit: U11 Emergency Generator

Operating Scenario: OS1 Natural Gas Fired Operation

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	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.
2	Particulate Emissions <= 6.28 lb/hr. Particulate emission limit from the combustion of natural gas based on rated heat input of the source (11.4 MMBtu/hr). [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Generator fuel limited to natural gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Maximum Gross Heat Input <= 11.4 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain documentation showing the maximum heat input rating. [N.J.A.C. 7:27-22.16(o)].	None.
5	Hours of Operation <= 100 hr/yr for testing and maintenance. The limit on the allowable hours for testing and maintenance in accordance with the documentation from manufacturer, the vendor, or the insurance company associated with the engine. [N.J.A.C. 7:27-22.16(a)]	<p>Hours of Operation: Monitored by hour/time monitor continuously.</p> <p>The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications.</p> <p>The monitor shall be ranged such that the allowable value is approximately mid-scale of the full range current / voltage output. [N.J.A.C. 7:27-22.16(o)]</p>	<p>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:</p> <p>For each time the emergency generator is specifically operated for testing or maintenance:</p> <ul style="list-style-type: none"> 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.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	NOx (Total) <= 6.47 lb/hr. Hourly emission limit based on 40 CFR 60, subpart JJJJ emission factor of 2 g/hp-hr and a rated horsepower of 1,468 hp. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations once initially. [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 once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
7	CO <= 13 lb/hr. Hourly emission limit based on 40 CFR 60, subpart JJJJ emission factor of 4 g/hp-hr and a rated horsepower of 1468 hp. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
8	VOC (Total) <= 3.24 lb/hr. Hourly emission limit based on 40 CFR 60, subpart JJJJ emission factor of 1 g/hp-hr and a rated horsepower of 1,468 hp. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
9	SO2 <= 0.159 lb/hr. Hourly emission limit based on natural gas heating value of 1027 MMBtu/MMScf, natural gas sulfur content of 5 grains / 100 scf and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
10	TSP: Hourly emission limit is below the reporting threshold of 0.05 lb/hr, in N.J.A.C. 7:27-22 (Appendix A). [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
11	PM-10 (Total) <= 0.11 lb/hr. Hourly emission limit based on AP-42 emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	PM-2.5 (Total) \leq 0.11 lb/hr Hourly emission limit based on PM-10 emission limit. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
13	Acrolein \leq 0.0586 lb/hr. Hourly emission limit based on AP-42 emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Acrolein: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Acrolein: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
14	Formaldehyde \leq 0.602 lb/hr. Hourly emission limit based on AP-42 emission factor and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Formaldehyde: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Formaldehyde: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
15	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	The owner or operator of the new emergency stationary spark ignition internal combustion engine (SI ICE) with a maximum engine power of HP \geq 130 combusting natural gas or lean burn Liquefied Petroleum Gas (LPG), manufactured on or after January 1, 2009 must comply with the emissions standards in Table 1 to 40 CFR 60 Subpart JJJJ as follows, in units either g/HP-hr or ppmvd at 15 percent O ₂ : NO _x \leq 2.0 g/HP-hr, CO \leq 4.0 g/HP-hr, VOC \leq 1.0 g/HP-hr or NO _x \leq 160 ppmvd at 15% O ₂ , CO \leq 540 ppmvd at 15% O ₂ , VOC \leq 86 ppmvd at 15% O ₂ . [40 CFR 60.4233(e)]	Other: Monitored by engine manufacturer data. [N.J.A.C. 7:27-22.16(o)] or [N.J.A.C. 7:27- 8.13(a)].	Other: The owner or operator of a SI ICE engine must keep documentation demonstrating compliance with the applicable emission standards. [40 CFR 60.4245(a)(4)].	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	Testing of the emergency generator shall not occur during start-up, shut down or shakedown of any turbine [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.

BOP190001

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

Emission Unit: U12 4.6 MMBtu/hr Gas-fired Parker Boiler

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Natural Gas Usage ≤ 39.24 MMft ³ per any 12 consecutive month period, rolling one month basis. Annual natural gas consumption limit for boiler. Based on combustion of natural gas for 8760 hr/yr with a natural gas heating value of 1027 MMBtu/MMScf and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	NOx (Total) ≤ 0.218 tons/yr. Annual emission limit based on permitted hourly emission rate and combustion of natural gas for 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations once initially. [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 once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
3	CO ≤ 1.85 tons/yr. Annual emission limit based on permitted hourly emission rate and combustion of natural gas for 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
4	SO ₂ ≤ 0.28 tons/yr. Annual emission limit based on permitted hourly emission rate and combustion of natural gas for 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	SO ₂ : Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO ₂ : Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
5	HAPs (Total) ≤ 0.0000216 tons/yr. Annual emission limit based on the sum of all permitted HAPs (those with a PTE above the N.J.A.C.7:27-17 reporting threshold). [N.J.A.C. 7:27-22.16(a)]	HAPs (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	HAPs (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Cadmium Emissions \leq 0.0000216 tons/yr. Annual emission limit, based on AP-42 (table 1.4-4) emission factor of and combustion of all permitted natural gas. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Emission Unit: U12 4.6 MMBtu/hr Gas-fired Parker Boiler

Operating Scenario: OS1 Natural Gas Fired Boiler

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. NOTE: This requirement applies during all operation of the boiler, including periods of start-up and shut down. [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.
2	Particulate Emissions \leq 2.76 lb/hr. Particulate emission limit from the combustion of natural gas based on rated heat input of the source (4.6 MMBtu/hr). [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Boiler fuel limited to Natural Gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Maximum Gross Heat Input \leq 4.6 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain documentation showing the maximum heat input rating.[N.J.A.C. 7:27-22.16(o)].	None.
5	NOx (Total) \leq 0.05 lb/hr. Hourly emission limit based on manufacturer guaranteed emission factor of 0.0108 lb/MMBtu and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations once initially. [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 once initially. Maintain manufacturer's emission factor guarantee and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
6	CO \leq 0.423 lb/hr. Hourly emission limit based on manufacturer guaranteed emission factor of 0.0920 lb/MMBtu and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain manufacturer's emission factor guarantee and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	VOC (Total): Hourly emission limit is below the reporting threshold of 0.05 lb/hr, in N.J.A.C. 7:27-22 (Appendix A). [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain manufacturer's emission factor guarantee and initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
8	SO ₂ ≤ 0.064 lb/hr. Hourly emission limit, based on natural gas heating value of 1027 MMBtu/MMScf, natural gas sulfur content of 5 grains / 100 scf and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	SO ₂ : Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	SO ₂ : Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
9	TSP: Hourly emission limit is below the reporting threshold of 0.05 lb/hr, in N.J.A.C. 7:27-22 (Appendix A). [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
10	PM-10 (Total): Hourly emission limit is below the reporting threshold of 0.05 lb/hr, in N.J.A.C. 7:27-22 (Appendix A). [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
11	PM-2.5 (Total): Hourly emission limit is below the reporting threshold of 0.05 lb/hr, in N.J.A.C. 7:27-22 (Appendix A). [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
12	Cadmium Emissions ≤ 0.00000493 lb/hr. Hourly emission limit based on AP-42 (Table 1.4-4) emission factor, natural gas heating value of 1027 MMBtu/MMScf and maximum permitted heat input. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain initial calculations and make available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.

BOP190001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Profile (General)

Facility Name (AIMS): TENNESSEE GAS PIPELINE COMPANY, L **Facility ID (AIMS):** 83405

Street 164 LIBERTYVILLE RD COUNTY RT 650
Address: WANTAGE TWP, NJ 07461-3022

Mailing AUSTIN HARRIS
Address: TENNESSEE GAS PIPELINE COMPANY LLC
 1001 LOUISIANA ST STE 1000
 HOUSTON, TX 77002

County: Sussex

Location
Description:

State Plane Coordinates:	
X-Coordinate:	451,765
Y-Coordinate:	878,189
Units:	New Jersey State Plane 8
Datum:	NAD83
Source Org.:	DEP-GIS
Source Type:	GPS

Industry:	
Primary SIC:	4922
Secondary SIC:	
NAICS:	486210

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

Contact Type: Air Permit Information Contact

Organization: Tennessee Gas Pipeline Company, L.L.C.

Org. Type: LLC

Name: Austin Harris

NJ EIN: 76022869500

Title: EHS Engineer

Phone: (713) 420-7024 x

Mailing Address: 1001 Louisiana St, Suite 1000

Fax: (713) 420-5074 x

Houston, TX 77002

Other: () - x

Type:

Email: Austin_Harris@KinderMorgan.com

Contact Type: Fees/Billing Contact

Organization: Tennessee Gas Pipeline Company, L.L.C.

Org. Type: LLC

Name: Austin Harris

NJ EIN: 76022869500

Title: EHS Engineer

Phone: (713) 420-7024 x

Mailing Address: 1001 Louisiana St, Suite 1000

Fax: (713) 420-5074 x

Houston, TX 77002

Other: () - x

Type:

Email: Austin_Harris@KinderMorgan.com

Contact Type: Operator

Organization: Tennessee Gas Pipeline Company, L.L.C.

Org. Type: LLC

Name: Ronald F. Miller

NJ EIN: 76022869500

Title: Director - Operations

Phone: (724) 662-6422 x

Mailing Address: 8 Anngina Dr.

Fax: () - x

Enfield, CT 06082

Other: () - x

Type:

Email: ron_miller@kindermorgan.com

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Owner (Current Primary)

Organization: Tennessee Gas Pipeline Company, L.L.C.

Org. Type: LLC

Name: Ronald F. Miller

NJ EIN: 76022869500

Title: Director - Operations

Phone: (724) 662-6422 x

Mailing 8 Anngina Dr.

Fax: () - x

Address: Enfield, CT 06082

Other: () - x

Type:

Email: ron_miller@kindermorgan.com

Contact Type: Responsible Official

Organization: Tennessee Gas Pipeline Company, L.L.C.

Org. Type: LLC

Name: Ronald F. Miller

NJ EIN: 76022869500

Title: Director - Operations

Phone: (724) 662-6422 x

Mailing 8 Anngina Dr.

Fax: () - x

Address: Enfield, CT 06082

Other: () - x

Type:

Email: ron_miller@kindermorgan.com

TENNESSEE GAS PIPELINE COMPANY LLC (83405)
BOP190001

Date: 01/18/2023

New Jersey Department of Environmental Protection
Non-Source Fugitive Emissions

FG NJID	Description of Activity Causing Emission	Location Description	Reasonable Estimate of Emissions (tpy)								
			VOC (Total)	NOx	CO	SO	TSP (Total)	PM-10	Pb	HAPS (Total)	Other (Total)
FG1	Pumps, Valves, Flanges	Across Compressor Station	6.140								
Total			6.140	0.000	0.000	0.000	0.000	0.000	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)
IS1	Natural Gas Fired Hot Water Heaters (<1.00 MMBtu/hr)	Fuel Combustion Equipment (Other)	Station Control Building	0.002	0.034	0.029	0.005	0.001	0.003			0.001
IS8	Purge of Taurus 70 Compressor (TXS < 0.1 lb/hr)	Other Equipment	Silencer North of Gas Cooler	0.098								50.360
IS9	Shutdown Venting of Taurus 70 Compressor (TXS < 0.1 lb/hr)	Other Equipment	Silencer North of Gas Cooler	0.416							0.00500000	215.000
IS11	Pipeline Inspection Gauge (Pig) Launcher Equipment (TXS < 0.1 lb/hr)	Other Equipment	Northwest Station Yard	0.004								2.000
IS12	Pipeline Inspection Gauge (Pig) Receiver Equipment (TXS < 0.1 lb/hr)	Other Equipment	Northeast Station Yard	0.004								2.000
IS16	Annual Station Emergency Shutdown (ESD) Test (TXS < 0.1 lb/hr)	Other Equipment	Silencer North of Gas Cooler	0.000								0.093
IS18	Pipeline Venting (TXS < 0.1 lb/hr)	Other Equipment	Silencer North of Gas Cooler	0.092								47.340
IS19	Purge of Titan 130 Centrifugal Compressor with Tandem Dry Gas Seals (TXS < 0.1 lb/hr)	Other Equipment	Silencer North of Gas Cooler	0.036								18.560

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)
IS20	Shutdown Venting of Titan 130 Centrifugal Compressor with Tandem Dry Gas Seals (TXS < 0.1 lb/hr)	Other Equipment	Silencer North of Gas Cooler	0.153								79.200
IS21	Pipeline Liquids Tank (<2,000 gallons) & Truck Loading	Other Equipment	North of Existing Control Room	0.028								
Total				0.833	0.034	0.029	0.005	0.001	0.003	0.000	0.00500000	414.554

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

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand- Fathered	Last Mod. (Since 1968)	Equip. Set ID
E3	Boiler	Peerless Boiler	Boiler	100004	12/4/1985	No		
E7	Unit 7	Solar Taurus 70 Simple Cycle Gas Turbine - Unit 7	Combustion Turbine		10/1/2010	No		
E8	Unit 8	Solar Taurus 70 Simple Cycle Gas Turbine - Unit 8	Combustion Turbine		7/1/2011	No		
E9	316kW Em Gen	316 kW Nat Gas Fired Emergency Generator	Emergency Generator		10/1/2010	No		
E10	Unit 10	Solar Titan 130-Simple Cycle Gas Turbine - Unit 10	Combustion Turbine					
E11	Em Gen	Nat Gas Fired Emergency Generator	Emergency Generator					
E12	Boiler	Hot Water Boiler	Boiler					

83405 TENNESSEE GAS PIPELINE COMPANY LLC BOP190001 E3 (Boiler)
Print Date: 1/18/2023

Make:	<input type="text"/>
Manufacturer:	<input type="text" value="Peerless"/>
Model:	<input type="text" value="211-10WP"/>
Maximum Rated Gross Heat Input (MMBtu/hr - HHV):	<input type="text" value="1.89"/>
Boiler Type:	<input type="text" value="Package"/>
Utility Type:	<input type="text" value="Non-Utility"/>
Output Type:	<input type="text"/>
Steam Output (lb/hr):	<input type="text"/>
Fuel Firing Method:	<input type="text"/>
Description (if other):	<input type="text"/>
Draft Type:	<input type="text"/>
Heat Exchange Type:	<input type="text" value="Indirect"/>

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

Low NOx Burner:	<input type="checkbox"/>	Type: <input type="text"/>
Staged Air Combustion:	<input type="checkbox"/>	
Flue Gas Recirculation (FGR):	<input type="checkbox"/>	Amount (%): <input type="text"/>

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:

83405 TENNESSEE GAS PIPELINE COMPANY LLC BOP190001 E7 (Combustion Turbine)
Print Date: 1/18/2023

Make:	Taurus		
Manufacturer:	Solar		
Model:	70-10302S		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	94.60		
Type of Turbine:	Industrial	Description:	
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Compressor	Description:	
Power Output:	9,785.00	Units:	BHP
Is the combustion turbine using (check all that apply):			
A Dry Low NOx Combustor:	<input checked="" type="checkbox"/>		
Steam Injection:	<input type="checkbox"/>	Steam to Fuel Ratio:	
Water Injection:	<input type="checkbox"/>	Water to Fuel Ratio:	
Other:	<input type="checkbox"/>	Description:	
Is the turbine Equipped with a Duct Burner?	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="radio"/> Yes <input checked="" type="radio"/> No		
	Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? <input checked="" type="radio"/> Yes <input type="radio"/> No		
Comments:	<p>94.6 MMBtu/hr-HHV is the rating @ 0 deg F. 79.5 MMBtu/hr-HHV is the rating @ ISO conditions.</p> <p>12,238 HP @ 0 deg F. 9,785 HP @ ISO conditions.</p> <p>9.13 MW @ 0 deg F. 7.30 MW @ ISO conditions.</p>		

83405 TENNESSEE GAS PIPELINE COMPANY LLC BOP190001 E8 (Combustion Turbine)
Print Date: 1/18/2023

Make:	Taurus		
Manufacturer:	Solar		
Model:	70-10302S		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	94.60		
Type of Turbine:	Industrial		
Type of Cycle:	Simple-Cycle	Description:	
Industrial Application:	Compressor	Description:	
Power Output:	9,785.00	Units:	BHP
Is the combustion turbine using (check all that apply):			
A Dry Low NOx Combustor:	<input checked="" type="checkbox"/>		
Steam Injection:	<input type="checkbox"/>	Steam to Fuel Ratio:	
Water Injection:	<input type="checkbox"/>	Water to Fuel Ratio:	
Other:	<input type="checkbox"/>	Description:	
Is the turbine Equipped with a Duct Burner?	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="radio"/> Yes <input checked="" type="radio"/> No		
	Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? <input checked="" type="radio"/> Yes <input type="radio"/> No		
Comments:	<p>94.6 MMBtu/hr-HHV is the rating @ 0 deg F. 79.5 MMBtu/hr-HHV is the rating @ ISO conditions.</p> <p>12,238 HP @ 0 deg F. 9,785 HP @ ISO conditions.</p> <p>9.13 MW @ 0 deg F. 7.30 MW @ ISO conditions.</p>		

83405 TENNESSEE GAS PIPELINE COMPANY LLC BOP190001 E9 (Emergency Generator)
Print Date: 1/18/2023

Make:			
Manufacturer:	Waukesha		
Model:	VGF18GL/GLD		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	3.82		
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 checked="" type="radio"/> Yes <input type="radio"/> No
Comments:	Installed 10/1/10. 423 bhp. 4SLB		

83405 TENNESSEE GAS PIPELINE COMPANY LLC BOP190001 E10 (Combustion Turbine)
Print Date: 1/18/2023

Make: Solar
Manufacturer: Titan
Model: 130-2050S
Maximum rated Gross Heat Input (MMBtu/hr-HHV): 169.50
Type of Turbine: Industrial
Type of Cycle: Simple-Cycle Description:
Industrial Application: Compressor Description:
Power Output: 20,929.00 Units: BHP

Is the combustion turbine using (check all that apply):

A Dry Low NOx Combustor: ☒

Steam Injection: ☐

Steam to Fuel Ratio:

Water Injection: ☐

Water to Fuel Ratio:

Other: ☐

Description:

Is the turbine Equipped with a Duct Burner?

☐ Yes

☒ No

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

☐ Yes

☒ No

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

☒ Yes

☐ No

Comments:

Max Hourly:
169.5 MMBtu/hr-HHV is the rating @ 0 deg F.
20,929 HP @ 0 deg F.

Annual Average:
158.4 MMBtu/hr-HHV is the rating @ 40 deg F.
20,087 HP @ 40 deg F.

Conditions at subzero:
172.2 MMBtu/hr - HHV is the rating @ -10 deg F.
21,062 HP @ -10 deg F.

Turbine drives a centrifugal compressor with tandem dry gas seals.

83405 TENNESSEE GAS PIPELINE COMPANY LLC BOP190001 E11 (Emergency Generator)
Print Date: 1/18/2023

Make:			
Manufacturer:	Caterpillar		
Model:	G3512		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	11.40		
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:	1,468 bhp.		

83405 TENNESSEE GAS PIPELINE COMPANY LLC BOP190001 E12 (Boiler)
Print Date: 1/18/2023

Make:	<input type="text"/>
Manufacturer:	<input type="text" value="Parker"/>
Model:	<input type="text" value="T-4600LR"/>
Maximum Rated Gross Heat Input (MMBtu/hr - HHV):	<input type="text" value="4.60"/>
Boiler Type:	<input type="text" value="Package"/>
Utility Type:	<input type="text" value="Non-Utility"/>
Output Type:	<input type="text"/>
Steam Output (lb/hr):	<input type="text"/>
Fuel Firing Method:	<input type="text"/>
Description (if other):	<input type="text"/>
Draft Type:	<input type="text"/>
Heat Exchange Type:	<input type="text" value="Indirect"/>

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

Low NOx Burner:	<input checked="" type="checkbox"/>	Type:	<input type="text"/>
Staged Air Combustion:	<input type="checkbox"/>		
Flue Gas Recirculation (FGR):	<input type="checkbox"/>	Amount (%):	<input type="text"/>

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:

TENNESSEE GAS PIPELINE COMPANY LLC (83405)
BOP190001

Date: 1/18/2023

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
CD10	U10 OxiCat	Unit 10 Oxidation Catalyst	Oxidizer (Catalytic)				

83405 TENNESSEE GAS PIPELINE COMPANY LLC BOP190001 CD10 (Oxidizer (Catalytic))

Print Date: 1/18/2023

Make:	ADVOCAT CO Catalyst
Manufacturer:	Advanced Catalyst Systems LLC
Model:	ADVOCAT
Minimum Inlet Temperature (°F):	600
Maximum Inlet Temperature (°F)	1150
Minimum Outlet Temperature (°F)	600
Maximum Outlet Temperature (°F):	1150
Minimum Residence Time (sec)	63.45
Fuel Type:	Natural gas
Description:	
Maximum Rated Gross Heat Input (MMBtu/hr):	169.5
Minimum Pressure Drop Across Catalyst (psi):	0.024
Maximum Pressure Drop Across Catalyst (psi):	0.13
Catalyst Material:	Platinum
Form of Catalyst:	Other
Description:	Metal Honeycomb
Minimum Expected Life of Catalyst:	2
Units:	Years
Volume of Catalyst (ft³):	65.63
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Comments:	* Max Turbine Heat Input at 0 degrees F is 169.5 MMBtu/hr - HHV.

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.		
PT3	Boiler	Boiler	Round	20	28	200	300.0	200.0	350.0	608.0	200.0	648.0	Up	
PT7	Unit 7	Turbine Unit 7	Rectangle	54	55	400	891.0	828.0	925.0	131,054.0	123,473.0	138,635.0	Up	
PT8	Unit 8	Turbine Unit 8	Rectangle	54	55	400	891.0	828.0	925.0	131,054.0	123,473.0	138,635.0	Up	
PT9	Em Gen	316kw Nat Gas Emer Gen	Round	8	17	200	800.0	700.0	925.0	3,125.0	1,028.0	3,331.0	Up	
PT10	Unit 10	Turbine Unit 10	Round	90	75	138	922.0	903.0	982.0	240,110.0	219,756.0	253,979.0	Up	
PT11	Em Gen	Em Gen	Round	16	20	207	984.0	984.0	1,006.0	9,006.0	5,009.0	9,006.0	Up	
PT12	Boiler	Boiler	Round	22	30	203	350.0	350.0	350.0	2,147.0	2,147.0	2,147.0	Up	

TENNESSEE GAS PIPELINE COMPANY LLC (83405)
BOP190001

Date: 1/18/2023

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

U 3 1.89 Boiler 1.89 MMBtu/hr Gas-fired Peerless Boiler, Series 211-10WP used to heat water for domestic plant use

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	G.F. Boiler	Normal - Steady State	E3		PT3	1-02-006-03	0.0	8,760.0		608.0	648.0	300.0	350.0

U 7 GT7 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression (GT7)

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	GT7	Firing Natural Gas at full range of load conditions when Ambient Temp = / > 0 deg F, in SoLoNOx mode	Normal - Steady State	E7		PT7	2-02-002-01	0.0	8,760.0		123,473.0	138,635.0	828.0	925.0
OS2	GT7 Subzero	Firing Natural Gas when Ambient Temp < 0 deg F, in Diffusion Flame mode	Normal - Steady State	E7		PT7	2-02-002-01	0.0	100.0		134,300.0	134,300.0	851.0	851.0
OS3	GT7 - SU	Startup of GT-7	Startup	E7		PT7	2-02-002-01	0.0	37.5		68,800.0	68,800.0	764.0	764.0
OS4	GT7 - SD	Shut Down of GT-7	Shutdown	E7		PT7	2-02-002-01	0.0	37.5		67,200.0	67,200.0	758.0	758.0

TENNESSEE GAS PIPELINE COMPANY LLC (83405)
BOP190001

Date: 1/18/2023

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

U 8 GT8 94.6 MMBtu/hr Solar Taurus 70 Gas Turbine used for natural gas compression (GT8)

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	GT8	Firing Natural Gas at full range of load conditions when Ambient Temp = / > 0 deg F, in SoLoNOx mode	Normal - Steady State	E8		PT8	2-02-002-01	0.0	8,760.0		123,473.0	138,635.0	828.0	925.0
OS2	GT8 Subzero	Firing Natural Gas when Ambient Temp < 0 deg F, in Diffusion Flame mode	Normal - Steady State	E8		PT8	2-02-002-01	0.0	100.0		134,300.0	134,300.0	851.0	851.0
OS3	GT8 - SU	Startup of GT-8	Startup	E8		PT8	2-02-002-01	0.0	37.5		68,800.0	68,800.0	764.0	764.0
OS4	GT8 - SD	Shut Down of GT-8	Shutdown	E8		PT8	2-02-002-01	0.0	37.5		67,200.0	67,200.0	758.0	758.0

U 9 316 kW Gen 316 kW (3.82 MMBtu/hr) Emergency Generator to be used during electrical service disruption

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	Emerg Gen	Natural Gas Fired Operation	Normal - Steady State	E9		PT9	2-02-002-54	0.0	50.0		1,028.0	3,331.0	700.0	841.0

TENNESSEE GAS PIPELINE COMPANY LLC (83405)
BOP190001

Date: 1/18/2023

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

U 10 GT10 172.22 MMBtu/hr Solar Titan 130 Gas Turbine used for natural gas compression (GT10)

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	GT10	Firing Natural Gas at full range of load conditions when Ambient Temp = / > 0 deg F, in SoLoNOx mode	Normal - Steady State	E10	CD10 (P)	PT10	2-02-002-01	0.0	8,760.0		219,800.0	254,000.0	903.0	982.0
OS2	GT10-subzero	Firing Natural Gas when Ambient Temp <0 degrees F, in Diffusion Flame mode	Normal - Steady State	E10	CD10 (P)	PT10	2-02-002-01	0.0	100.0		257,800.0	257,800.0	900.0	900.0
OS3	GT10 - SU	Startup of GT-10	Startup	E10		PT10	2-02-002-01	0.0	37.5		101,800.0	101,800.0	823.0	823.0
OS4	GT10 - SD	Shut Down of GT-10	Shutdown	E10		PT10	2-02-002-01	0.0	37.5		99,400.0	99,400.0	823.0	823.0
OS5	GT10 SHKDN	Shakedown of GT-10		E10		PT10	2-02-002-01	0.0	120.0					

U 11 Em Gen Emergency Generator

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	Emerg Gen	Natural Gas Fired Operation	Normal - Steady State	E11		PT11	2-02-002-54	0.0	100.0		5,009.0	9,006.0	984.0	1,006.0

TENNESSEE GAS PIPELINE COMPANY LLC (83405)
BOP190001

Date: 1/18/2023

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

U 12 4.6 Boiler 4.6 MMBtu/hr Gas-fired Parker Boiler

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	Natural Gas	Natural Gas Fired Boiler	Normal - Steady State	E12		PT12	1-02-006-03	0.0	8,760.0		2,147.0	2,147.0	350.0	350.0

Date: 1/18/2023

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

Group NJID: GR1 NSPS OOOOa

Members:

Type	ID	OS	Step
FG	FG1		
U	U 10	OS0 Summary	

Formal Reason(s) for Group/Cap:

☒ Other

Other (explain): Collection of fugitive emissions components at a compressor station subject to NSPS
Subpart OOOOa

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

Operating Circumstances: