State of New Jersey

PHILIP D. MURPHY
Governor

TAHESHA L. WAY
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

SHAWN M. LATOURETTE
Commissioner

# Air Pollution Control Operating Permit
# Significant Modification

**Permit Activity Number: BOP220001** **Program Interest Number: 78901**

| Mailing Address | Plant Location |
|---|---|
| Ed Werkheiser<br>Principal Environmental Specialist<br>OCEAN ENERGY HOLDINGS LLC<br>1605 N CEDAR CREST BLVD - STE 509<br>ALLENTOWN, PA 18104 | OCEAN ENERGY HOLDINGS, LLC<br>2498 State Hwy 70<br>Manchester Twp<br>Ocean County |

**Initial Operating Permit Approval Date: June 9, 1999**

**Operating Permit Approval Date: Draft**

**Operating Permit Expiration Date: June 9, 2004 (Operating Under Application Shield)**

## AUTHORITY AND APPLICABILITY

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

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

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

## PERMIT SHIELD

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

## COMPLIANCE SCHEDULES

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

## COMPLIANCE CERTIFICATIONS AND DEVIATION REPORTS

The permittee shall submit to the Department and to United States Environmental Protection Agency (US EPA) periodic compliance certifications, in accordance with N.J.A.C. 7:27-22.19. **The annual compliance certification** is due to the

Department and EPA within 60 days after the end of each calendar year during which this permit was in effect. **Semi-annual deviation reports** relating to compliance testing and monitoring are due to the Department within 30 days after the end of the semi-annual period. The schedule and additional details for these submittals are available in Subject Item - FC, of the Facility Specific Requirements of this permit.

## ACCESSING PERMITS

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

## HELPLINE

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

## RENEWING YOUR OPERATING PERMIT AND APPLICATION SHIELD

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

## COMPLIANCE ASSURANCE MONITORING

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

## ADMINISTRATIVE HEARING REQUEST

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

If you have any questions regarding this permit approval, please call Shafi Ahmed at (609) 940-5652.

Approved by:

_____

Joel Leon

Enclosure

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

**Facility Name: OCEAN ENERGY HOLDINGS LLC**
**Program Interest Number: 78901**
**Permit Activity Number: BOP220001**

## TABLE OF CONTENTS

## Section A

## Facility Name: OCEAN ENERGY HOLDINGS LLC
## Program Interest Number: 78901
## Permit Activity Number: BOP220001

## POLLUTANT EMISSIONS SUMMARY

Table 1: Total emissions from all Significant Source Operations[1] at the facility.

| Facility's Potential Emissions from all Significant Source Operations (tons per year) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Source Categories | VOC (total) | $NO_x$ | CO | $SO_2$ | TSP (total) | $PM_{10}$ (total) | $PM_{2.5}$ (total) | Pb | HAPs* (total) | $CO_2e$[2] |
| Emission Units Summary | 77.11 | 69.95 | 365.48 | 26.29 | 24.82 | 24.82 | 22.42 | NA | 62.4 | |
| Batch Process Summary | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Group Summary | 46.46 | 42.01 | 125.5 | 3.7 | 4.78 | 4.78 | 4.35 | NA | 21.8 | |
| Total Emissions | 123.57 | 111.96 | 490.98 | 29.99 | 29.6 | 29.6 | 26.77 | NA | 84.2 | 176,612 |

Table 2: Estimate of total emissions from all Insignificant Source Operations[1] and total emissions from Non-Source Fugitives at the facility.

| Emissions from all Insignificant Source Operations and Non-Source Fugitive Emissions (tons per year) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Source Categories | VOC (total) | $NO_x$ | CO | $SO_2$ | TSP (total) | $PM_{10}$ (total) | $PM_{2.5}$ (total) | Pb | HAPs (total) |
| Insignificant Source Operations | 0.35 | NA | NA | NA | NA | NA | NA | NA | NA |
| Non-Source Fugitive Emissions | NA | NA | NA | NA | NA | NA | NA | NA | NA |

VOC: Volatile Organic Compounds
NOx: Nitrogen Oxides
CO: Carbon Monoxide
$SO_2$: Sulfur Dioxide
TSP: Total Suspended Particulates
Other: Any other air contaminant regulated under the Federal CAA
$PM_{10}$: Particulates under 10 microns
$PM_{2.5}$: Particulates under 2.5 microns
Pb: Lead
HAPs: Hazardous Air Pollutants
$CO_2e$: Carbon Dioxide equivalent
N/A: Indicates the pollutant is not emitted or is emitted below the reporting threshold specified in N.J.A.C. 7:27-22, Appendix, Table A and N.J.A.C. 7:27-17.9(a).

*Emissions of individual HAPs are provided in Table 3 on the next page.
Emissions of "Other" air contaminants are provided in Table 4 on the next page.

[1] Significant Source Operations and Insignificant Source Operations are defined at N.J.A.C. 7:27-22.1.
[2] Total $CO_2e$ emissions for the facility.

## Section A

## Facility Name: OCEAN ENERGY HOLDINGS LLC
## Program Interest Number: 78901
## Permit Activity Number: BOP220001

## POLLUTANT EMISSIONS SUMMARY

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

| HAP | TPY |
|---|---|
| 1,1,2,2-Tetrachloroethane | 0.0183 |
| 1,3-Butadiene | 0.035 |
| 1,2-Dichloroethane | 0.0137 |
| 1,4-Dichlorobenzene | 0.00422 |
| 7,12-Dimethylbenz(a)anthracene | 0.00000109 |
| Acetaldehyde | 1.1 |
| Acrolein | 0.00428 |
| Acrylonitrile | 0.0033 |
| Arsenic | 0.0000136 |
| Benzene | 0.0635 |
| Cadmium | 0.0000746 |
| Cobalt | 0.0000057 |
| Dichloromethane | 0.0464 |
| Ethylbenzene | 0.0379 |
| Ethylene Dibromide | 0.00581 |
| Formaldehyde | 76.2 |
| Naphthalene | 0.0144 |
| Trichloroethylene | 0.0142 |
| Vinyl Chloride | 0.0361 |
| Hydrochloric Acid | 0.657 |

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

| Other Air Contaminant | TPY |
|---|---|
| Ammonia | 5.96 |
| | |
| | |
| | |
| | |
| | |

[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: OCEAN ENERGY HOLDINGS LLC
## Program Interest Number: 78901
## Permit Activity Number: BOP220001

## GENERAL PROVISIONS AND AUTHORITIES

1. No permittee shall allow any air contaminant, including an air contaminant detectable by the sense of smell, to be present in the outdoor atmosphere in a quantity and duration which is, or tends to be, injurious to human health or welfare, animal or plant life or property, or which would unreasonably interfere with the enjoyment of life or property. This shall not include an air contaminant that occurs only in areas over which the permittee has exclusive use or occupancy. Requirements relative only to nuisance situations, including odors, are not considered federally enforceable. [N.J.A.C. 7:27-22.16(g)8]

2. Any deviation from operating permit requirements which results in a release of air contaminants shall be reported to the Department as follows:

   a. If the air contaminants are released in a quantity or concentration which poses a potential threat to public health, welfare or the environment or which might reasonably result in citizen complaints, the permittee shall report the release to the Department:

      i. Immediately on the Department hotline at 1-(877) 927-6337, pursuant to N.J.S.A. 26:2C-19(e); and

      ii. As part of the compliance certification required in N.J.A.C. 7:27-22.19(f). However, if the deviation is identified through source emissions testing, it shall be reported through the source emissions testing and monitoring procedures at N.J.A.C. 7:27-22.18(e)3; or

   b. If the air contaminants are released in a quantity or concentration which poses no potential threat to public health, welfare or the environment and which will not likely result in citizen complaints, the permittee shall report the release to the Department as part of the compliance certification required in N.J.A.C. 7:27-22.19(f), except for deviations identified by source emissions testing reports, which shall be reported through the procedures at N.J.A.C. 7:27-22.18(e)3; or

   c. If the air contaminants are released in a quantity or concentration which poses no potential threat to public health, welfare or the environment and which will not likely result in citizen complaints, and the permittee intends to assert the affirmative defense afforded by N.J.A.C. 7:27-22.16(l), the violation shall be reported by 5:00 PM of the second full calendar day following the occurrence, or of becoming aware of the occurrence, consistent with N.J.A.C. 7:27-22.16(l). [N.J.A.C. 7:27-22.19(g)]

3. The permittee shall comply with all conditions of the operating permit including the approved compliance plan. Any non-compliance with a permit condition constitutes a violation of the New Jersey Air Pollution Control Act N.J.S.A. 26:2C-1 et seq., or the CAA, 42 U.S.C. §7401 et seq., or both, and is grounds for enforcement action; for termination, revocation and reissuance, or for modification of the operating permit; or for denial of an application for a renewal of the operating permit. [N.J.A.C. 7:27-22.16(g)1]

4. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of its operating permit. [N.J.A.C. 7:27-22.16(g)2]

5. This operating permit may be modified, terminated, or revoked for cause by the EPA pursuant to 40 CFR 70.7(g) and revoked or reopened and modified for cause by the Department pursuant to N.J.A.C. 7:27-22.25. [N.J.A.C. 7:27-22.16(g)3]

6. The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this operating permit; or to determine compliance with the operating permit. [N.J.A.C. 7:27-22.16(g)4]

7. The filing of an application for a modification of an operating permit, or of a notice of planned changes or anticipated non-compliance, does not stay any operating permit condition. [N.J.A.C. 7:27-22.16(g)5]

8. The operating permit does not convey any property rights of any sort, or any exclusive privilege. [N.J.A.C. 7:27-22.16(g)6]

9. Upon request, the permittee shall furnish to the Department copies of records required by the operating permit to be kept. [N.J.A.C. 7:27-22.16(g)7]

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

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

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

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

11. In the event of a challenge to any part of this operating permit, all other parts of the permit shall continue to be valid. [N.J.A.C. 7:27-22.16(f)]

12. Each owner and each operator of any facility, source operation, or activity to which this permit applies is responsible for ensuring compliance with all requirements of N.J.A.C. 7:27-22. If the owner and operator are separate persons, or if there is more than one owner or operator, each owner and each operator is jointly and severally liable for any fees due under N.J.A.C. 7:27-22, and for any penalties for violation of N.J.A.C. 7:27-22. [N.J.A.C. 7:27-22.3]

13. The permittee shall ensure that no air contaminant is emitted from any significant source operation at a rate, calculated as the potential to emit, that exceeds the applicable threshold for reporting emissions set forth in the Appendix to N.J.A.C. 7:27-22 or 7:27-17.9(a), unless emission of the air contaminant is authorized by this operating permit. [N.J.A.C. 7:27-22.3(c)]

14. Consistent with the provisions of N.J.A.C. 7:27-22.3(e), the permittee shall ensure that all requirements of this operating permit are met. In the event that there are multiple emission limitations, monitoring, recordkeeping, and/or reporting requirements for a given source operation, the facility must comply with all requirements, including the most stringent.

15. Consistent with the provisions of N.J.A.C. 7:27-22.3(s), Except as otherwise provided in this subchapter, the submittal of any information or application by a permittee including, but not limited to, an application or notice for any change to the operating permit, including any administrative amendment, any minor or significant modification, renewal, a notice of a seven-day notice change, a notice of past or anticipated noncompliance, does not stay any operating permit condition, nor relieve a permittee from the obligation to obtain other necessary permits and to comply with all applicable Federal, State, and local requirements.

16. Applicable requirements derived from an existing or terminated consent decree with EPA will not be changed without advance consultation by the Department with EPA. N.J.A.C. 7:27-22.3(uu).

17. Unless specifically exempted from permitting, temporary mobile equipment for short-term activities may be periodically used at major facilities, on site for up to 90 days if the requirements listed below, (a) through (h) are satisfied.

    a. The permittee will ensure that the temporary mobile equipment will not be installed permanently or used permanently on site.

    b. The permittee will ensure that the temporary mobile equipment will not circumvent any State or Federal rules and regulations, even for a short period of time, and the subject equipment will comply with all applicable performance standards.

    c. The permittee cannot use temporary mobile equipment unless the owner or operator of the subject equipment has obtained and maintains an approved Air Pollution Control Permit, issued pursuant to N.J.A.C. 7:27-8 or 22, prior to bringing the temporary mobile equipment to operate at the major facility.

    d. The permittee is responsible for ensuring the temporary mobile equipment's compliance with the terms and conditions specified in its approved Air Pollution Control Permit when the temporary mobile equipment operates on the property of the permittee.

    e. The permittee will ensure that temporary mobile equipment utilized for short-term activities will not operate on site for more than a total of 90 days during any calendar year.

    f. The permittee will keep on site a list of temporary mobile equipment being used at the facility with the start date, end date, and record of the emissions from all such equipment (amount and type of each air contaminant) no later than 30 days after the temporary mobile equipment completed its job in accordance with N.J.A.C. 7:27-22.19(i)3.

    g. Emissions from the temporary mobile equipment must be included in the emission netting analysis required of the permittee by N.J.A.C. 7:27-18.7. This information is maintained on site by the permittee and provided to the Department upon request in accordance with existing applicable requirements in the FC Section of its Title V permit.

    h. Where short-term activities (employing temporary mobile equipment) will reoccur on at least an annual basis, the permittee is required to include such activities (and the associated equipment) within one year of the first use, in its Title V permit through the appropriate modification procedures.

18. Consistent with the provisions of N.J.A.C. 7:27-22.9(c), the permittee shall use monitoring of operating parameters, where required by the compliance plan, as a surrogate for direct emissions testing or monitoring, to demonstrate compliance with applicable requirements.

19. The permittee is responsible for submitting timely and administratively complete operating permit applications:

    Administrative Amendments [N.J.A.C. 7:27-22.20(c)];
    Seven-Day Notice changes [N.J.A.C. 7:27-22.22(e)];
    Minor Modifications [N.J.A.C. 7:27-22.23(e)];
    Significant Modifications [N.J.A.C. 7:27-22.24(e)]; and
    Renewals [N.J.A.C. 7:27-22.30(b).

20. The operating permit renewal application consists of a RADIUS application and the application attachment available at the Department's website https://dep.nj.gov/boss/applications-and-forms/ (Attachment to the RADIUS Operating Permit Renewal Application). Both the RADIUS application and the Application Attachment, along with any other supporting documents must be submitted using the Department's Portal

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

21. For all source emissions testing performed at the facility, the phrase "worst case conditions without creating an unsafe condition" used in the enclosed compliance plan is consistent with EPA's National Stack Testing Guidance, dated April 27, 2009, where all source emission testing performed at the facility shall be under the representative (normal) conditions that:

    i. Represent the range of combined process and control measure conditions under which the facility expects to operate (regardless of the frequency of the conditions); and

    ii. Are likely to most challenge the emissions control measures of the facility with regard to meeting the applicable emission standards, but without creating an unsafe condition.

22. Consistent with EPA's National Stack Testing Guidance and Technical Manual 1004, a facility may not stop an ongoing stack test because it would have failed the test unless the facility also ceases operation of the equipment in question to correct the issue. Stopping an ongoing stack test in these instances will be considered credible evidence of emissions non-compliance.

23. Each permittee shall maintain records of all source emissions testing or monitoring performed at the facility and required by the operating permit in accordance with N.J.A.C. 7:27-22.19. Records shall be maintained, for at least five years from the date of each sample, measurement, or report. Each permittee shall maintain all other records required by this operating permit for a period of five years from the date each record is made. At a minimum, source emission testing or monitoring records shall contain the information specified at N.J.A.C. 7:27-22.19(b). [N.J.A.C. 7:27-22.19(a) and N.J.A.C. 7:27-22.19(b)]

24. A Permittee may seek the approval of the Department for a delay in testing required pursuant to this permit by submitting a written request to the appropriate Regional Enforcement Office in accordance with N.J.A.C. 7:27-22.18(k). A Permittee may also seek advanced approval for a longer period for submittal of a source emissions test report required by the permit by submitting a request to the Department's Regional Enforcement Office in accordance with N.J.A.C. 7:27-22.19. [N.J.A.C. 7:27-22.18(k) and N.J.A.C. 7:27-22.19]

25. Testing every 5 years shall be defined as no later than the end of the 60th month after the first required and each subsequent stack test was completed for the new or modified source.

## Section C

## Facility Name: OCEAN ENERGY HOLDINGS LLC
## Program Interest Number: 78901
## Permit Activity Number: BOP220001

# STATE-ONLY APPLICABLE REQUIREMENTS

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

**STATE-ONLY APPLICABLE REQUIREMENTS**

The following applicable requirements are not federally enforceable:

| SECTION | SUBJECT ITEM | ITEM # | REF. # |
|---|---|---|---|
| B | --- | 1 | --- |
| B | --- | 10b | --- |
| D | FC | --- | 3 |
| D | FC | --- | 9 |

## Section D

## Facility Name: OCEAN ENERGY HOLDINGS LLC
## Program Interest Number: 78901
## Permit Activity Number: BOP220001

# FACILITY SPECIFIC REQUIREMENTS AND INVENTORIES

### FACILITY SPECIFIC REQUIREMENTS PAGE INDEX

**OCEAN ENERGY HOLDINGS (78901)**
**BOP220001**

Date: 2/28/2024

# New Jersey Department of Environmental Protection
# Reason for Application

## Permit Being Modified

**Permit Class:** BOP **Number:** 170001

**Description of Modifications:** MRPC Holdings, LLC operates a landfill gas to energy (LFGTE) facility consisting of twelve (12) landfill gas (LFG) internal combustion engines that drive generators providing electricity to the grid. The facility is a major source with respect to the Title V Operating Permit program and is also classified as a major source of hazardous air pollutants (HAP). Further, the facility is considered an existing major stationary source with respect to the federal Prevention of Significant Deterioration (PSD) permitting program under 40 Code of Federal Regulations (CFR) Part 52.21 and Nonattainment New Source Review (NNSR) permitting program under N.J.A.C. 7:27-18.

Ocean Energy Holdings, LLC (OEH) is proposing to construct a renewable natural gas (RNG) plant that will treat and convert LFG generated at the adjacent Ocean County Landfill into RNG, a pipeline quality natural gas equivalent. With this modification application for the proposed RNG project, an administrative amendment to change the name of the facility from MRPC Holdings, LLC to Ocean Energy Holdings, LLC is being requested.

Please see attached documents for additional details, including the analyses that demonstrate the RNG project does not trigger PSD and NNSR permitting pursuant to 40 CFR 52.21 and N.J.A.C. 7:27-18, respectively.

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

**Subject Item:** **FC**

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

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

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

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

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

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

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

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

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

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

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

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

**Subject Item:** **GR1 Six landfill gas engines CAT3516, 1138 HP each, installed in phase I (1996)**

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 1 | VOC (Total) <= 46.46 tons/yr including formaldehyde. [N.J.A.C. 7:27-22.16(a)] | VOC (Total): Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and by calculations.<br><br>The VOC(Total) ton per year value shall be calculated using the following formula: (Ton/Year) = (A lb/MMBTU) x (B BTU/scf) x (MMscf of landfill gas consumed by the engine during 12 consecutive months) x (1 ton / 2000 lb). A = Emission Factor (0.18 lb/MMBTU) for VOC as stated in this permit). B = Heating Value (HHV) for Landfill Gas (monthly average of higher heating value of the landfill gas as measured by the facility). . [N.J.A.C. 7:27-22.16(o)] | VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and emission rate calculation procedures in this permit approved by the Department. [N.J.A.C. 7:27-22.16(o)] | Submit a report: Annually , a report shall be submitted to the Central Regional Enforcement Office by April 15 of each year. The annual report shall include a summary of calendar year emissions of pollutants, which shall be determined using annual fuel consumption data and emission factors. The annual amount of each fuel used in the calendar year shall also be reported. [N.J.A.C. 7:27-22.16(o)] |
| 2 | NOx (Total) <= 42.01 tons/yr. Annual emission rate. [N.J.A.C. 7:27-22.16(a)] | NOx (Total): Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and by calculations.<br>The NOx ton per year value shall be calculated using the following formula: (Ton/Year) = (A lb/MMBTU) x (B BTU/scf) x (MMscf of landfill gas consumed by the engine during 12 consecutive months) x (1 ton / 2000 lb). A = Emission Factor (0.199 lb/MMBTU) for NOx as stated in this permit. B = Heating Value (HHV) for Landfill Gas (monthly average of higher heating value of the landfill gas as measured by the facility). . [N.J.A.C. 7:27-22.16(o)] | NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and emission rate calculation procedures in this permit approved by the Department. [N.J.A.C. 7:27-22.16(o)] | Submit a report: Annually , a report shall be submitted to the Central Regional Enforcement Office by April 15 of each year. The annual report shall include a summary of calendar year emissions of pollutants, which shall be determined using annual fuel consumption data and emission factors. The annual amount of each fuel used in the calendar year shall also be reported. [N.J.A.C. 7:27-22.16(o)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 3 | CO <= 125.48 tons/yr. Annual emission rate. [N.J.A.C. 7:27-22.16(a)] | CO: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and by calculations.<br>The CO ton per year value shall be calculated using the following formula: (Ton/Year) = (A lb/MMBTU) x (B BTU/scf) x (MMscf of landfill gas consumed by the engines during 12 consecutive months) x (1 ton / 2000 lb).<br>A = Emission Factor (0.595 lb/MMBTU) for CO as stated in this permit. B = Heating Value (HHV) for Landfill Gas (monthly average of higher heating value of the landfill gas as measured by by the facility).<br>. [N.J.A.C. 7:27-22.16(o)] | CO: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and emission rate calculation procedures in this permit approved by the Department. [N.J.A.C. 7:27-22.16(o)] | Submit a report: Annually. A report shall be submitted to the Central Regional Enforcement Office by April 15 of each year. The annual report shall include a summary of calendar year emissions of pollutants, which shall be determined using annual fuel consumption data and emission factors. The annual amount of each fuel used in the calendar year shall also be reported. [N.J.A.C. 7:27-22.16(o)] |
| 4 | SO2 <= 3.7 tons/yr. Annual emission rate. [N.J.A.C. 7:27-22.16(a)] | SO2: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and by calculations.<br>SO2 emissions, tpy for the 12 consecutive month period (rolling 1 month), are required to be calculated monthly based on the H2S concentration in landfill gas quarterly monitoring results.<br><br>Landfill gas shall be sampled quarterly at MRPC 3516 engines, prior to combustion. [N.J.A.C. 7:27-22.16(o)] | SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and emission rate calculation procedures in this permit approved by the Department. [N.J.A.C. 7:27-22.16(o)] | Submit a report: Annually , a report shall be submitted to the Central Regional Enforcement Office by April 15 of each year. The annual report shall include a summary of calendar year emissions of pollutants, which shall be determined using annual fuel consumption data and emission factors. The annual amount of each fuel used in the calendar year shall also be reported. [N.J.A.C. 7:27-22.16(o)] |

GR1 Six landfill gas engines CAT3516, 1138 HP each, installed in phase I (1.

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 5 | TSP <= 4.78 tons/yr. Annual emission rate. [N.J.A.C. 7:27-22.16(a)] | TSP: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and by calculations. The TSP ton per year value shall be calculated using the following formula: (Ton/Year) = (A lb/MMBTU) x (B BTU/scf) x (MMscf of landfill gas consumed by the engines during 12 consecutive months) x (1 ton / 2000 lb). A = Emission Factor (0.023 lb/MMBTU) for TSP as stated in this permit. B = Heating Value (HHV) for Landfill Gas (monthly average of higher heating value of the landfill gas as measured by by the facility). . [N.J.A.C. 7:27-22.16(o)] | TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and emission rate calculation procedures in this permit approved by the Department. [N.J.A.C. 7:27-22.16(o)] | Submit a report: Annually. A report shall be submitted to the Central Regional Enforcement Office by April 15 of each year. The annual report shall include a summary of calendar year emissions of pollutants, which shall be determined using annual fuel consumption data and emission factors. The annual amount of each fuel used in the calendar year shall also be reported. [N.J.A.C. 7:27-22.16(o)] |
| 6 | PM-10 (Total) <= 4.78 tons/yr. Annual emission rate. [N.J.A.C. 7:27-22.16(a)] | PM-10 (Total): Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and by calculations. The PM-10 ton per year value shall be calculated using the following formula: (Ton/Year) = (A lb/MMBTU) x (B BTU/scf) x (MMscf of landfill gas consumed by the engines during 12 consecutive months) x (1 ton / 2000 lb). A = Emission Factor (0.023 lb/MMBTU) for PM-10 as stated in this permit. B = Heating Value (HHV) for Landfill Gas (monthly average of higher heating value of the landfill gas as measured by by the facility). [N.J.A.C. 7:27-22.16(o)] | PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and emission rate calculation procedures in this permit approved by the Department. [N.J.A.C. 7:27-22.16(o)] | Submit a report: Annually. A report shall be submitted to the Central Regional Enforcement Office by April 15 of each year. The annual report shall include a summary of calendar year emissions of pollutants, which shall be determined using annual fuel consumption data and emission factors. The annual amount of each fuel used in the calendar year shall also be reported. [N.J.A.C. 7:27-22.16(o)] |

GR1 Six landfill gas engines CAT3516, 1138 HP each, installed in phase I (1.

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 7 | PM-2.5 (Total) <= 4.35 tons/yr. Annual emissions rate. [N.J.A.C. 7:27-22.16(a)] | PM-2.5 (Total): Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and by calculations. The PM2.5 ton per year value shall be calculated using the following formula: (Ton/Year) = (A lb/MMBTU) x (B BTU/scf) x (MMscf of landfill gas consumed by the engines during 12 consecutive months) x (1 ton / 2000 lb). A = Emission Factor (0.021 lb/MMBTU) for PM2.5 as stated in this permit. B = Heating Value (HHV) for Landfill Gas (monthly average of higher heating value of the landfill gas as measured by by the facility). [N.J.A.C. 7:27-22.16(o)] | PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and emission rate calculation procedures in this permit approved by the Department. [N.J.A.C. 7:27-22.16(o)] | Submit a report: Annually. A report shall be submitted to the Central Regional Enforcement Office by April 15 of each year. The annual report shall include a summary of calendar year emissions of pollutants, which shall be determined using annual fuel consumption data and emission factors. The annual amount of each fuel used in the calendar year shall also be reported. [N.J.A.C. 7:27-22.16(o)] |
| 8 | Tetrachloroethane (1,1,2,2-) <= 0.00364 tons/yr for 6 engines. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 9 | Acrylonitrile <= 0.00657 tons/yr for 6 engines. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 10 | Formaldehyde <= 21.76 tons/yr for 6 engines. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 11 | Annual fuel use limit is 766.27 MM standard cubic feet in 12 consecutive-months period. The fuel usage will be measured at the common landfill header that supplies fuel to the six engines. Should the permittee exceeds this quantitative fuel flow limit, compliance with gross heat input of 421,451 MM BTU (HHV) per 12 consecutive months for all six CAT3516 engines under GR1 shall be required to be demonstrated. [N.J.A.C. 7:27-22.16(a)] | Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(o)] | Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Compliance shall be determined based on a consecutive 12-month period computed with monthly sums. Compliance determined by calculating a total monthly MMBtu based on total gas flow and average monthly methane content. (HHV). [N.J.A.C. 7:27-22.16(o)] | Submit a report: Annually. A report shall be submitted to the Central Regional Enforcement Office by April 15 of each year. The annual report shall include a summary of calendar year emissions of pollutants, which shall be determined using annual fuel consumption data and emission factors. The annual amount of each fuel used in the calendar year shall also be reported. [N.J.A.C. 7:27-22.16(o)] |
| 12 | The permittee shall monitor the methane concentration in landfill gas and calculate the heating value (HHV) of landfill gas used in all six G3516 engines (E1 through E6) on a monthly basis. [N.J.A.C. 7:27-22.16(a)] | Monitored by other method (provide description) at the approved frequency. Percentage of methane in the Landfill gas shall be continuously monitored by methane gas analyzer and continuously recorded. [N.J.A.C. 7:27-22.16(o)] | Recordkeeping by data acquisition system (DAS) / electronic data storage each month during operation. [N.J.A.C. 7:27-22.16(o)] | Comply with the requirement: Every month. [N.J.A.C. 7:27-22.16(o)] |

GR1 Six landfill gas engines CAT3516, 1138 HP each, installed in phase I (1.

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 13 | CAT 3516 engines will be shutdown once the RNG Plant is operational. [N.J.A.C. 7:27-22.16(a)] | | | None. |

GR1 Six landfill gas engines CAT3516, 1138 HP each, installed in phase I (1.

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

**Emission Unit:** **U1 CAT 3516 Lean Burn Reciprocating Engine, 1138 BHP, each**
**Operating Scenario:** **OS1 Normal Firing Landfill Gas**

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 1 | Opacity <= 20 %. Smoke emissions from stationary internal combustion engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5] | None. | None. | None. |
| 2 | Particulate Emissions <= 5.21 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)] | None. | None. | None. |
| 3 | SO2 <= 16 lb/hr. Maximum allowable limit for SO2 emissions at any instant. [N.J.A.C. 7:27- 7.2(b)2] | None. | None. | None. |
| 4 | SO2 <= 8 lb/hr. Maximum allowable limit for SO2 emissions in any 60 minute period. [N.J.A.C. 7:27- 7.2(r)] | None. | None. | None. |
| 5 | Adjust the combustion process each calendar year. Record NOx and CO concentration after each adjustment and the O2 concentration at which NOx and CO were measured. [N.J.A.C. 7:27-16.10(e)] | Other: Periodic Emission Monitoring (Portable Instrument). Annually.[N.J.A.C. 7:27-16.10(e)]. | Other: Manual Logging of Parameter (Permanently Bound). Annually.[N.J.A.C. 7:27-16.10(e)]. | None. |
| 6 | CO <= 500 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.10(b)] | None. | None. | None. |
| 7 | NOx (Total) <= 1.5 grams/brake horsepower-hour. Restriction of NOx emission per hp-hr for lean burn I.C. engine with an output of more than 500 hp and fueled by gaseous fuel. [N.J.A.C. 7:27-19.8(e)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 8 | Opacity <= 10 %. Smoke emissions no greater than 10% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds, except for startups or shutdowns. The engine startup and shutdown time shall be less than 5 mins. [N.J.A.C. 7:27-22.16(e)] | None. | None. | None. |
| 9 | VOC (Total) <= 0.183 lb/MMBTU (including formaldehyde) based on the maximum gross heat input per each G3516 engine of 9.69 MMBtu/hr (HHV). [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 10 | VOC (Total) <= 0.71 grams/brake horsepower-hour (including formaldehyde), Maximum emission rate. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 11 | VOC (Total) <= 1.77 lb/hr including formaldehyde. Maximum emission rate. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 12 | NOx (Total) <= 0.199 lb/MMBTU based on 0.77grams/bhp-hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 13 | NOx (Total) <= 0.77 grams/brake horsepower-hour Maximum emission rate. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 14 | NOx (Total) <= 55 ppmvd @ 15% O2 Maximum emission limit. [N.J.A.C. 7:27-22.16(a)] | Other: Monitored by periodic emission monitoring each quarter during operation.[N.J.A.C. 7:27-22.16(o)]. | Other: Recordkeeping by manual logging of parameter or storing data in a computer data system each quarter during operation.[N.J.A.C. 7:27-22.16(o)]. | None. |
| 15 | NOx (Total) <= 1.93 lb/hr. Maximum emission rate. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 16 | CO <= 2.3 grams/brake horsepower-hour. Maximum emission rate. [N.J.A.C. 7:27-22.16(e)] | None. | None. | None. |
| 17 | CO <= 0.595 lb/MMBTU based on the maximum gross heat input per each G3516 engine of 9.69 MMBtu/hr (HHV). [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 18 | CO <= 258 ppmvd @ 15% O2. Maximum emission limit. [N.J.A.C. 7:27-22.16(e)] | Other: Monitored by periodic emission monitoring each quarter during operation.[N.J.A.C. 7:27-22.16(o)]. | Other: Recordkeeping by manual logging of parameter or storing data in a computer data system each quarter during operation.[N.J.A.C. 7:27-22.16(o)]. | None. |
| 19 | CO <= 5.77 lb/hr. Maximum emission rate. [N.J.A.C. 7:27-22.16(e)] | None. | None. | None. |
| 20 | SO2 <= 0.018 lb/MMBTU based on the maximum gross heat input per each G3516 engine of 9.69 MMBtu/hr (HHV). [N.J.A.C. 7:27-22.16(e)] | None. | None. | None. |
| 21 | SO2 <= 0.17 lb/hr. Maximum emission rate. [N.J.A.C. 7:27-22.16(e)] | Other: Monitored by periodic emission monitoring each quarter during operation. Monitored by Hydrogen Sulfide (H2S) analyzer quarterly and calculated using the following equations:<br><br>lb SO2/hr per engine = (X.X lb SO2/MMCf LFG) (MMcf/hr total)([kW-hr per engine]/[ sum of kW-hr for 6 CAT 3516 engines, E1 through E6]<br><br>X.X lb SO2/MMscfLFG = [(X.X scf H2S/MMcf LFG)(1 scfSO2/scf H2S)(64.06 lbSO2/mol)]/(385.3 cft/mol)<br>where<br>X.X scfH2S/MMcfLFG is the average quarterly H2S concentration in the LFG<br><br>kW-hr per engine is the amount of electricity generated by each of the IC engine generator sets operated during the hour that the H2S monitoring occurred.<br><br>MMcf/hr total is the amount of LFG used by all IC engine generator sets (E1, E2, E3, E4, E5, E6) during the hour that the H2S monitoring was performed.[N.J.A.C. 7:27-22.16(o)]. | Other: Recordkeeping by manual logging of parameter or storing data in a computer data system each quarter during operation. The records of all the readings of the H2S analyzer and of the corresponding electricity generated shall be recorded and maintained in a manner acceptable to the Department.[N.J.A.C. 7:27-21.16(o)]. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 22 | TSP <= 0.023 lb/MMBTU based on the maximum gross heat input per each G3516 engine of 9.69 MMBtu/hr (HHV). [N.J.A.C. 7:27-22.16(e)] | None. | None. | None. |
| 23 | TSP <= 0.22 lb/hr. Maximum emission rate. [N.J.A.C. 7:27-22.16(e)] | None. | None. | None. |
| 24 | PM-10 (Total) <= 0.023 lb/MMBTU based on the maximum gross heat input per each G3516 engine of 9.69 MMBtu/hr (HHV). [N.J.A.C. 7:27-22.16(e)] | None. | None. | None. |
| 25 | PM-10 (Total) <= 0.22 lb/hr. Maximum emission rate. [N.J.A.C. 7:27-22.16(e)] | None. | None. | None. |
| 26 | PM-2.5 (Total) <= 0.021 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)] | | | |
| 27 | Tetrachloroethane (1,1,2,2-) <= 0.000139 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 28 | Acrylonitrile <= 0.00025 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 29 | Formaldehyde <= 0.83 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 30 | Maximum Gross Heat Input <= 9.69 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(e)] | None. | None. | None. |
| 31 | The permittee shall periodically monitor and record oxygen content of exhaust gas. [N.J.A.C. 7:27-22.16(e)] | Other: Monitored by periodic emission monitoring each quarter during operation.[N.J.A.C. 7:27-22.16(o)]. | Other: Recordkeeping by manual logging of parameter or storing data in a computer data system each quarter during operation.[N.J.A.C. 7:27-22.16(o)]. | None. |
| 32 | Fuel type limited to treated landfill gas. [N.J.A.C. 7:27-22.16(e)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 33 | Operate a gas treatment system for the landfill gas (LFG) prior to combustion in the six reciprocating internal combustion engines G3516. The treatment system shall include (in this order):<br><br>1) A primary inlet coalescing filter to remove particles in the gas stream that are 0.3 microns and larger. The bottom chamber of the vessel is designed to knockout any remaining condensate and is equipped with a sight glass device that provides an indication of the presence and amount of water (condensate level) that has accumulated in the chamber.<br><br>2) Gas blowers for the compression of the landfill gas..<br><br>3) An air-to-gas cooler, which is used to reduce the elevated temperatures of LFG received from the compressors (heated by the blower during gas compression.<br><br>4) A final two-stage dewatering/ polishing filter vessel (the bottom chambers are used for moisture knock out, top chambers are equipped with coalescing filter to remove gas particles having a diameter of 0.3 micron and larger).<br><br>The treatment system qualifies as a control system pursuant to 40 CFR 60 Subpart XXX, consistent with past USEPA determinations.<br><br>Monitoring parameters, to ensure proper operation of the treatment system, are included under 40 CFR 60.766(g). [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 34 | Operate the Treatment System's Pressure Discharge Blower at 2.0 psig or greater. [40 CFR 60.766(d)] | Monitored by pressure measurement device continuously. The pressure shall be monitored with a pressure switch that is located after the polishing filter vessel and notifies a plant operator (by audio alarm and/or phone communication to an operator carried pager) of an exceedance condition (i.e. the set point of the switch has been tripped) .<br><br>If the pressure of the gas in the treatment system monitored after the polishing filter vessel is less than 0.5 psig, the electricity generation processes will be shut down and an investigation of the equipment will be performed and corrective actions implemented prior to startup. [40 CFR 60.766(d)] | Recordkeeping by manual logging of parameter or storing data in a computer data system daily. Any pressure less than 0.5 psig, and any corrective action taken to restore the pressure back to 0.5 psig and greater shall be recorded daily.<br><br>Treatment system component data must be kept on site for seven years. [40 CFR 60.768(b)(5)] | Submit a report: Every six months on January 1 and July 1 of each year but started no sooner than three months after the effective date of the approved permit. The first report shall include data for the three months preceding the reporting half-year, if applicable.. The six month cycles shall begin on January 1 and July 1.<br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai [40 CFR 60.756(d) 63.1981(h)] and. [40 CFR 63.1981(l)] |
| 35 | Pressure Drop <= 2 psi d. The pressure differential across the primary coalescing filter vessel (vacuum side of the blowers) of the treatment system shall be equal to or less than 2 psid (pound per square inch differential).<br><br>The polishing filter (pressure side of blower and downstream of the gas cooler) of the treatment system should be equal or less than 2 psid. [40 CFR 60.766(d)] | Pressure Drop: Monitored by pressure measurement device daily. The pressure drop across each of the primary coalescing filter vessel is greater than 2.0 psid, the electricity generation processes shall be shut down and the associated filter must be replaced and/or investigations shall be performed to evaluate potential malfunctions of upstream LFG de-watering equipment and corrective actions implemented prior to startup. [40 CFR 60.766(d)] | Pressure Drop: Recordkeeping by manual logging of parameter or storing data in a computer data system daily. Any pressure differential greater than 2.0 psid, and any corrective action taken to restore the pressure back to 2.0 psid and less shall be recorded daily.<br><br>Treatment system component data must be kept on site for seven years. [40 CFR 60.768(b)(5)] | Submit a report: As per the approved schedule. The six month cycles shall begin on January 1 and July 1.<br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai [40 CFR 60.756(d) 63.1981(h)] and. [40 CFR 63.1981(l)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 36 | Pressure Drop <= 3 psi d. The pressure differential across the polishing coalescing filter vessel (pressure side of the blowers and downstream of gas cooler) of the treatment system shall be equal or less than 3 psid (pound per square inch differential).<br><br>The polishing filter (pressure side of blower and downstream of the gas cooler) of the treatment system should be equal or less than 2 psid. [40 CFR 60.766(d)] | Pressure Drop: Monitored by pressure measurement device daily. The pressure drop across each of the primary coalescing filter vessel is greater than 3.0 psid, the electricity generation processes shall be shut down and the associated filter must be replaced and/or investigations shall be performed to evaluate potential malfunctions of upstream LFG de-watering equipment and corrective actions implemented prior to startup. [40 CFR 60.766(d)] | Pressure Drop: Recordkeeping by manual logging of parameter or storing data in a computer data system daily. Any pressure differential greater than 3.0 psid, and any corrective action taken to restore the pressure back to 3.0 psid and less shall be recorded daily.<br><br>Treatment system component data must be kept on site for seven years. [40 CFR 60.768(b)(5)] | Submit a report: As per the approved schedule The six month cycles shall begin on January 1 and July 1.<br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai [40 CFR 60.756(d) 63.1981(h)] and. [40 CFR 63.1981(l)] |
| 37 | Temperature <= 130 degrees F.<br>The temperature of the air-to-gas cooler of the treatment system shall be maintained at a temperature less than or equal to 130 degrees F. [40 CFR 60.766(d)] | Temperature: Monitored by temperature instrument continuously.<br>The temperature shall be monitored with a temperature switch set at 130 degrees F, that is located after the polishing coalescing filter vessel and notifies a plant operator (by audio alarm and/or phone communication to an operator carried pager of an exceedance (i.e. the set point of the switch has been tripped.<br><br>If the temperature of the gas in the treatment system monitored after the polishing coalescing filter vessel is greater than 130 degrees F the electricity generation processes will be shut down immediately, and an investigation of the equipment shall be performed and corrective actions implemented prior to startup. [40 CFR 60.766(d)] | Temperature: Recordkeeping by manual logging of parameter or storing data in a computer data system daily. Any temperature greater than 130 degrees F, and any corrective action taken to restore the temperature to 130 degrees F and less shall be recorded daily. Treatment system component data must be kept on site for seven years. [40 CFR 60.768(b)(5)] | Submit a report: As per the approved schedule. The six month cycles shall begin on January 1 and July 1.<br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai [40 CFR 60.756(d) 63.1981(h)] and. [40 CFR 63.1981(l)] |

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

**Emission Unit:** **U2 CAT 3516 Lean Burn Reciprocating Engine, 1138 BHP, each**
**Operating Scenario:** **OS1 Normal Firing Landfill Gas**

The requirements for this item are identical to those for: U1 OS1

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

**Emission Unit:** **U3 CAT 3516 Lean Burn Reciprocating Engine, 1138 BHP, each**

**Operating Scenario:** **OS1 Normal Firing Landill Gas**

The requirements for this item are identical to those for: U1 OS1

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

**Emission Unit:** **U4 CAT 3516 Lean Burn Reciprocating Engine, 1138 BHP, each**
**Operating Scenario:** **OS1 Normal Firing Landfill Gas**

The requirements for this item are identical to those for: U1 OS1

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

**Emission Unit:** **U5 CAT 3516 Lean Burn Reciprocating Engine, 1138 BHP, each**
**Operating Scenario:** **OS1 Normal Firing Landfill Gas**

The requirements for this item are identical to those for: U1 OS1

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

**Emission Unit:** **U6 CAT 3516 Lean Burn Reciprocating Engine, 1138 BHP, each**

**Operating Scenario:** **OS1 Normal Firing Landill Gas**

The requirements for this item are identical to those for: U1 OS1

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

**Emission Unit:** **U7 Six CAT 3520 Lean Burn Reciprocating Engines, 2233 BHP, each**
**Operating Scenario:** **OS Summary**

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 1 | Summary of Applicable Federal Regulations:<br>40 CFR 60 Subpart A<br>40 CFR 60 Subpart XXX<br>40 CFR 63 Subpart A<br>40 CFR 63 Subpart AAAA<br>40 CFR 63 Subpart ZZZZ. [40 CFR Federal Rules Summary] | None. | None. | None. |
| 2 | Stack Testing Requirements:<br>Conduct a comprehensive stack test on each CAT 3520 engine at emission points 7 through 12 once initially within 180 days and every five years from the last stack test to demonstrate compliance with the CO, NOx, PM10, PM2.5, TSP, VOC, Oxygen, Acetaldehyde, Acrolein, Benzene, Formaldehyde, and opacity emission limits. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.<br><br>(Note: Initial and periodic stack testing for natural gas firing only. Since the engines may not fire on LFG once the RNG plant is operational, only require testing on LFG if fired within five year permit term). [N.J.A.C. 7:27-22.16(a)] | Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-21.16(o)] | 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: http://www.epa.gov/ttnchie1/ert. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.<br><br>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<br>. [N.J.A.C. 7:27-22.18(h)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 3 | NOx Emission Offsets:<br>The landfill gas to energy project shall not operate unless 84.1 tons of nitrogen oxides emission offsets, that meet the criteria established in N.J.A.C. 7:27 - 18.1 et.seq. for NOx emissions, are secured.<br>These offset shall be secured from Saint-Gobain Containers, located at a distance of 70 miles (less than 100 miles) from MRPC, in the city of Millville, Cumberland County, New Jersey. [N.J.A.C. 7:27-18.3(c)1] | None. | None. | Other (provide description): Once initially. 84.1 tons NOx Emission Offsets were obtained from Saint-Cobain Containers (PI 75002) on 5/21/2007. (TM7-0002). [N.J.A.C. 7:27-18.18(c)1] |
| 4 | Once the RNG plant is operational, prior to firing landfill gas in the engines, the stack height must be increased to 58 feet aboveground or more.<br>(Note: The stack height does not need to be raised if natural gas is fired). [N.J.A.C. 7:27-22.16(a)] | Monitored by documentation of construction once initially. [N.J.A.C. 7:27-22.16(o)] | Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)] | Submit a report: Once initially to the Chief, Central Regional Office, to the Secrtion Chief, Emission Measurement Section and to the Chief, Bureau of Stationary Sources. [N.J.A.C. 7:27-21.16(o)] |
| 5 | Once the RNG Plant is operational, only five (5) engines may operate on landfill gas at a time. [N.J.A.C. 7:27-22.16(a)] | Other: Monitored by engines' operation records.[N.J.A.C. 7:27-22.16(o)]. | Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)] | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 6 | Annual heat input limit of landfill gas is 825,999 MMBTU(HHV)/ any consecutive 12 months (1502 MMscf/ any consecutive 12 months at 550 BTU/scf (HHV)) for six (6) CAT 3520 engines.<br><br>Total annual heat input during any consecutive 12-month period shall be calculated by adding the total heat input for a given month to the total heat input during the preceding 11-month period. Monthly MMBTU fuel use shall be calculated using the following formula: (MMBTU(HHV)/Month) = [(Y MMBTU/MMscf) x (MMscf of landfill gas consumed by the engines per month)]. Y = Heating Value of Landfill Gas (monthly average of higher heating value of the landfill gas as measured by plant personnel). This procedure will begin the first day following the commencement of the operation of the engines. [N.J.A.C. 7:27-22.16(a)] | Monitored by fuel flow/firing rate instrument continuously. The fuel use monitoring system shall have an accuracy of not less than 1.5%, certified by the manufacturer. Compliance shall be determined based on a consecutive 12-month period computed with monthly sums.<br><br>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. Monitored by fuel flow/firing rate instrument at the approved frequency. [N.J.A.C. 7:27-22.16(o)] | Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Compliance shall be determined based on a consecutive 12-month period computed with monthly sums. Compliance determined by calculating a total monthly MMBtu based on total gas flow and average monthly methane content. [N.J.A.C. 7:27-22.16(o)] | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 7 | Annual heat input limit of natural gas is 874,073 MMBTU(HHV)/ any consecutive 12 months (857 MMscf/ any consecutive 12 months at 1020 BTU/scf (HHV)) for six (6) CAT 3520 engines.<br><br>Total annual heat input during any consecutive 12-month period shall be calculated by adding the total heat input for a given month to the total heat input during the preceding 11-month period. Monthly MMBTU fuel use shall be calculated using the following formula: (MMBTU(HHV)/Month) = [(Y MMBTU/MMscf) x (MMscf of natural gas consumed by the engines per month)]. Y = Heating Value of Natural Gas (monthly average of higher heating value of the naural gas as measured by plant personnel). This procedure will begin the first day following the commencement of the operation of the engines. [N.J.A.C. 7:27-22.16(a)] | Monitored by fuel flow/firing rate instrument continuously. The fuel use monitoring system shall have an accuracy of not less than 1.5%, certified by the manufacturer. Compliance shall be determined based on a consecutive 12-month period computed with monthly sums.<br><br>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. Monitored by fuel flow/firing rate instrument at the approved frequency. [N.J.A.C. 7:27-22.16(o)] | Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Compliance shall be determined based on a consecutive 12-month period computed with monthly sums. Compliance determined by calculating a total monthly MMBtu based on total gas flow and average monthly methane content. [N.J.A.C. 7:27-22.16(o)] | None. |
| 8 | VOC (Total) <= 75.04 tons/yr including formaldehhyde. Annual emission limit for six (6) CAT 3520 engines. [N.J.A.C. 7:27-22.16(a)] | VOC (Total): Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and calculations. [N.J.A.C. 7:27-22.16(o)] | VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The landfill gas and natural gas flow to all engines shall be continuously measured by a flow totalizer, and the monthly landfill gas flow measurements shall be manually recorded. [N.J.A.C. 7:27-21.16(o)] | None. |
| 9 | NOx (Total) <= 61.1 tons/yr. Annual emission limit for six (6) CAT 3520 engines. [N.J.A.C. 7:27-22.16(a)] | NOx (Total): Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and calculations. [N.J.A.C. 7:27-22.16(o)] | NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The landfill gas and natural gas flow to all engines shall be continuously measured by a flow totalizer, and the monthly landfill gas flow measurements shall be manually recorded. [N.J.A.C. 7:27-22.16(o)] | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 10 | CO <= 332.5 tons/yr. Annual emission limit for six (6) CAT 3520 engines. [N.J.A.C. 7:27-22.16(a)] | CO: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and calculations. [N.J.A.C. 7:27-22.16(o)] | CO: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation The landfill gas and natural gas flow to all engines shall be continuously measured by a flow totalizer, and the monthly landfill gas flow measurements shall be manually recorded. [N.J.A.C. 7:27-22.16(o)] | None. |
| 11 | SO2 <= 25 tons/yr. Annual emission rate for six (6) CAT 3520 engines. [N.J.A.C. 7:27-22.16(a)] | SO2: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and by calculations. Landfill gas shall be sampled quarterly at OEH 3520 engines, prior to combustion. [N.J.A.C. 7:27-22.16(o)] | SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)] | None. |
| 12 | TSP <= 18.3 tons/yr. Annual emission limit for six (6) CAT 3520 engines. [N.J.A.C. 7:27-22.16(a)] | TSP: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and by calculations. [N.J.A.C. 7:27-22.16(o)] | TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation The landfill gas and natural gas flow to all engines shall be continuously measured by a flow totalizer, and the monthly landfill gas flow measurements shall be manually recorded. [N.J.A.C. 7:27-22.16(o)] | None. |
| 13 | PM-10 (Total) <= 18.3 tons/yr. Annual emission limit for six (6) CAT 3520 engines. [N.J.A.C. 7:27-22.16(a)] | PM-10 (Total): Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and calculations. [N.J.A.C. 7:27-22.16(o)] | PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The landfill gas and natural gas flow to all engines shall be continuously measured by a flow totalizer, and the monthly landfill gas flow measurements shall be manually recorded. [N.J.A.C. 7:27-22.16(o)] | None. |
| 14 | PM-2.5 (Total) <= 15.9 tons/yr. Annual emission limit for six (6) CAT 3520 engines. [N.J.A.C. 7:27-22.16(a)] | PM-2.5 (Total): Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and calculations. [N.J.A.C. 7:27-22.16(o)] | PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The landfill gas and natural gas flow to all engines shall be continuously measured by a flow totalizer, and the monthly landfill gas flow measurements and methane measurements shall be manually recorded. [N.J.A.C. 7:27-22.16(o)] | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 15 | HAPs (Total) <= 61.6 tons/yr.Annual emission limit for six (6) CAT 3520 engines. [N.J.A.C. 7:27-22.16(a)] | HAPs (Total): Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(o)] | HAPs (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. The landfill gas flow to all engines shall be continuously measured by a flow totalizer, and the monthly landfill gas flow measurements shall be manually recorded. [N.J.A.C. 7:27-22.16(o)] | None. |
| 16 | Butadiene (1,3-) <= 0.035 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 17 | Dichloroethane (1,2-) <= 0.00707 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 18 | Tetrachloroethane (1,1,2,2-) <= 0.00756 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 19 | Acetaldehyde <= 1.1 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 20 | Acrolein <= 0.00428 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 21 | Acrylonitrile <= 0.0136 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 22 | Benzene <= 0.0577 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 23 | Ethylene dibromide <= 0.00581 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 24 | Formaldehyde <= 54.4 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 25 | Naphthalene <= 0.00975 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 26 | Vinyl chloride <= 0.0186 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 27 | Ammonia <= 5.96 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 28 | Other Gaseous Fuel Usage <= 1,502 MMft^3/yr of treated landfill gas for six engines. [N.J.A.C. 7:27-22.16(a)] | Other Gaseous Fuel Usage: Monitored by gas use totalizing meter continuously, based on a consecutive 12 month period (rolling 1 month basis). 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)] | Other Gaseous Fuel Usage: Recordkeeping by manual logging of parameter each month during operation. [N.J.A.C. 7:27-22.16(o)] | |
| 29 | Treatment of landfill gas includes: filter, chiller, compressor, generator, and /or turbine. The treatment system must not have any vents or atmospheric emissions. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 30 | Ocean Energy Holdings, LLC owns and operates the compression, de-watering, and filtering equipment and processes that are used to treat the landfill gas that is received from the Ocean County Landfill. The flow of the gas from Ocean County Landfill to Ocean Energy Holdings, LLC is fully automated.<br><br>The gas treatment system used at Ocean Energy Holdings, LLC is not equipped with atmospheric vents. Therefore, all of the landfill gas received by the system is directed to either the IC engines for use as a fuel or the RNG Plant. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 31 | NSPS Subpart XXX and MACT Subpart AAAA are applicable to operating scenarios OS1 through OS6 only. [40 CFR 60] and [40 CFR 63] | None. | None. | None. |
| 32 | MACT Subpart ZZZZ is applicable to operating scenarios OS7 through OS12 only. [40 CFR 63] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 33 | All requests, reports, applications, submittals, and other communications required by 40 CFR 60 shall be submitted in duplicate to the EPA Region 2 Administrator. [40 CFR 60.4(a)] | None. | None. | Other (provide description): As per the approved schedule , submit reports to EPA Region 2 as required by 40 CFR 60. Submit Information to:<br>Air Compliance Branch<br>EPA Region 2<br>290 Broadway New York, New York 10007-1886. [40 CFR 60.4(a)] |
| 34 | Submit a copy of all requests, reports, applications, submittals, and other communication required by 40 CFR 60 to the Central Regional Enforcement Office of NJDEP. [40 CFR 60.4(b)] | None. | None. | Other (provide description): As per the approved schedule , submit reports to Central Regional Office as required by 40 CFR 60. Submit Information to: Central Regional Office, NJDEP, 401 East State Street, Trenton, NJ 08625-0420. [40 CFR 60.4(b)] |
| 35 | A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in section 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)] | None. | None. | Comply with the requirement: Upon occurrence of event submit notification to EPA Region 2 and the Central Regional Office per 40 CFR 60.7. [40 CFR 60.7(a)(4)] |
| 36 | Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)] | None. | Other: Manual logging of Parameter (Permanently Bound). Upon occurrence of event.[40 CFR 60.7(b)]. | None. |

## 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 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)] |
| 38 | 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)] |
| 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. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 40 | No owner or operator subject to the provisions of this part 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. |
| 41 | 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. |
| 42 | The owner or operator shall route all the collected gas to a control system that complies with the requirements in either paragraph 60.762(b)(2)(iii) (A), (B), or (C) [40 CFR 60.762(b)(2)(iii)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 43 | All gas received by Ocean Energy Holdings, LLC must be routed to the treatment system that processes the collected gas for subsequent sale or beneficial use. If the treatment system is not operating at manufacturer's specification, the landfill gas may not be used by Ocean Energy Holdings, LLC and must be flared at Ocean County Landfill. [40 CFR 60.762(b2)(iii)(c)] | None. | None. | None. |
| 44 | All collected gases must be routed to a control system that meets requirements of the treatment system that processes the collected gas for subsequent use. [40 CFR 60.762(b)(2)(iii)] | Other: The time duration of shutdown of the treatment system must be recorded.<br><br>The standard operating procedure for shutdown of the landfill gas treatment system is to:<br>1. Ensure there are no unsafe conditions.<br>2. Contact prior to shutdown the OEH in charge Plant Operator and notify appropriate Ocean County Landfill representatives that the landfill gas treatment and electricity generation processes will be shutdown.<br>Extended shutdowns of the specified equipment will require startup of the Ocean County Landfill gas flaring process.<br>3. Initiate the proper equipment, process, and system shutdown sequence by one or more of the following:<br>a. Press Emergency Stop as determined to be necessary.<br>b. Close On/Off Switch(es) or push On/Off button(s).<br>c. Close adjacent valves as determined to be necessary.<br>4. Observe that system achieves normal shutdown ranges for appropriate gas and fluid levels, pressures, and temperatures.<br>5. Complete the appropriate SSM reporting forms and documents.<br>6. Refer to Operations and Maintenance Manuals as determined when necessary. [40 CFR 60.752]. | Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The time duration of shutdown of the treatment system must be recorded. [40 CFR 60.752] | Submit a report: Every six months on January 1 and July 1 of each year but started no sooner than three months after the effective date of the approved permit. The first report shall include data for the three months preceding the reporting half-year, if applicable.. The six month cycles shall begin on January 1 and July 1.<br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai [40 CFR 63.1981(h) and. [40 CFR 63.1981(l)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 45 | The owner or operator shall operate the collection system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.762(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour. [40 CFR 60.763(e)] | None. | None. | Comply with the requirement: As per the approved schedule. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour. [40 CFR 60.763(e)] |
| 46 | If the treatment system or the engines are not operating according to the applicable requirements and the manufacturer's specifications, the engines and the treatment system must be shutdown in one hour or less. After the shut down is complete, the landfill gas must be processed by Ocean County Landfill. [40 CFR 60.763(e)] | Other: The time duration of shutdown of the engines or the treatment system must be monitored.[40 CFR 60.763(e)]. | Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The time duration of shutdown of the engines or the treatment system must be recorded. [40 CFR 60.763(e)] | Submit a report: As per the approved schedule. The six month cycles shall begin on January 1 and July 1.<br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai [40 CFR 63.1981(h) and. [40 CFR 63.1981(l)] |
| 47 | The owner or operator shall operate the control or treatment system at all times when the collected gas is routed to the system. [40 CFR 60.763(f)] | None. | None. | None. |
| 48 | The provisions of NSPS Subpart XXX apply at all times, including periods of start-up, shutdown, or malfunction. During periods of start-up, shutdown, or malfunction, you must comply with the work practice specified in 40 CFR 60.763(e) in lieu of the compliance provisions in 40 CFR 60.765. [40 CFR 60.765(e)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 49 | Operate a gas treatment system for the landfill gas (LFG) prior to combustion in the six reciprocating internal combustion engines. The treatment system shall include (in this order):<br><br>1) A Primary filter vessel that contains coalescing filter, which is designed to remove particles in the gas stream that are 0.3 microns and larger. Condensate collected by the coalescing filter falls to the bottom of the vessel where it is immediately transferred by gravity to a sump that transfers the liquid back to the landfill for processing.<br><br>2) Gas blowers (four separate blowers) for compression of the de-watered LFG.<br><br>3) An air-to-gas cooler to reduce the temperature of the gas (which is heated by the blower during gas compression).<br><br>4) A polishing filter vessel that contains coalescing filter, which is designed to remove particles in the gas stream that are 0.3 microns and larger. Condensate collected by the coalescing filter falls to the bottom of the vessel where it is immediately transferred by gravity to a sump that transfers the liquid back to the landfill for processing.<br><br>The treatment system qualifies as a control system pursuant to 40 CFR 60 Subpart XXX, consistent with past USEPA determinations.<br><br>Monitoring parameters, to ensure proper operation of the treatment system, are included under 40 CFR 60.766(g). [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 50 | Operate the Treatment System's Pressure Discharge Blower at 0.5 psig or greater. [40 CFR 60.766(d)] | Monitored by pressure measurement device continuously. The pressure shall be monitored with a pressure switch that is located after the polishing filter vessel and notifies a plant operator (by audio alarm and/or phone communication to an operator carried pager) of an exceedance condition (i.e. the set point of the switch has been tripped).<br><br>If the pressure of the gas in the treatment system monitored after the polishing filter vessel is less than 0.5 psig, the electricity generation processes will be shut down and an investigation of the equipment will be performed and corrective actions implemented prior to startup. [40 CFR 60.766(d)] | Recordkeeping by manual logging of parameter or storing data in a computer data system daily. Any pressure less than 0.5 psig, and any corrective action taken to restore the pressure back to 0.5 psig and greater shall be recorded daily.<br><br>Treatment system component data must be kept on site for seven years. [40 CFR 60.768(b)(5)] | Submit a report: As per the approved schedule. The six month cycles shall begin on January 1 and July 1.<br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai [40 CFR 63.1981(h) and. [40 CFR 63.1981(l)] |
| 51 | Pressure Drop <= 2 psi d. The pressure differential across the primary coalescing filter vessel (vacuum side of the blowers) of the treatment system shall be equal to or less than 2 psid (pound per square inch differential).<br><br>The polishing filter (pressure side of blower and downstream of the gas cooler) of the treatment system should be equal or less than 2 psid. [40 CFR 60.766(d)] | Pressure Drop: Monitored by pressure measurement device each hour during operation. The pressure drop across each of the primary coalescing filter vessel is greater than 2.0 psid, the electricity generation processes shall be shut down and the associated filter must be replaced and/or investigations shall be performed to evaluate potential malfunctions of upstream LFG de-watering equipment and corrective actions implemented prior to startup. [40 CFR 60.766(d)] | Pressure Drop: Recordkeeping by manual logging of parameter or storing data in a computer data system daily. Any pressure differential greater than 2.0 psid, and any corrective action taken to restore the pressure back to 2.0 psid and less shall be recorded daily.<br><br>Treatment system component data must be kept on site for seven years. [40 CFR 60.768(b)(5)] | Submit a report: Every six months on January 1 and July 1 of each year but started no sooner than three months after the effective date of the approved permit. The first report shall include data for the three months preceding the reporting half-year, if applicable.. The six month cycles shall begin on January 1 and July 1.<br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai [40 CFR 63.1981(h) and. [40 CFR 63.1981(l)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 52 | Pressure Drop <= 3 psi d. The pressure differential across the polishing coalescing filter vessel (pressure side of the blowers and downstream of gas cooler) of the treatment system shall be equal or less than 3 psid (pound per square inch differential).<br><br>The polishing filter (pressure side of blower and downstream of the gas cooler) of the treatment system should be equal or less than 2 psid. [40 CFR 60.766(d)] | Pressure Drop: Monitored by pressure measurement device each hour during operation. The pressure drop across each of the primary coalescing filter vessel is greater than 3.0 psid, the electricity generation processes shall be shut down and the associated filter must be replaced and/or investigations shall be performed to evaluate potential malfunctions of upstream LFG de-watering equipment and corrective actions implemented prior to startup. [40 CFR 60.766(d)] | Pressure Drop: Recordkeeping by manual logging of parameter or storing data in a computer data system daily. Any pressure differential greater than 3.0 psid, and any corrective action taken to restore the pressure back to 3.0 psid and less shall be recorded daily.<br><br>Treatment system component data must be kept on site for seven years. [40 CFR 60.768(b)(5)] | Submit a report: Every six months on January 1 and July 1 of each year but started no sooner than three months after the effective date of the approved permit. The first report shall include data for the three months preceding the reporting half-year, if applicable.. The six month cycles shall begin on January 1 and July 1.<br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai [40 CFR 63.1981(h) and. [40 CFR 63.1981(l)] |
| 53 | Temperature <= 130 degrees F.<br>The temperature of the air-to-gas cooler of the treatment system shall be maintained at a temperature less than or equal to 130 degrees F. [40 CFR 60.766(d)] | Temperature: Monitored by temperature instrument continuously.<br>The temperature shall be monitored with a temperature switch set at 130 degrees F, that is located after the polishing coalescing filter vessel and notifies a plant operator (by audio alarm and/or phone communication to an operator carried pager of an exceedance (i.e. the set point of the switch has been tripped.<br><br>If the temperature of the gas in the treatment system monitored after the polishing coalescing filter vessel is greater than 130 degrees F the electricity generation processes will be shut down immediately, and an investigation of the equipment shall be performed and corrective actions implemented prior to startup. [40 CFR 60.766(d)] | Temperature: Recordkeeping by manual logging of parameter or storing data in a computer data system daily. Any temperature greater than 130 degrees F, and any corrective action taken to restore the temperature to 130 degrees F and less shall be recorded daily. Treatment system component data must be kept on site for seven years. [40 CFR 60.768(b)(5)] | Submit a report: As per the approved schedule. The six month cycles shall begin on January 1 and July 1.<br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai [40 CFR 63.1981(h) and. [40 CFR 63.1981(l)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 54 | An owner or an operator of a landfill gas treatment system must submit a semi-annual report to EPA describing the monitoring and operational practices. [40 CFR 60.766(d)] | None. | None. | Submit a report: As per the approved schedule. The six month cycles shall begin on January 1 and July 1.<br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai [40 CFR 63.1981(h) and. [40 CFR 63.1981(l)] |
| 55 | For landfills that use a device other than an open flare or enclosed combustor to control the landfill gas (the treatment system) the owner or operator will provide information satisfactory to the Administrator describing the operation of the control device (the treatment system), the operating parameters that would indicate proper performance and appropriate monitoring procedures. The Administrator will review the information and either approve it or request that additional information be submitted. [40 CFR 60.766(d)] | None. | None. | Obtain approval: As per the approved schedule i.e. The owner or operator shall obtain approval of the treatment system plan from the Administrator within 180 days of initial startup of the Ocean Energy Corporation Engines.<br><br>The treatment system plan was submitted to the Department on July 20, 2006. This plan was faxed to EPA by the Department on August 4, 2006. [40 CFR 60.766(d)] |
| 56 | The landfill source shall keep up-to-date, readily accessible records for the life of the control equipment (the treatment system). Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the treatment system devices' specifications must be kept until the equipment is removed. [40 CFR 60.768(b)] | None. | Other: Keep records in accordance with 40 CFR 60.768. [40 CFR 768(a)] and[40 CFR 60.768(b)]. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 57 | No owner or operator subject to the provisions of MACT Subpart A in 40 CFR 63 shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to: (1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere; (2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions. [40 CFR 63.4(b)] | None. | None. | None. |
| 58 | The owner and operator must not use fragmentation or phasing of reconstruction activities (i.e., intentionally dividing reconstruction into multiple parts for purposes of avoiding new source requirements) to avoid becoming subject to new source requirements. [40 CFR 63.4(c)] | None. | None. | None. |
| 59 | The owner or operator of a new or reconstructed affected source must provide the following information to the Administrator: notification of intention to construct a new affected source, reconstruct an affected source, or reconstruct a source such that the source becomes an affected source: notification of the actual date of startup of the source shall be delivered or postmarked within 15 calendar days after that date. [40 CFR 63.9(b)(5)] | None. | Recordkeeping by other recordkeeping method (provide description) once initially. Notification records shall be maintained and recorded in a form suitable and readily available for expeditious inspection and review for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)] | Submit notification: Upon occurrence of event. [40 CFR 63.9(b)(5)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 60 | After a title V permit has been issued, the owner or operator shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under 40 CFR 63. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard. [40 CFR 63.9(h)(3)] | None. | Recordkeeping by other recordkeeping method (provide description) upon occurrence of event. Notification records shall be maintained for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)] | Submit notification: As per the approved schedule. The notification shall be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration to NJDEP. [40 CFR 63.9(h)(3)] |
| 61 | The owner or operator shall submit all information required under 40 CFR 63 to the Regional Enforcement Office of NJDEP. In addition, per 40 CFR 63.9(a)(4)(ii), the owner or operator shall send a copy of each report submitted to NJDEP under 40 CFR 63 to Director, Division of Enforcement and Compliance Assistance, USEPA Region 2, 290 Broadway, New York, NY 10007-1866. [40 CFR 63.10(a)(4)(ii)] | None. | Other: The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]. | Other (provide description): As per the approved schedule. Submit reports and notifications as required by 40 CFR 63 to EPA Region 2 and NJDEP. [40 CFR 63.13(b)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 62 | General recordkeeping requirements. The owner or operator shall maintain files of all information (including all reports and notifications) required by 40 CFR 63 recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. The owner or operator shall maintain relevant records per 40 CFR 63.10(b)(2) and 40 CFR 63.10(c). [40 CFR 63.10(b)(1)] | None. | None. | None. |
| 63 | The facility must comply with the requirements in 40 CFR 63 Subpart AAAA and with the general provisions of part 63 as specified in table 1 of Subpart AAAA. [40 CFR 63.1930(b)] | None. | None. | None. |
| 64 | An owner or an operator of a landfill gas treatment system must submit a semi-annual report to EPA describing the monitoring and operational practices. [40 CFR 63.1981(h)] | None. | None. | Submit a report: As per the approved schedule The six month cycles shall begin on January 1 and July 1.<br><br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai CFR 63.1981(h)] and. [40 CFR 63.1981(l)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 65 | The owner or operator of a landfill seeking to comply with 40 CFR 63.1959(b)(2) using an active collection system must submit to the Administrator semi-annual reports. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 63.1983(c). The semi-annual reports must contain the information in paragraphs 40 CFR 63.1981(h)(1) through (8). [40 CFR 63.1981(h)] | None. | None. | Submit a report: As per the approved schedule. [40 CFR 63.1981(h)] |

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

**Emission Unit:** **U7 Six CAT 3520 Lean Burn Reciprocating Engines, 2233 BHP, each**

**Operating Scenario:** **OS1 Lean Burn CAT 3520 Engine -OEC1, OS2 Lean Burn CAT 3520 Engine -OEC2, OS3 Lean Burn CAT 3520 Engine -OEC3, OS4 Lean Burn CAT 3520 Engine -OEC4, OS5 Lean Burn CAT 3520 Engine -OEC5, OS6 Lean Burn CAT 3520 Engine -OEC6**

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 1 | Particulate Emissions <= 7.3 lb/hr. [N.J.A.C. 7:27- 4.2(a)] | None. | None. | None. |
| 2 | CO <= 500 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.10(b)] | None. | None. | None. |
| 3 | Adjust the combustion process in accordance with N.J.A.C.7:27-19.16 each calendar year. Record NOx and CO conc. after each adjustment and the O2 conc. at which NOx and CO were measured. [N.J.A.C. 7:27-16.10(e)] | Other: Adjust combustion process in accordance to the manufacturer's recommended procedures and maintenance schedule.[N.J.A.C. 7:27-16.8(c)]. | Recordkeeping by manual logging of parameter or storing data in a computer data system at the manufacturer's specified frequency cin a logbook or readily accessible computer data system and retained for a minimum of five years, to be made accessible to the Department upon request. Such record shall contain the following information for each adjustment:<br><br>1. The date of the adjustment and the times at which it began and ended;<br><br>2. The name, title and affiliation of the person who made the adjustment;<br><br>3. The type of procedure and maintenance performed;<br><br>4. The concentration of NOx, CO and O2 measured before and after the adjustment was made, and<br><br>5. The type and amout of fuel use over the 12 months prior to adjustment. [N.J.A.C. 7:27-19.16(h)] | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 4 | NOx (Total) <= 1.5 grams/brake horsepower-hour. [N.J.A.C. 7:27-19.8(e)] | NOx (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three 1-hour tests. For any equipment or source operation which was in operation prior to January 1, 1995, the owner or operator shall demonstrate compliance by May 31, 1996. For any equipment or source operation which commences operation or is altered after January 1, 1995, the owner or operator shall demonstrate compliance within 180 days from the date on which the source operation commences operation. [N.J.A.C. 7:27-19.15(a)2] | NOx (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-19.15(a)2] |
| 5 | Opacity <= 20 %. During startup and shutdown periods smoke emissions no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. The engine startup and shutdown time shall be less than 5 minutes. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 6 | Opacity <= 10 %. Smoke emissions no greater than 10% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds, except for startups or shutdowns. The engine startup and shutdown time shall be less than 5 mins. [N.J.A.C. 7:27-22.16(a)] | Opacity: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the averaging period as per approved sampling protocol. Refer to the stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] | Opacity: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test).<br>Refer to the stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] | Submit a stack test report: As per the approved schedule. [N.J.A.C. 7:27-22.16(o)] |
| 7 | VOC (Total) <= 2.86 lb/hr including formaldehyde. [N.J.A.C. 7:27-22.16(a)] | VOC (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | VOC (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 8 | VOC (Total) <= 0.58 grams/brake horsepower-hour including formaldehyde. [N.J.A.C. 7:27-22.16(a)] | VOC (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | VOC (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 9 | NOx (Total) <= 2.46 lb/hr. [N.J.A.C. 7:27-22.16(a)] | NOx (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | NOx (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 10 | NOx (Total) <= 2.46 lb/hr. [N.J.A.C. 7:27-22.16(a)] | Other: Monitored by periodic emission monitoring each quarter during operation based on any consecutive 30-minute period. The permittee shall measure the concentrations in the effluent stream of NOx, CO and O2 in accordance with Technical Manual 1005 and with a protocol TSP060001 approved October 31, 2006. The periodic monitoring equipment is required to be maintained, operated and calibrated in accordance CTM 034.[N.J.A.C. 7:27-22.16(o)]. | Other: Recordkeeping by manual logging of parameter or storing data in a computer data system each quarter during operation.[N.J.A.C. 7:27-22.16(o)]. | Submit a report: Every year beginning on the first of January but no sooner than three months following the effective date of the approved permit. The first report shall include data for the three months preceding the reporting year, if applicable..<br>Submit the report of the quarterly readings to the Section Chief EMS and Bureau Chief BoSS. [N.J.A.C. 7:27-22.16(o)] |
| 11 | NOx (Total) <= 0.5 grams/brake horsepower-hour. [N.J.A.C. 7:27-22.16(a)] | Other: Monitored by periodic emission monitoring each quarter during operation based on any consecutive 30-minute period. The permittee shall measure the concentrations in the effluent stream of NOx, CO and O2 in accordance with Technical Manual 1005 and with a protocol TSP060001 approved October 31, 2006. The periodic monitoring equipment is required to be maintained, operated and calibrated in accordance CTM 034.[N.J.A.C. 7:27-22.16(o)]. | Other: Recordkeeping by manual logging of parameter or storing data in a computer data system each quarter during operation.[N.J.A.C. 7:27-22.16(o)]. | Submit test results: Every year beginning on the first of January but no sooner than three months following the effective date of the approved permit. The first report shall include data for the three months preceding the reporting year, if applicable..<br>Submit the yearly report of the quarterly readings to the Section Chief EMS and Bureau Chief BoSS. [N.J.A.C. 7:27-22.16(o)] |
| 12 | NOx (Total) <= 0.5 grams/brake horsepower-hour. [N.J.A.C. 7:27-22.16(a)] | NOx (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | NOx (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 13 | CO <= 13.39 lb/hr. [N.J.A.C. 7:27-22.16(a)] | CO: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | CO: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 14 | CO <= 2.72 grams/brake horsepower-hour. [N.J.A.C. 7:27-22.16(a)] | Other: Monitored by periodic emission monitoring each quarter during operation. Daily for the first month of operation of engine, once every week for the next five months and then once a quarter thereafter to determine compliance.<br>The permittee shall measure the concentrations in the effluent stream of NOx, CO and O2 in accordance with Technical Manual 1005 and with a protocol TSP060001 approved October 31, 2006. The periodic monitoring equipment is required to be maintained, operated and calibrated in accordance CTM 034.[N.J.A.C. 7:27-22.16(o)]. | Other: Recordkeeping by manual logging of parameter or storing data in a computer data system each quarter during operation. The records of all the readings taken by the periodic emission monitor shall be recorded and maintained in a manner acceptable to the Department.[N.J.A.C. 7:27-22.16(o)]. | Submit a report: Every year beginning on the first of January but no sooner than three months following the effective date of the approved permit. The first report shall include data for the three months preceding the reporting year, if applicable. Submit the yearly report to Section Chief EMS and to Bureau Chief BoSS. [N.J.A.C. 7:27-22.16(o)] |
| 15 | CO <= 2.72 grams/brake horsepower-hour. [N.J.A.C. 7:27-22.16(a)] | CO: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | CO: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 16 | CO <= 13.39 lb/hr. [N.J.A.C. 7:27-22.16(a)] | Other: Monitored by periodic emission monitoring each quarter during operation based on any consecutive 30-minute period. The permittee shall measure the concentrations in the effluent stream of NOx, CO and O2 in accordance with Technical Manual 1005 and with a protocol TSP060001 approved October 31, 2006. The periodic monitoring equipment is required to be maintained, operated and calibrated in accordance CTM 034.[N.J.A.C. 7:27-22.16(o)]. | Other: Recordkeeping by manual logging of parameter or storing data in a computer data system each quarter during operation.[N.J.A.C. 7:27-22.16(o)]. | Submit a report: Every year beginning on the first of January but no sooner than three months following the effective date of the approved permit. The first report shall include data for the three months preceding the reporting year, if applicable..<br>Submit the report of the quarterly readings to the Section Chief EMS and Bureau Chief BoSS. [N.J.A.C. 7:27-22.16(o)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 17 | CO <= 352 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)] | Other: Monitored by periodic emission monitoring each quarter during operation based on any consecutive 30-minute period. The permittee shall measure the concentrations in the effluent stream of NOx, CO and O2 in accordance with Technical Manual 1005 and with a protocol TSP060001 approved October 31, 2006. The periodic monitoring equipment is required to be maintained, operated and calibrated in accordance CTM 034.[N.J.A.C. 7:27-22.16(o)]. | Other: Recordkeeping by manual logging of parameter or storing data in a computer data system each quarter during operation.[N.J.A.C. 7:27-22.16(o)]. | Submit a report: Every year beginning on the first of January but no sooner than three months following the effective date of the approved permit. The first report shall include data for the three months preceding the reporting year, if applicable. Submit the report of the quarterly readings to the Section Chief EMS and Bureau Chief BoSS. [N.J.A.C. 7:27-22.16(o)] |
| 18 | SO2 <= 1.13 lb/hr. [N.J.A.C. 7:27-22.16(a)] | Other: Monitored by periodic emission monitoring each quarter during operation. Monitored by Hydrogen Sulfide (H2S) analyzer quarterly and calculated using the following equations:<br><br>lb SO2/hr per engine = (X.X lb SO2/MMCf LFG) (MMcf/hr total)([kW-hr per engine]/[ sum of kW-hr for 6 engines, E7, E8, E9, E10, E11, E12]<br><br>X.X lb SO2/MMscfLFG = [(X.X scf H2S/MMcf LFG)(1 scfSO2/scf H2S)(64.06 lbSO2/mol)]/(385.3 cft/mol)<br>where<br>X.X scfH2S/MMcfLFG is the average quarterly H2S concentration in the LFG<br><br>kW-hr per engine is the amount of electricity generated by each of the IC engine generator sets operated during the hour that the H2S monitoring occurred.<br><br>MMcf/hr total is the amount of LFG used by all IC engine generator sets (E7, E8, E9, E10, E11, E12) during the hour that the H2S monitoring was performed.[N.J.A.C. 7:27-22.16(o)]. | Other: Recordkeeping by manual logging of parameter or storing data in a computer data system each quarter during operation. The records of all the readings of the H2S analyzer and of the corresponding electricity generated shall be recorded and maintained in a manner acceptable to the Department.[N.J.A.C. 7:27-22.16(o)]. | Submit an equipment protocol: Prior to occurrence of event Equipment protocol was submitted to the Department and approved on 11/24/10. [N.J.A.C. 7:27-22.16(o)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 19 | TSP <= 0.74 lb/hr. [N.J.A.C. 7:27-22.16(a)] | TSP: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | TSP: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 20 | PM-10 (Total) <= 0.74 lb/hr. [N.J.A.C. 7:27-22.16(a)] | PM-10 (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. The Department reserves the right to additional stack testing if necessary. [N.J.A.C. 7:27-22.16(o)] | PM-10 (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. For initial and renewal testing, refer to stack testing requirements specified in this permit.<br><br>For interim testing, submit protocol 60 days prior to end of second year of operation of engine to the Section Chief EMS for review and approval. Within 30 days of protocol approval, the permittee must contact EMS at 609-530-4041 to schedule a mutually acceptable test date. The stack test must be conducted within 120 days from the date of the approved protocol. The stack test report must be submitted Bureau Chief BoSS and to Section Chief EMS 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 New Jersey licensed professional engineer or certified industrial hygienist.<br><br>A copy of the test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit.<br><br>Test results shall report in gr/bh-hr, lbs/hour, lbs/MM Btu, ppm (as needed) . [N.J.A.C. 7:27-22.18(e)] and [N.J.A.C. 7:27-22.18(h)]. [N.J.A.C. 7:27-22.16(o)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 21 | PM-10 (Total) <= 0.15 grams/brake horsepower-hour. [N.J.A.C. 7:27-22.16(a)] | PM-10 (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. The Department reserves the right to additional stack testing if necessary. [N.J.A.C. 7:27-22.16(o)] | PM-10 (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. For initial and renewal testing, refer to stack testing requirements specified in this permit.<br><br>For interim testing, submit protocol 60 days prior to end of second year of operation of engine to the Section Chief EMS for review and approval. Within 30 days of protocol approval, the permittee must contact EMS at 609-530-4041 to schedule a mutually acceptable test date. The stack test must be conducted within 120 days from the date of the approved protocol. The stack test report must be submitted Bureau Chief BoSS and to Section Chief EMS 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 New Jersey licensed professional engineer or certified industrial hygienist.<br><br>A copy of the test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit.<br><br>Test results shall report in gr/bh-hr, lbs/hour, lbs/MM Btu, ppm (as needed) . [N.J.A.C. 7:27-22.18(e)] and [N.J.A.C. 7:27-22.18(h)]. [N.J.A.C. 7:27-22.16(o)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 22 | PM-2.5 (Total) <= 0.64 lb/hr. [N.J.A.C. 7:27-22.16(a)] | PM-2.5 (Total): Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. The Department reserves the right to additional stack testing if necessary. [N.J.A.C. 7:27-22.16(o)] | PM-2.5 (Total): Recordkeeping by stack test results every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. For initial and renewal testing, refer to stack testing requirements specified in this permit.<br><br>For interim testing, submit protocol 60 days prior to end of second year of operation of engine to the Section Chief EMS for review and approval. Within 30 days of protocol approval, the permittee must contact EMS at 609-530-4041 to schedule a mutually acceptable test date. The stack test must be conducted within 120 days from the date of the approved protocol. The stack test report must be submitted to Bureau Chief BoSS and to Section Chief EMS 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 New Jersey licensed professional engineer or certified industrial hygienist.<br><br>A copy of the test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit.<br><br>Test results shall report in gr/bh-hr, lbs/hour, lbs/MM Btu, ppm (as needed) . [N.J.A.C. 7:27-22.18(e)] and [N.J.A.C. 7:27-22.18(h)]. [N.J.A.C. 7:27-22.16(o)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 23 | Other Gaseous Fuel Usage <= 265 MMft^3/yr per engine of treated landfill gas. [N.J.A.C. 7:27-22.16(a)] | Other Gaseous Fuel Usage: Monitored by gas use totalizing meter daily, based on a consecutive 12 month period (rolling 1 month basis) , electric generating records and total facility fuel flow.<br><br>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)] | Other Gaseous Fuel Usage: Recordkeeping by manual logging of parameter each month during operation , electric generating records and total fuel flow to all engines, which shall be continuously measured by a flow totalizer. The monthly flow measurements shall be manually recorded. [N.J.A.C. 7:27-22.16(o)] | |
| 24 | Oxygen > 6 %. [N.J.A.C. 7:27-22.16(a)] | Oxygen: Monitored by stack emission testing every 5 years (based on completion date of the last stack test), based on an instantaneous determination and thereafter using a periodic emissions monitor, monthly, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)] | Oxygen: Recordkeeping by stack test results every 5 years (based on completion date of the last stack test) and by manual logging of portable emissions monitoring results thereafter. [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 25 | Maximum Gross Heat Input <= 16.63 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 26 | Methane: Requirement to continuously monitor and continuously record the percentage of methane in the landfill gas. [N.J.A.C. 7:27-22.16(a)] | Other: Methane Gas Analyzer. Continuously.[N.J.A.C. 7:27-22.16(o)]. | Methane: Recordkeeping by data acquisition system (DAS) / electronic data storage every 15 minutes. [N.J.A.C. 7:27-21.16(o)] | None. |
| 27 | Fuel type limited to treated landfill gas. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 28 | Tetrachloroethane (1,1,2,2-) <= 0.000288 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 29 | Dichloroethane (1,2-) <= 0.000269 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 30 | Acrylonitrile <= 0.000519 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 31 | Formaldehyde <= 2.07 lb/hr. [N.J.A.C. 7:27-22.16(a)] | Formaldehyde: Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Formaldehyde: Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 32 | Naphthalene <= 0.000185 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 33 | Vinyl chloride <= 0.000708 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |

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

**Emission Unit:** **U7 Six CAT 3520 Lean Burn Reciprocating Engines, 2233 BHP, each**

**Operating Scenario:** **OS7 Lean Burn CAT 3520 Engine -OEC1 Combusting Natural Gas, OS8 Lean Burn CAT 3520 Engine -OEC2 Combusting Natural Gas, OS9 Lean Burn CAT 3520 Engine -OEC3 Combusting Natural Gas, OS10 Lean Burn CAT 3520 Engine -OEC4 Combusting Natural Gas, OS11 Lean Burn CAT 3520 Engine -OEC5 Combusting Natural Gas, OS12 Lean Burn CAT 3520 Engine -OEC6 Combusting Natural Gas**

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 1 | Smoke emissions from each stationary internal combustion engine shall not exceed 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5] | Other: Periodic Visual Inspections.[N.J.A.C. 7:27-22.16(o)]. | None. | None. |
| 2 | Particulate Emissions <= 7.3 lb/hr. [N.J.A.C. 7:27- 4.2(a)] | None. | None. | None. |
| 3 | CO <= 500 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.10(b)] | CO: Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | CO: Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 4 | NOx (Total) <= 0.9 grams/brake horsepower-hour. [N.J.A.C. 7:27-19.8(e)2] | NOx (Total): Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | NOx (Total): Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 5 | VOC (excl formaldehyde) <= 0.15 g/hp-hr. [N.J.A.C. 7:27-22.16(a)] | Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 6 | VOC (excl formaldehyde) <= 0.738 lb/hr. [N.J.A.C. 7:27-22.16(a)] | Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 7 | NOx <= 0.15 g/hp-hr. [N.J.A.C. 7:27-22.16(a)] | Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 8 | NOx (Total) <= 0.738 lb/hr. [N.J.A.C. 7:27-22.16(a)] | NOx (Total): Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | NOx (Total): Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 9 | CO <= 0.5 g/hp-hr. [N.J.A.C. 7:27-22.16(a)] | Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 10 | CO <= 2.461 lb/hr. [N.J.A.C. 7:27-22.16(a)] | CO: Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | CO: Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 11 | PM-10 (Total) <= 0.01 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)] | PM-10 (Total): Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | PM-10 (Total): Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 12 | PM-10 (Total) <= 0.166 lb/hr. [N.J.A.C. 7:27-22.16(a)] | PM-10 (Total): Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | PM-10 (Total): Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 13 | PM-2.5 (Total) <= 0.01 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)] | PM-2.5 (Total): Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | PM-2.5 (Total): Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 14 | PM-2.5 (Total) <= 0.166 lb/hr. [N.J.A.C. 7:27-22.16(a)] | PM-2.5 (Total): Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | PM-2.5 (Total): Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 15 | Tetrachloroethane (1,1,2,2-) <= 0.0002 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 16 | Butadiene (1,3-) <= 0.00133 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 17 | Acetaldehyde <= 0.0417 lb/hr. [N.J.A.C. 7:27-22.16(a)] | Acetaldehyde: Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | Acetaldehyde: Recordkeeping by stack test results once initially. [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 18 | Acrolein <= 0.000163 lb/hr. [N.J.A.C. 7:27-22.16(a)] | Acrolein: Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | Acrolein: Recordkeeping by stack test results once initially. [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 19 | Benzene <= 0.0022 lb/hr. [N.J.A.C. 7:27-22.16(a)] | Benzene: Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | Benzene: Recordkeeping by stack test results once initially. [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 20 | Ethylene dibromide <= 0.000221 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 21 | Formaldehyde <= 0.0878 lb/hr. [N.J.A.C. 7:27-22.16(a)] | Formaldehyde: Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. Perform initial stack emission testing within 180 days from the date on which the source commences operation. [N.J.A.C. 7:27-22.16(o)] | Formaldehyde: Recordkeeping by stack test results once initially. [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 22 | Naphthalene <= 0.000371 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 23 | Ammonia <= 0.227 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 24 | The SCR shall be operated at all times that the engine is operating on natural gas except during start-up and shutdown as follows: During startup and shut down the SCR may or may not operate as required by manufacturer's recommendation. [N.J.A.C. 7:27-22.16(a)] | Other: The permittee shall record the time and duration of the operation of both the SCR and the engine.[N.J.A.C. 7:27-22.16(o)]. | Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The permittee shall record the time and duration of the operation of the engine and the selective catalytic reduction unit (SCR). [N.J.A.C. 7:27-22.16(o)] | None. |
| 25 | Temperature upstream of SCR System >= 500 degrees Fahrenheit, except during startups or shutdowns. [N.J.A.C. 7:27-22.16(a)] | None. | Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)] | None. |
| 26 | Selective Catalytic Reduction (SCR ): NOx Percentage Removal >= 77 % (design value). [N.J.A.C. 7:27-22.16(a)] | None. | Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. The permittee shall keep SCR manufacturer's documentation, as-built performance guarantee and operation and maintenance manual on-site. [N.J.A.C. 7:27-22.16(o)] | None. |
| 27 | The oxidation catalyst shall be operated at all times that the engine is operating on natural gas except during start-up and shutdown as follows: During startup and shut down the oxidation catalyst may or may not operate as required by manufacturer's recommendation. [N.J.A.C. 7:27-22.16(o)] | Other: The permittee shall record the time and duration of the operation of both the oxidation catalyst and the engine.[N.J.A.C. 7:27-22.16(o)]. | Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The permittee shall record the time and duration of the operation of the engine and the oxidation catlayst unit. [N.J.A.C. 7:27-22.16(o)] | None. |
| 28 | Temperature at Exit of Catalyst > 500 degrees F except during startup or shutdown. [N.J.A.C. 7:27-22.16(a)] | None. | Temperature at Exit of Catalyst: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)] | None. |
| 29 | Oxidation catalyst: CO Percentage Removal >= 93 % (design value). [N.J.A.C. 7:27-22.16(a)] | None. | Other: The permittee shall keep oxidation catalyst manufacturer's documentation, as-built performance guarantee and operation and maintenance manual on-site.[N.J.A.C. 7:27-22.16(o)]. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 30 | Owners and operators of new 4SLB stationary reciprocating internal combustion engines must reduce CO emissions by 93 percent or more; or limit the concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15% O2. [40 CFR 63.6600(b) and Table 2a to Subpart ZZZZ]. [40 CFR 63] | Other: Must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in § 63.7(a)(2). [40 CFR 63.6610(a)]. Subsequent performance tests must be conducted semi-annually per 40 CFR 63.6640.<br>After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.[40 CFR 63]. | Recordkeeping by stack test results at the approved frequency. [40 CFR 63] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule in 40 CFR 63.6630 and 63.6640. [40 CFR 63] |
| 31 | Except during startup new 4SLB stationary RICE> 250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst must maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test. [40 CFR 63 Table 2b to Subpart ZZZZ] [40 CFR 63] | Other: Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test. [40 CFR 63 Table 6 to Subpart ZZZZ][40 CFR 63]. | Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation [40 CFR 63 Table 6 to Subpart ZZZZ]. [40 CFR 63] | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 32 | New 4SLB stationary RICE> 250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst must maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F (based on 4-hour rolling average), except during periods of startup. [40 CFR 63 Table 2b to Subpart ZZZZ]. [40 CFR 63] | None. | Recordkeeping by data acquisition system (DAS) / electronic data storage continuously [40 CFR 63 Table 5 to Subpart ZZZZ]. [40 CFR 63] | None. |
| 33 | At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 34 | Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraphs (b)(1) through (4) of this section. [40 CFR 63.6620(b)] | None. | None. | None. |
| 35 | The permittee must conduct three separate test runs for each performance test required in this section, as specified in § 63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in this subpart. [40 CFR 63.6620(d)] | None. | None. | None. |
| 36 | Submit all notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you. If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart. [40 CFR 63.6645(a)] | None. | Other: Recordkeeping per 40 CFR 63.6655.[40 CFR 63]. | Submit notification: Upon occurrence of event to EPA Region 2 and the appropriate Reginal enforcement Office of NJDEP as required by 40 CFR 63.7. [40 CFR 63.7] |
| 37 | If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in § 63.7(b)(1). [40 CFR 63.6645(g)] | None. | Other: Recordkeeping per 40 CFR 63.6655.[40 CFR 63]. | Submit notification: Upon occurrence of event to EPA Region 2 and the appropriate Reginal enforcement Office of NJDEP as required by 40 CFR 63.7. [40 CFR 63.7] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 38 | If the permittee is required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, the permittee must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii).<br>(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.<br>(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to § 63.10(d)(2). [40 CFR 63.6645(h)] | None. | Recordkeeping by ing per 40 CFR 63.6655.[40 CFR 63]. | Submit notification: Upon occurrence of event to EPA Region 2 and the appropriate Reginal enforcement Office of NJDEP as required by 40 CFR 63.9(h)(2). [40 CFR 63.9] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 39 | Each owner or operator of a new non-emergency stationary RICE > 500 HP located at a major source of HAP shall submit a semi-annual compliance report. The semi-annual report must contain: (a) If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or (b) If the permittee had a deviation from any emission limitation or operating limitation during the reporting period, the information in § 63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), the information in § 63.6650(e); or (c) If you had a malfunction during the reporting period, the information in § 63.6650(c)(4). [40 CFR 63 Table 7 to Subpart ZZZZ]. [40 CFR 63] | None. | Other: Recordkeeping per 40 CFR 63.6655.[40 CFR 63]. | Other (provide description): Other Submit a semi-annual compliance report to EPA Region 2 and the appropriate Regional Enforcement Office of NJDEP as required under 40 CFR 63 Table 7 to Subpart ZZZZ. [40 CFR 63.6650] |

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

**Emission Unit:** **U8 RNG Plant Operation**
**Operating Scenario:** **OS Summary**

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 1 | Summary of Applicable Federal Regulations:<br>40 CFR 60 Subpart A<br>40 CFR 60 Subpart XXX<br>40 CFR 63 Subpart A<br>40 CFR 63 Subpart AAAA. [40 CFR Federal Rules Summary] | None. | None. | None. |
| 2 | Stack Testing Requirements:<br>Conduct a comprehensive stack test on the thermal oxidizer at emission point PT13 once initially and every five years from the last stack test to demonstrate compliance with the VOC, CO, NOx, SO2, TSP, PM-10, PM-2.5, Benzene and Formaldehyde emission limits.<br>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)] | Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | Other: Recordkeeping as required under the applicable operating scenario(s).[N.J.A.C. 7:27-22.16(o)]. | 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 tear 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: http://www.epa.gov/ttnchie1/ert. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.<br><br>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<br>. [N.J.A.C. 7:27-22.18(h)] |
| 3 | VOC (Total) <= 2.07 tons/yr. [N.J.A.C. 7:27-22.16(a)] | | | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 4 | NOx (Total) <= 8.85 tons/yr. [N.J.A.C. 7:27-22.16(a)] | | | None. |
| 5 | CO <= 32.98 tons/yr. [N.J.A.C. 7:27-22.16(a)] | | | None. |
| 6 | SO2 <= 1.29 tons/yr. [N.J.A.C. 7:27-22.16(a)] | | | None. |
| 7 | TSP <= 6.52 tons/yr. [N.J.A.C. 7:27-22.16(a)] | | | None. |
| 8 | PM-10 (Total) <= 6.52 tons/yr. [N.J.A.C. 7:27-22.16(a)] | | | None. |
| 9 | PM-2.5 (Total) <= 6.52 tons/yr. [N.J.A.C. 7:27-22.16(a)] | | | None. |
| 10 | HAPs (Total) <= 0.82 tons/yr. [N.J.A.C. 7:27-22.16(a)] | | | None. |
| 11 | Dichlorobenzene (1,4-) <= 0.00422 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 12 | Dichloroethane (1,2-) <= 0.00666 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 13 | Dimethylbenz(a)anthracene (7,12-) <= 0.00000109 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 14 | Tetrachloroethane (1,1,2,2-) <= 0.00712 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 15 | Acrylonitrile <= 0.0128 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 16 | Arsenic Emissions <= 0.0000136 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 17 | Benzene <= 0.00585 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 18 | Cadmium Emissions <= 0.0000746 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 19 | Cobalt Emissions <= 0.0000057 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 20 | Ethylbenzene <= 0.0379 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 21 | Formaldehyde <= 0.00509 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 22 | Hydrogen chloride <= 0.657 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 23 | Methylene chloride (Dichloromethane) <= 0.0464 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 24 | Naphthalene <= 0.00462 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 25 | Trichloroethylene <= 0.0142 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 26 | Vinyl chloride <= 0.0175 tons/yr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 27 | 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)] |
| 28 | 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)] |
| 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 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)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 30 | 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)] |
| 31 | 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)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 32 | 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. |
| 33 | The owner or operator shall demonstrate compliance with NSPS opacity standards specified in 40 CFR Part 60. [40 CFR 60.11(b)] | Monitored by visual determination once initially, based on 6 minute blocks. Testing shall be conducted using Reference Method 9 in Appendix A of NSPS. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-min averages) for the performance test. [40 CFR 60.11(b)] | Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall maintain records of opacity of emissions based on Method 9 observations. [40 CFR 60.11(e)(2)] | Submit a report: At a common schedule agreed upon by the operator and the Administrator. The owner or operator shall submit results of Method 9 observation data to the Administrator. [40 CFR 60.11(e)(2)] |
| 34 | 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. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 35 | 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. |
| 36 | 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. |
| 37 | 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. |
| 38 | The owner or operator shall route all the collected gas to a control system that complies with the requirements in either paragraph 60.762(b)(2)(iii) (A), (B), or (C) [40 CFR 60.762(b)(2)(iii)] | None. | None. | Comply with the requirement: As per the approved schedule. Submit protocol, conduct tests and submit results. Refer to stack testing requirements specified in this permit. [40 CFR 60.764(d) and. [40 CFR 60.764(e)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 39 | All gas received by Ocean Energy Holdings, LLC must be routed to the treatment system that processes the collected gas for subsequent sale or beneficial use. If the treatment system is not operating at manufacturer's specification, the landfill gas may not be used by Ocean Energy Holdings, LLC and must be flared at Ocean County Landfill. [40 CFR 60.762(b2)(iii)(c)] | None. | None. | None. |
| 40 | Each owner or operator seeking to demonstrate compliance with § 60.762(b)(2)(iii) using a landfill gas treatment system must maintain and operate all monitoring systems associated with the treatment system in accordance with the site-specific treatment system monitoring plan required in § 60.768(b)(5)(ii) and must calibrate, maintain, and operate according to the manufacturer's specifications a device that records flow to the treatment system and bypass of the treatment system (if applicable).<br>The owner or operator must:<br>(1) Install, calibrate, and maintain a gas flow rate measuring device that records the flow to the treatment system at least every 15 minutes; and<br>(2) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line. [40 CFR 60.766(g)] | None. | None. | None. |
| 41 | All collected gases must be routed to a control system that meets requirements of the treatment system that processes the collected gas for subsequent use. [40 CFR 60.762(b)(2)(iii)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 42 | The owner or operator shall operate the collection system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.762(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour. [40 CFR 60.763(e)] | None. | None. | Comply with the requirement: As per the approved schedule. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour. [40 CFR 60.763(e)] |
| 43 | If the treatment system or the RNG Plant is not operating according to the applicable requirements and the manufacturer's specifications, the RNG Plant and the treatment system must be shutdown in one hour or less. After the shut down is complete, the landfill gas must be processed by Ocean County Landfill. [40 CFR 60.763(e)] | Other: The time duration of shutdown of the RNG Plant or the treatment system must be monitored.[40 CFR 60.763(e)]. | Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The time duration of shutdown of the RNG Plant or the treatment system must be recorded. [40 CFR 60.763(e)] | Submit a report: As per the approved schedule. The six month cycles shall begin on January 1 and July 1.<br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai [40 CFR 63.1981(h) and. [40 CFR 63.1981(l)] |
| 44 | The owner or operator shall operate the control or treatment system at all times when the collected gas is routed to the system. [40 CFR 60.763(f)] | None. | None. | None. |
| 45 | The provisions of NSPS Subpart XXX apply at all times, including periods of start-up, shutdown, or malfunction. During periods of start-up, shutdown, or malfunction, you must comply with the work practice specified in 40 CFR 60.763(e) in lieu of the compliance provisions in 40 CFR 60.765. [40 CFR 60.765(e)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 46 | Temperature <= 130 degrees F.<br>The temperature of the air-to-gas cooler of the treatment system shall be maintained at a temperature less than or equal to 130 degrees F. [40 CFR 60.766(d)] | Temperature: Monitored by temperature instrument continuously.<br>The temperature shall be monitored with a temperature switch set at 130 degrees F, that is located after the polishing coalescing filter vessel and notifies a plant operator (by audio alarm and/or phone communication to an operator carried pager of an exceedance (i.e. the set point of the switch has been tripped.<br><br>If the temperature of the gas in the treatment system monitored after the polishing coalescing filter vessel is greater than 130 degrees F the electricity generation processes will be shut down immediately, and an investigation of the equipment shall be performed and corrective actions implemented prior to startup. [40 CFR 60.766(d)] | Temperature: Recordkeeping by manual logging of parameter or storing data in a computer data system daily. Any temperature greater than 130 degrees F, and any corrective action taken to restore the temperature to 130 degrees F and less shall be recorded daily. Treatment system component data must be kept on site for seven years. [40 CFR 60.768(b)(5)] | Submit a report: As per the approved schedule. The six month cycles shall begin on January 1 and July 1.<br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai [40 CFR 63.1981(h) and. [40 CFR 63.1981(l)] |
| 47 | An owner or an operator of a landfill gas treatment system must submit a semi-annual report to EPA describing the monitoring and operational practices. [40 CFR 60.766(d)] | None. | None. | Submit a report: As per the approved schedule. The six month cycles shall begin on January 1 and July 1.<br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai [40 CFR 63.1981(h) and. [40 CFR 63.1981(l)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 48 | For landfills that use a device other than an open flare or enclosed combustor to control the landfill gas (the treatment system) the owner or operator will provide information satisfactory to the Administrator describing the operation of the control device (the treatment system), the operating parameters that would indicate proper performance and appropriate monitoring procedures. The Administrator will review the information and either approve it or request that additional information be submitted. [40 CFR 60.766(d)] | None. | None. | Obtain approval: As per the approved schedule i.e. The owner or operator shall obtain approval of the treatment system plan from the Administrator within 180 days of initial startup of the Ocean Energy Corporation Engines.<br><br>The treatment system plan was submitted to the Department on July 20, 2006. This plan was faxed to EPA by the Department on August 4, 2006. [40 CFR 60.766(d)] |
| 49 | Each owner or operator seeking to demonstrate compliance with § 60.762(b)(2)(iii) using a landfill gas treatment system must maintain and operate all monitoring systems associated with the treatment system in accordance with the site-specific treatment system monitoring plan required in § 60.768(b)(5)(ii) and must calibrate, maintain, and operate according to the manufacturer's specifications a device that records flow to the treatment system and bypass of the treatment system (if applicable). The owner or operator must:<br><br>(1) Install, calibrate, and maintain a gas flow rate measuring device that records the flow to the treatment system at least every 15 minutes; and<br><br>(2) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line. [40 CFR 60.766(g)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 50 | Each owner or operator of a controlled landfill must submit a closure report to the Administrator 30 days of waste acceptance cessation [40 CFR 60.767(f)] | None. | None. | Submit a report: As per the approved schedule. The equipment removal report shall contain all of the following items: (i) A copy of the closure report submitted in accordance with 40 CFR 60.767(e); (ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired unless the report of the results of the performance test has been submitted to the EPA via CDX; and (iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 34 megagrams or greater of NMOC per year. [40 CFR 60.767(f)] |
| 51 | The landfill source shall keep up-to-date, readily accessible records for the life of the control equipment (the treatment system). Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the treatment system devices' specifications must be kept until the equipment is removed. [40 CFR 60.768(b)] | None. | Other: Keep records in accordance with 40 CFR 60.768. [40 CFR 768(a)] and[40 CFR 60.768(b)]. | None. |
| 52 | No owner or operator subject to the provisions of MACT Subpart A in 40 CFR 63 shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to: (1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere; (2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions. [40 CFR 63.4(b)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 53 | The owner and operator must not use fragmentation or phasing of reconstruction activities (i.e., intentionally dividing reconstruction into multiple parts for purposes of avoiding new source requirements) to avoid becoming subject to new source requirements. [40 CFR 63.4(c)] | None. | None. | None. |
| 54 | The owner or operator of a new or reconstructed affected source must provide the following information to the Administrator: notification of intention to construct a new affected source, reconstruct an affected source, or reconstruct a source such that the source becomes an affected source: notification of the actual date of startup of the source shall be delivered or postmarked within 15 calendar days after that date. [40 CFR 63.9(b)(5)] | None. | Recordkeeping by other recordkeeping method (provide description) once initially. Notification records shall be maintained and recorded in a form suitable and readily available for expeditious inspection and review for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)] | Submit notification: Upon occurrence of event. [40 CFR 63.9(b)(5)] |
| 55 | After a title V permit has been issued, the owner or operator shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under 40 CFR 63. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard. [40 CFR 63.9(h)(3)] | None. | Recordkeeping by other recordkeeping method (provide description) upon occurrence of event. Notification records shall be maintained for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)] | Submit notification: As per the approved schedule. The notification shall be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration to NJDEP. [40 CFR 63.9(h)(3)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 56 | The owner or operator shall submit all information required under 40 CFR 63 to the Regional Enforcement Office of NJDEP. In addition, per 40 CFR 63.9(a)(4)(ii), the owner or operator shall send a copy of each report submitted to NJDEP under 40 CFR 63 to Director, Division of Enforcement and Compliance Assistance, USEPA Region 2, 290 Broadway, New York, NY 10007-1866. [40 CFR 63.10(a)(4)(ii)] | None. | Other: The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]. | Other (provide description): As per the approved schedule. Submit reports and notifications as required by 40 CFR 63 to EPA Region 2 and NJDEP. [40 CFR 63.13(b)] |
| 57 | General recordkeeping requirements. The owner or operator shall maintain files of all information (including all reports and notifications) required by 40 CFR 63 recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. The owner or operator shall maintain relevant records per 40 CFR 63.10(b)(2) and 40 CFR 63.10(c). [40 CFR 63.10(b)(1)] | None. | None. | None. |
| 58 | The facility must comply with the requirements in 40 CFR 63 Subpart AAAA and with the general provisions of part 63 as specified in table 1 of Subpart AAAA. [40 CFR 63.1930(b)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 59 | An owner or an operator of a landfill gas treatment system must submit a semi-annual report to EPA describing the monitoring and operational practices. [40 CFR 63.1981(h)] | None. | None. | Submit a report: As per the approved schedule The six month cycles shall begin on January 1 and July 1.<br><br>Submit reports following the procedure specified in 40 CFR 63.1981(l) to the EPA via CEDRI. The owner or operator must use the appropriate electronic report in CEDRI or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-ai CFR 63.1981(h)] and. [40 CFR 63.1981(l)] |
| 60 | The owner or operator of a landfill seeking to comply with 40 CFR 63.1959(b)(2) using an active collection system must submit to the Administrator semi-annual reports. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 63.1983(c). The semi-annual reports must contain the information in paragraphs 40 CFR 63.1981(h)(1) through (8). [40 CFR 63.1981(h)] | None. | None. | Submit a report: As per the approved schedule. [40 CFR 63.1981(h)] |

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

**Emission Unit:** **U8 RNG Plant Operation**
**Operating Scenario:** **OS1 Normal Operation (Thermal Oxidizer)**

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 1 | No visible emissions. As specified in N.J.A.C. 7:27-3.2(c), this provision does not apply to smoke which is visible for a period of time of not longer than three (3) minutes in any consecutive 30-minute period. [N.J.A.C. 7:27- 3.2(a)] | | | |
| 2 | SO2 <= 20 lb/hr. [N.J.A.C. 7:27- 7.2(r)] | None. | None. | None. |
| 3 | NOx (Total) <= 0.06 lb/MMBTU. [N.J.A.C. 7:27-19.7(b)] | NOx (Total): Monitored by stack emission testing once initially and every 5 years, based on any 60 minute period. [N.J.A.C. 7:27-19.15(a)2] | NOx (Total): Recordkeeping by stack test results once initially and prior to permit expiration date. [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 4 | The permittee shall annually adjust the combustion process as specified at N.J.A.C. 7:27-19.16(a): Inspect burner, and clean or replace necessary components. Inspect flame patterns and the system controlling air-to-fuel ratio and make necessary adjustments to ensure optimum burner efficiency. [N.J.A.C. 7:27-19.7(d)1] | | Recordkeeping by manual logging of parameter annually. The permittee shall record the date and times of the adjustment; the name, title and affiliation of the person who made the adjustment; the concentration of NOx and CO in the effluent stream in ppm after each adjustment was made; and the concentration of O2 at which the NOx and CO concentrations were measured. [N.J.A.C. 7:27-19.16(c)] | |
| 5 | The thermal oxidizer shall be designed to reduce the concentration of VOC by >= 98%. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 6 | VOC (Total) <= 0.45 lb/hr. [N.J.A.C. 7:27-22.16(a)] | VOC (Total): Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | VOC (Total): Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. [N.J.A.C. 7:27-22.16(o)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 7 | NOx (Total) <= 1.52 lb/hr. [N.J.A.C. 7:27-22.16(a)] | NOx (Total): Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | NOx (Total): Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 8 | CO <= 6.8 lb/hr. [N.J.A.C. 7:27-22.16(a)] | CO: Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | CO: Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 9 | CO <= 0.2 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)] | CO: Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | CO: Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)] |
| 10 | SO2 <= 0.28 lb/hr. [N.J.A.C. 7:27-22.16(a)] | SO2: Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | SO2: Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. [N.J.A.C. 7:27-22.16(o)] |
| 11 | TSP <= 1.42 lb/hr. [N.J.A.C. 7:27-22.16(a)] | TSP: Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | TSP: Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. [N.J.A.C. 7:27-22.16(o)] |
| 12 | PM-10 (Total) <= 1.42 lb/hr. [N.J.A.C. 7:27-22.16(a)] | PM-10 (Total): Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | PM-10 (Total): Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. [N.J.A.C. 7:27-22.16(o)] |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 13 | PM-2.5 (Total) <= 1.42 lb/hr. [N.J.A.C. 7:27-22.16(a)] | PM-2.5 (Total): Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | PM-2.5 (Total): Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. [N.J.A.C. 7:27-22.16(o)] |
| 14 | Waste gas Usage <= 1,498 MMft^3/yr. [N.J.A.C. 7:27-22.16(a)] | Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis). The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)] | Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)] | None. |
| 15 | Natural Gas Usage <= 137 MMft^3/yr. [N.J.A.C. 7:27-22.16(a)] | Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis). 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)] | Natural Gas Usage: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)] | None. |
| 16 | Dichlorobenzene (1,4-) <= 0.000967 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 17 | Dichloroethane (1,2-) <= 0.00152 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 18 | Dimethylbenz(a)anthracene (7,12-) <= 0.00000029 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 19 | Tetrachloroethane (1,1,2,2-) <= 0.00163 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 20 | Acrylonitrile <= 0.00293 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 21 | Arsenic Emissions <= 0.00000357 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 22 | Benzene <= 0.00134 lb/hr. [N.J.A.C. 7:27-22.16(a)] | Benzene: Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | Benzene: Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. [N.J.A.C. 7:27-22.16(o)] |
| 23 | Cadmium Emissions <= 0.0000196 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 24 | Cobalt Emissions <= 0.0000015 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 25 | Ethylbenzene <= 0.0086 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 26 | Formaldehyde <= 0.00134 lb/hr. [N.J.A.C. 7:27-22.16(a)] | Formaldehyde: Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)] | Formaldehyde: Recordkeeping by stack test results once initially and every 5 years (based on completion date of the last stack test). [N.J.A.C. 7:27-22.16(o)] | Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. [N.J.A.C. 7:27-22.16(o)] |
| 27 | Hydrogen chloride <= 0.15 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 28 | Methylene chloride (Dichloromethane) <= 0.0106 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 29 | Naphthalene <= 0.00106 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 30 | Trichloroethylene <= 0.00323 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 31 | Vinyl chloride <= 0.004 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |

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

**Emission Unit:** **U8 RNG Plant Operation**
**Operating Scenario:** **OS2 Off Specification Gas (Candlestick Flare)**

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 1 | Smoke emissions from the flare shall not exceed 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5] | Other: Periodic visual inspections.[N.J.A.C. 7:27-22.16(o)]. | None. | None. |
| 2 | SO2 <= 20 lb/hr. [N.J.A.C. 7:27- 7.2(r)] | None. | None. | None. |
| 3 | The flare shall be designed to reduce the concentration of VOC by >= 95%. [N.J.A.C. 7:27-16.13(a)] | | | |
| 4 | The flare must be installed, operated and maintained in accordance with manufacturer specifications. [N.J.A.C. 7:27-16.13(a)] | None. | None. | None. |
| 5 | VOC (Total) <= 0.53 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 6 | NOx (Total) <= 13.5 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 7 | CO <= 61.54 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 8 | SO2 <= 0.33 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 9 | TSP <= 1.48 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 10 | PM-10 (Total) <= 1.48 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 11 | PM-2.5 (Total) <= 1.48 lb/hr. [N.J.A.C. 7:27-22.16(a)] | None. | None. | None. |
| 12 | Temperature of flare >= 1400 degrees Fahrenheit, except during startups or shutdowns. [N.J.A.C. 7:27-22.16(a)] | None. | Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)] | None. |

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

| Ref.# | Applicable Requirement | Monitoring Requirement | Recordkeeping Requirement | Submittal/Action Requirement |
|---|---|---|---|---|
| 13 | Natural Gas Usage <= 84.924 MMft^3/yr. [N.J.A.C. 7:27-22.16(a)] | Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis). 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)] | Natural Gas Usage: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)] | None. |
| 14 | Operate the flare in accordance with the parameters established under 40 CFR 60.18 and [40 CFR 60.762(b)(2)(iiic)] | None. | None. | None. |

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

**Facility Name (AIMS):** Ocean Energy Holdings, LLC

**Facility ID (AIMS):** 78901

**Street Address:** OCEAN ENERGY HOLDINGS LLC
C/O OCEAN COUNTY LANDFILL
2498 STATE HWY 70
MANCHESTER, NJ 08759

**Mailing Address:** 1605 N CEDAR CREST BLVD
STE 509
ALLENTOWN, PA 18104

**State Plane Coordinates:**

| | |
|---|---|
| **X-Coordinate:** | 564,000 |
| **Y-Coordinate:** | 4,431,000 |
| **Units:** | UTM Zone 18N - Meters |
| **Datum:** | Unknown |
| **Source Org.:** | Submittal Document |
| **Source Type:** | Other/Unknown |

**County:** Ocean

**Location Description:** RNG plant adjacent to the Ocean County Landfill

**Industry:**

| | |
|---|---|
| **Primary SIC:** | 4911 |
| **Secondary SIC:** | |
| **NAICS:** | 213112 |

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

**Contact Type: Air Permit Information Contact**

**Organization:**
**Name:** Ed Werkheiser
**Title:** Principal Environmental Specialist
**Phone:** (484) 294-8253 x
**Fax:** ( ) - x
**Other:** ( ) - x
**Type:**
**Email:** edward.werkheiser@nexteraenergy.com

**Org. Type:** LLC
**NJ EIN:** 00261722655

**Mailing Address:** 1605 N. Cedar Crest Blvd
Suite 509
Allentown, PA 18104

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**Contact Type: BOP - Operating Permits**

**Organization:**
**Name:** Sidney Barker
**Title:** PGD Plant General Manager
**Phone:** (210) 269-6448 x
**Fax:** ( ) - x
**Other:** ( ) - x
**Type:**
**Email:** sidney.barker@nexteraenergy.com

**Org. Type:** LLC
**NJ EIN:** 00261722655

**Mailing Address:** 5500 Youngblood Road
Dallas, TX 75241

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**Contact Type: Consultant**

**Organization:** Civil & Environmental Consultants
**Name:** Carla Adduci
**Title:** Principal
**Phone:** (267) 568-2300 x
**Fax:** ( ) - x
**Other:** (215) 595-3202 x
**Type:** Mobile
**Email:** cadduci@cecinc.com

**Org. Type:** Corporation
**NJ EIN:**

**Mailing Address:** 370 East Maple Ave
Suite 304
Langhorne, PA 19047

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

**Contact Type: Delegated Authority**

**Organization:**
**Name:** Sidney Barker
**Title:** PGD Plant General Manager
**Phone:** (210) 269-6448 x
**Fax:** ( ) - x
**Other:** ( ) - x
**Type:**
**Email:** sidney.barker@nexteraenergy.com

**Org. Type:** LLC
**NJ EIN:** 00261722655

**Mailing Address:** 5500 Youngblood Road
Dallas, TX 75241

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**Contact Type: Emission Statements**

**Organization:**
**Name:** Ed Werkheiser
**Title:** Principal Environmental Specialist
**Phone:** (484) 294-8253 x
**Fax:** ( ) - x
**Other:** ( ) - x
**Type:**
**Email:** edward.werkheiser@nexteraenergy.com

**Org. Type:** LLC
**NJ EIN:** 00261722655

**Mailing Address:** 1605 N. Cedar Crest Blvd
Suite 509
Allentown, PA 18104

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**Contact Type: Fees/Billing Contact**

**Organization:**
**Name:** Ed Werkheiser
**Title:** Principal Environmental Specialist
**Phone:** (484) 294-8253 x
**Fax:** ( ) - x
**Other:** ( ) - x
**Type:**
**Email:** edward.werkheiser@nexteraenergy.com

**Org. Type:** LLC
**NJ EIN:** 00261722655

**Mailing Address:** 1605 N. Cedar Crest Blvd
Suite 509
Allentown, PA 18104

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

**Contact Type: General Contact**

**Organization:**
**Name:** Ed Werkheiser
**Title:** Principal Environmental Specialist
**Phone:** (484) 294-8253 x
**Fax:** ( ) - x
**Other:** ( ) - x
**Type:**
**Email:** edward.werkheiser@nexteraenergy.com

**Org. Type:** LLC
**NJ EIN:** 00261722655

**Mailing Address:**
1605 N. Cedar Crest Blvd
Suite 509
Allentown, PA 18104

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**Contact Type: On-Site Manager**

**Organization:**
**Name:** Phil Maida
**Title:** PGD Operations Leader
**Phone:** (732) 995-0839 x
**Fax:** ( ) - x
**Other:** ( ) - x
**Type:**
**Email:** Philip.Maida@nexteraenergy.com

**Org. Type:** LLC
**NJ EIN:** 00261722655

**Mailing Address:**
Ocean Energy Holdings
2498 State Highway 70
Manchester, NJ 08759

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**Contact Type: Operator**

**Organization:**
**Name:** Phil Maida
**Title:** PGD Operations Leader
**Phone:** (732) 995-0839 x
**Fax:** ( ) - x
**Other:** ( ) - x
**Type:**
**Email:** Philip.Maida@nexteraenergy.com

**Org. Type:** LLC
**NJ EIN:** 00261722655

**Mailing Address:**
Ocean Energy Holdings
2498 State Highway 70
Manchester, NJ 08759

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

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

**Organization:** Ocean Energy Holdings, LLC
**Org. Type:** LLC
**Name:** Justin Brenner
**NJ EIN:** 00261722655
**Title:** VP Env Trading and Renewable Fuels
**Phone:** (561) 304-6047 x
**Fax:** ( ) - x
**Other:** ( ) - x
**Type:**
**Email:** justin.brenner@nexteraenergy.com
**Mailing Address:** 700 Universe Blvd
Juno Beach Office
Juno Beach, FL 33408

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**Contact Type: Responsible Official**

**Organization:** Ocean Energy Holdings, LLC
**Org. Type:** LLC
**Name:** Justin Brenner
**NJ EIN:** 00261722655
**Title:** VP Env Trading and Renewable Fuels
**Phone:** (561) 304-6047 x
**Fax:** ( ) - x
**Other:** ( ) - x
**Type:**
**Email:** justin.brenner@nexteraenergy.com
**Mailing Address:** 700 Universe Blvd
Juno Beach Office
Juno Beach, FL 33408

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**Contact Type: Title V Compliance Certification Contact**

**Organization:**
**Org. Type:** LLC
**Name:** Ed Werkheiser
**NJ EIN:** 00261722655
**Title:** Principal Environmental Specialist
**Phone:** (484) 294-8253 x
**Fax:** ( ) - x
**Other:** ( ) - x
**Type:**
**Email:** edward.werkheiser@nexteraenergy.com
**Mailing Address:** 1605 N. Cedar Crest Blvd
Suite 509
Allentown, PA 18104

**OCEAN ENERGY HOLDINGS (78901)** Date: 2/28/2024

**BOP220001**

# New Jersey Department of Environmental Protection
# Equipment Inventory

| Equip. NJID | Facility's Designation | Equipment Description | Equipment Type | Certificate Number | Install Date | Grand-Fathered | Last Mod. (Since 1968) | Equip. Set ID |
|---|---|---|---|---|---|---|---|---|
| E1 | MRPC Engine1 | CAT 3516 Lean Burn Reciprocating Engine | Stationary Reciprocating Engine | 123341 | 1/1/1995 | No | | |
| E2 | MRPC Engine2 | CAT 3516 Lean Burn Reciprocating Engine | Stationary Reciprocating Engine | 123342 | 1/1/1995 | No | | |
| E3 | MRPC Engine3 | CAT 3516 Lean Burn Reciprocating Engine | Stationary Reciprocating Engine | 123343 | 1/1/1995 | No | | |
| E4 | MRPC Engine4 | CAT 3516 Lean Burn Reciprocating Engine | Stationary Reciprocating Engine | 123344 | 1/1/1995 | No | | |
| E5 | MRPC Engine5 | CAT 3516 Lean Burn Reciprocating Engine | Stationary Reciprocating Engine | 123345 | 1/1/1995 | No | | |
| E6 | MRPC Engine6 | CAT 3516 Lean Burn Reciprocating Engine | Stationary Reciprocating Engine | 123346 | 1/1/1995 | No | | |
| E7 | OEC Engine 1 | CAT 3520 gas IC engine genset | Stationary Reciprocating Engine | BOP160001 | 9/1/2007 | No | | |
| E8 | OEC Engine 2 | CAT 3520 gas IC engine genset | Stationary Reciprocating Engine | BOP160001 | 9/1/2007 | No | | |
| E9 | OEC Engine 3 | CAT 3520 gas IC engine genset | Stationary Reciprocating Engine | BOP160001 | 9/1/2007 | No | | |
| E10 | OEC Engine 4 | CAT 3520 gas IC engine genset | Stationary Reciprocating Engine | BOP160001 | 9/1/2007 | No | | |
| E11 | OEC Engine 5 | CAT 3520 gas IC engine genset | Stationary Reciprocating Engine | BOP160001 | 9/1/2007 | No | | |
| E12 | OEC Engine 6 | CAT 3520 gas IC engine genset | Stationary Reciprocating Engine | BOP160001 | 9/1/2007 | No | | |
| E13 | RNG | RNG Skid | Other Equipment | | 3/1/2023 | No | | |

**78901 OCEAN ENERGY HOLDINGS BOP220001 E1 (Stationary Reciprocating Engine)**
**Print Date: 11/30/2023**

| | |
|---|---|
| Make: | |
| Manufacturer: | Caterpillar |
| Model: | 3516 |
| Maximum Rated Gross Heat Input (MMBtu/hr): | 9.69 |
| Class: | Lean Burn |
| Description: | |
| Duty: | Base Loaded |
| Description: | |
| Minimum Load Range (%): | |
| Maximum Load Range (%): | |
| Stroke: | 4-stroke |
| Power Output (BHP): | 1138 |
| Electric Output(KW): | 800 |
| Compression Ratio: | 11 |
| Ignition Type: | Spark |
| Description: | |
| Engine Speed (RPM): | 1200 |
| Engine Exhaust Temperature (°F): | 825 |
| Air to Fuel Ratio at Peak Load: | 6.8 |
| Ratio Basis: | |
| Lambda Factor (scfm/scfm): | |
| Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr): | 7564 |
| Output Type: | Electric |
| Heat to Power Ratio: | |
| Is the Engine Using a Turbocharger? | ● Yes ○ No |
| Is the Engine Using an Aftercooler? | ● Yes ○ No |

Is the Engine Using (check all that apply):

| | | | |
|---|---|---|---|
| A Prestratified Charge (PSC) | ☐ | A NOx Converter | ☐ |
| Air to Fuel Adjustment (AF) | ☑ | Ignition Timing Retard | ☐ |
| Low Emission Combustion | ☑ | Non-Selective Catalytic Retard (NSCR) | ☐ |
| Other | ☐ | | |

Description:

| | |
|---|---|
| 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:

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

**78901 OCEAN ENERGY HOLDINGS BOP220001 E2 (Stationary Reciprocating Engine)**
**Print Date: 11/30/2023**

| | |
|---|---|
| Make: | |
| Manufacturer: | Caterpillar |
| Model: | 3516 |
| Maximum Rated Gross Heat Input (MMBtu/hr): | 9.69 |
| Class: | Lean Burn |
| Description: | |
| Duty: | Base Loaded |
| Description: | |
| Minimum Load Range (%): | |
| Maximum Load Range (%): | |
| Stroke: | 4-stroke |
| Power Output (BHP): | 1138 |
| Electric Output(KW): | 800 |
| Compression Ratio: | 11 |
| Ignition Type: | Spark |
| Description: | |
| Engine Speed (RPM): | 1200 |
| Engine Exhaust Temperature (°F): | 825 |
| Air to Fuel Ratio at Peak Load: | 6.8 |
| Ratio Basis: | |
| Lambda Factor (scfm/scfm): | |
| Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr): | 7564 |
| Output Type: | Electric |
| Heat to Power Ratio: | |
| Is the Engine Using a Turbocharger? | ● Yes ○ No |
| Is the Engine Using an Aftercooler? | ● Yes ○ No |

Is the Engine Using (check all that apply):

| | | | |
|---|---|---|---|
| A Prestratified Charge (PSC) | ☐ | A NOx Converter | ☐ |
| Air to Fuel Adjustment (AF) | ☑ | Ignition Timing Retard | ☐ |
| Low Emission Combustion | ☑ | Non-Selective Catalytic Retard (NSCR) | ☐ |
| Other | ☐ | | |

Description:

| | | | |
|---|---|---|---|
| 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:

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

**78901 OCEAN ENERGY HOLDINGS BOP220001 E3 (Stationary Reciprocating Engine)**
**Print Date: 11/30/2023**

| | |
|---|---|
| Make: | |
| Manufacturer: | Caterpillar |
| Model: | 3516 |
| Maximum Rated Gross Heat Input (MMBtu/hr): | 9.69 |
| Class: | Lean Burn |
| Description: | |
| Duty: | Base Loaded |
| Description: | |
| Minimum Load Range (%): | |
| Maximum Load Range (%): | |
| Stroke: | 4-stroke |
| Power Output (BHP): | 1138 |
| Electric Output(KW): | 800 |
| Compression Ratio: | 11 |
| Ignition Type: | Spark |
| Description: | |
| Engine Speed (RPM): | 1200 |
| Engine Exhaust Temperature (°F): | 825 |
| Air to Fuel Ratio at Peak Load: | 6.8 |
| Ratio Basis: | |
| Lambda Factor (scfm/scfm): | |
| Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr): | 7564 |
| Output Type: | Electric |
| Heat to Power Ratio: | |
| Is the Engine Using a Turbocharger? | ● Yes ○ No |
| Is the Engine Using an Aftercooler? | ● Yes ○ No |

Is the Engine Using (check all that apply):

| | | | |
|---|---|---|---|
| A Prestratified Charge (PSC) | ☐ | A NOx Converter | ☐ |
| Air to Fuel Adjustment (AF) | ☑ | Ignition Timing Retard | ☐ |
| Low Emission Combustion | ☑ | Non-Selective Catalytic Retard (NSCR) | ☐ |
| Other | ☐ | | |

Description:

| | |
|---|---|
| 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:

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

**78901 OCEAN ENERGY HOLDINGS BOP220001 E4 (Stationary Reciprocating Engine)**
**Print Date: 11/30/2023**

| | |
|---|---|
| Make: | |
| Manufacturer: | Caterpillar |
| Model: | 3516 |
| Maximum Rated Gross Heat Input (MMBtu/hr): | 9.69 |
| Class: | Lean Burn |
| Description: | |
| Duty: | Base Loaded |
| Description: | |
| Minimum Load Range (%): | |
| Maximum Load Range (%): | |
| Stroke: | 4-stroke |
| Power Output (BHP): | 1138 |
| Electric Output(KW): | 800 |
| Compression Ratio: | 11 |
| Ignition Type: | Spark |
| Description: | |
| Engine Speed (RPM): | 1200 |
| Engine Exhaust Temperature (°F): | 825 |
| Air to Fuel Ratio at Peak Load: | 6.8 |
| Ratio Basis: | |
| Lambda Factor (scfm/scfm): | |
| Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr): | 7564 |
| Output Type: | Electric |
| Heat to Power Ratio: | |
| Is the Engine Using a Turbocharger? | ● Yes ○ No |
| Is the Engine Using an Aftercooler? | ● Yes ○ No |

Is the Engine Using (check all that apply):

| | | | |
|---|---|---|---|
| A Prestratified Charge (PSC) | ☐ | A NOx Converter | ☐ |
| Air to Fuel Adjustment (AF) | ☑ | Ignition Timing Retard | ☐ |
| Low Emission Combustion | ☑ | Non-Selective Catalytic Retard (NSCR) | ☐ |
| Other | ☐ | | |

Description:

| | | | |
|---|---|---|---|
| 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:

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

**78901 OCEAN ENERGY HOLDINGS BOP220001 E5 (Stationary Reciprocating Engine)**
**Print Date: 11/30/2023**

| | |
|---|---|
| Make: | |
| Manufacturer: | Caterpillar |
| Model: | 3516 |
| Maximum Rated Gross Heat Input (MMBtu/hr): | 9.69 |
| Class: | Lean Burn |
| Description: | |
| Duty: | Base Loaded |
| Description: | |
| Minimum Load Range (%): | |
| Maximum Load Range (%): | |
| Stroke: | 4-stroke |
| Power Output (BHP): | 1138 |
| Electric Output(KW): | 800 |
| Compression Ratio: | 11 |
| Ignition Type: | Spark |
| Description: | |
| Engine Speed (RPM): | 1200 |
| Engine Exhaust Temperature (°F): | 825 |
| Air to Fuel Ratio at Peak Load: | 6.8 |
| Ratio Basis: | |
| Lambda Factor (scfm/scfm): | |
| Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr): | 7564 |
| Output Type: | Electric |
| Heat to Power Ratio: | |
| Is the Engine Using a Turbocharger? | (●) Yes ( ) No |
| Is the Engine Using an Aftercooler? | (●) Yes ( ) No |

Is the Engine Using (check all that apply):

| | | | |
|---|---|---|---|
| A Prestratified Charge (PSC) | ☐ | A NOx Converter | ☐ |
| Air to Fuel Adjustment (AF) | ☑ | Ignition Timing Retard | ☐ |
| Low Emission Combustion | ☑ | Non-Selective Catalytic Retard (NSCR) | ☐ |
| Other | ☐ | | |

Description:

| | |
|---|---|
| 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:

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

**78901 OCEAN ENERGY HOLDINGS BOP220001 E6 (Stationary Reciprocating Engine)**
**Print Date: 11/30/2023**

| | |
|---|---|
| Make: | |
| Manufacturer: | Caterpillar |
| Model: | 3516 |
| Maximum Rated Gross Heat Input (MMBtu/hr): | 9.69 |
| Class: | Lean Burn |
| Description: | |
| Duty: | Base Loaded |
| Description: | |
| Minimum Load Range (%): | |
| Maximum Load Range (%): | |
| Stroke: | 4-stroke |
| Power Output (BHP): | 1138 |
| Electric Output(KW): | 800 |
| Compression Ratio: | 11 |
| Ignition Type: | Spark |
| Description: | |
| Engine Speed (RPM): | 1200 |
| Engine Exhaust Temperature (°F): | 825 |
| Air to Fuel Ratio at Peak Load: | 6.8 |
| Ratio Basis: | |
| Lambda Factor (scfm/scfm): | |
| Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr): | 7564 |
| Output Type: | Electric |
| Heat to Power Ratio: | |
| Is the Engine Using a Turbocharger? | ● Yes ○ No |
| Is the Engine Using an Aftercooler? | ● Yes ○ No |

Is the Engine Using (check all that apply):

| | | | |
|---|---|---|---|
| A Prestratified Charge (PSC) | ☐ | A NOx Converter | ☐ |
| Air to Fuel Adjustment (AF) | ☑ | Ignition Timing Retard | ☐ |
| Low Emission Combustion | ☑ | Non-Selective Catalytic Retard (NSCR) | ☐ |
| Other | ☐ | | |

Description:

| | |
|---|---|
| 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:

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

**78901 OCEAN ENERGY HOLDINGS BOP220001 E7 (Stationary Reciprocating Engine)**
**Print Date: 11/30/2023**

| | |
|---|---|
| Make: | Low Emission/Low Energy |
| Manufacturer: | Caterpillar, Inc. |
| Model: | G3520LE |
| Maximum Rated Gross Heat Input (MMBtu/hr): | 16.63 |
| Class: | Lean Burn |
| Description: | |
| Duty: | Base Loaded |
| Description: | |
| Minimum Load Range (%): | |
| Maximum Load Range (%): | |
| Stroke: | 4-stroke |
| Power Output (BHP): | 2233 |
| Electric Output(KW): | 1600 |
| Compression Ratio: | 11.3 |
| Ignition Type: | Spark |
| Description: | |
| Engine Speed (RPM): | 1200 |
| Engine Exhaust Temperature (°F): | 900 |
| Air to Fuel Ratio at Peak Load: | 7.5 |
| Ratio Basis: | Volume Basis |
| Lambda Factor (scfm/scfm): | 1.7 |
| Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr): | 6320 |
| Output Type: | Electric |
| Heat to Power Ratio: | |
| Is the Engine Using a Turbocharger? | ● Yes ○ No |
| Is the Engine Using an Aftercooler? | ● Yes ○ No |

Is the Engine Using (check all that apply):

| | | | |
|---|---|---|---|
| A Prestratified Charge (PSC) | ☐ | A NOx Converter | ☐ |
| Air to Fuel Adjustment (AF) | ☑ | Ignition Timing Retard | ☐ |
| Low Emission Combustion | ☑ | Non-Selective Catalytic Retard (NSCR) | ☐ |
| Other | ☐ | | |

| | |
|---|---|
| Description: | |
| 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: | Fueled with landfill gas |

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

**78901 OCEAN ENERGY HOLDINGS BOP220001 E8 (Stationary Reciprocating Engine)**
**Print Date: 11/30/2023**

| | |
|---|---|
| Make: | Low Emission/Low Energy |
| Manufacturer: | Caterpillar, Inc. |
| Model: | G3520LE |
| Maximum Rated Gross Heat Input (MMBtu/hr): | 16.63 |
| Class: | Lean Burn |
| Description: | |
| Duty: | Base Loaded |
| Description: | |
| Minimum Load Range (%): | |
| Maximum Load Range (%): | |
| Stroke: | 4-stroke |
| Power Output (BHP): | 2233 |
| Electric Output(KW): | 1600 |
| Compression Ratio: | 11.3 |
| Ignition Type: | Spark |
| Description: | |
| Engine Speed (RPM): | 1200 |
| Engine Exhaust Temperature (°F): | 900 |
| Air to Fuel Ratio at Peak Load: | 7.5 |
| Ratio Basis: | Volume Basis |
| Lambda Factor (scfm/scfm): | 1.7 |
| Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr): | 6320 |
| Output Type: | Electric |
| Heat to Power Ratio: | |
| Is the Engine Using a Turbocharger? | (●) Yes ( ) No |
| Is the Engine Using an Aftercooler? | (●) Yes ( ) No |

Is the Engine Using (check all that apply):

| | | | |
|---|---|---|---|
| A Prestratified Charge (PSC) | ☐ | A NOx Converter | ☐ |
| Air to Fuel Adjustment (AF) | ☑ | Ignition Timing Retard | ☐ |
| Low Emission Combustion | ☑ | Non-Selective Catalytic Retard (NSCR) | ☐ |
| Other | ☐ | | |

Description:

| | | | |
|---|---|---|---|
| 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: Fueled with landfill gas

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

**78901 OCEAN ENERGY HOLDINGS BOP220001 E9 (Stationary Reciprocating Engine)**
**Print Date: 11/30/2023**

| | |
|---|---|
| Make: | Low Emission/Low Energy |
| Manufacturer: | Caterpillar, Inc. |
| Model: | G3520LE |
| Maximum Rated Gross Heat Input (MMBtu/hr): | 16.63 |
| Class: | Lean Burn |
| Description: | |
| Duty: | Base Loaded |
| Description: | |
| Minimum Load Range (%): | |
| Maximum Load Range (%): | |
| Stroke: | 4-stroke |
| Power Output (BHP): | 2233 |
| Electric Output(KW): | 1600 |
| Compression Ratio: | 11.3 |
| Ignition Type: | Spark |
| Description: | |
| Engine Speed (RPM): | 1200 |
| Engine Exhaust Temperature (°F): | 900 |
| Air to Fuel Ratio at Peak Load: | 7.5 |
| Ratio Basis: | Volume Basis |
| Lambda Factor (scfm/scfm): | 1.7 |
| Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr): | 6320 |
| Output Type: | Electric |
| Heat to Power Ratio: | |
| Is the Engine Using a Turbocharger? | ● Yes ○ No |
| Is the Engine Using an Aftercooler? | ● Yes ○ No |

Is the Engine Using (check all that apply):

| | | | |
|---|---|---|---|
| A Prestratified Charge (PSC) | ☐ | A NOx Converter | ☐ |
| Air to Fuel Adjustment (AF) | ☑ | Ignition Timing Retard | ☐ |
| Low Emission Combustion | ☑ | Non-Selective Catalytic Retard (NSCR) | ☐ |
| Other | ☐ | | |

| | |
|---|---|
| Description: | |
| 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: | Fueled with landfill gas |

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

**78901 OCEAN ENERGY HOLDINGS BOP220001 E10 (Stationary Reciprocating Engine)**
**Print Date: 11/30/2023**

| | |
|---|---|
| Make: | Low Emission/Low Energy |
| Manufacturer: | Caterpillar, Inc. |
| Model: | G3520LE |
| Maximum Rated Gross Heat Input (MMBtu/hr): | 16.63 |
| Class: | Lean Burn |
| Description: | |
| Duty: | Base Loaded |
| Description: | |
| Minimum Load Range (%): | |
| Maximum Load Range (%): | |
| Stroke: | 4-stroke |
| Power Output (BHP): | 2233 |
| Electric Output(KW): | 1600 |
| Compression Ratio: | 11.3 |
| Ignition Type: | Spark |
| Description: | |
| Engine Speed (RPM): | 1200 |
| Engine Exhaust Temperature (°F): | 900 |
| Air to Fuel Ratio at Peak Load: | 7.5 |
| Ratio Basis: | Volume Basis |
| Lambda Factor (scfm/scfm): | 1.7 |
| Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr): | 6320 |
| Output Type: | Electric |
| Heat to Power Ratio: | |
| Is the Engine Using a Turbocharger? | (●) Yes ( ) No |
| Is the Engine Using an Aftercooler? | (●) Yes ( ) No |

Is the Engine Using (check all that apply):

| | | | |
|---|---|---|---|
| A Prestratified Charge (PSC) | ☐ | A NOx Converter | ☐ |
| Air to Fuel Adjustment (AF) | ☑ | Ignition Timing Retard | ☐ |
| Low Emission Combustion | ☑ | Non-Selective Catalytic Retard (NSCR) | ☐ |
| Other | ☐ | | |

Description:

| | | | |
|---|---|---|---|
| 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: Fueled with landfill gas

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

**78901 OCEAN ENERGY HOLDINGS BOP220001 E11 (Stationary Reciprocating Engine)**
**Print Date: 11/30/2023**

| | |
|---|---|
| Make: | Low Emission/Low Energy |
| Manufacturer: | Caterpillar, Inc. |
| Model: | G3520LE |
| Maximum Rated Gross Heat Input (MMBtu/hr): | 16.63 |
| Class: | Lean Burn |
| Description: | |
| Duty: | Base Loaded |
| Description: | |
| Minimum Load Range (%): | |
| Maximum Load Range (%): | |
| Stroke: | 4-stroke |
| Power Output (BHP): | 2233 |
| Electric Output(KW): | 1600 |
| Compression Ratio: | 11.3 |
| Ignition Type: | Spark |
| Description: | |
| Engine Speed (RPM): | 1200 |
| Engine Exhaust Temperature (°F): | 900 |
| Air to Fuel Ratio at Peak Load: | 7.5 |
| Ratio Basis: | Volume Basis |
| Lambda Factor (scfm/scfm): | 1.7 |
| Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr): | 6320 |
| Output Type: | Electric |
| Heat to Power Ratio: | |
| Is the Engine Using a Turbocharger? | (●) Yes ( ) No |
| Is the Engine Using an Aftercooler? | (●) Yes ( ) No |

Is the Engine Using (check all that apply):

| | | | |
|---|---|---|---|
| A Prestratified Charge (PSC) | ☐ | A NOx Converter | ☐ |
| Air to Fuel Adjustment (AF) | ☑ | Ignition Timing Retard | ☐ |
| Low Emission Combustion | ☑ | Non-Selective Catalytic Retard (NSCR) | ☐ |
| Other | ☐ | | |

Description:

| | | | |
|---|---|---|---|
| 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: Fueled with landfill gas

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

**78901 OCEAN ENERGY HOLDINGS BOP220001 E12 (Stationary Reciprocating Engine)**
**Print Date: 11/30/2023**

| | |
|---|---|
| Make: | Low Emission/Low Energy |
| Manufacturer: | Caterpillar, Inc. |
| Model: | G3520LE |
| Maximum Rated Gross Heat Input (MMBtu/hr): | 16.63 |
| Class: | Lean Burn |
| Description: | |
| Duty: | Base Loaded |
| Description: | |
| Minimum Load Range (%): | |
| Maximum Load Range (%): | |
| Stroke: | 4-stroke |
| Power Output (BHP): | 2233 |
| Electric Output(KW): | 1600 |
| Compression Ratio: | 11.3 |
| Ignition Type: | Spark |
| Description: | |
| Engine Speed (RPM): | 1200 |
| Engine Exhaust Temperature (°F): | 900 |
| Air to Fuel Ratio at Peak Load: | 7.5 |
| Ratio Basis: | Volume Basis |
| Lambda Factor (scfm/scfm): | 1.7 |
| Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr): | 6320 |
| Output Type: | Electric |
| Heat to Power Ratio: | |
| Is the Engine Using a Turbocharger? | (●) Yes ( ) No |
| Is the Engine Using an Aftercooler? | (●) Yes ( ) No |

Is the Engine Using (check all that apply):

| | | | |
|---|---|---|---|
| A Prestratified Charge (PSC) | ☐ | A NOx Converter | ☐ |
| Air to Fuel Adjustment (AF) | ☑ | Ignition Timing Retard | ☐ |
| Low Emission Combustion | ☑ | Non-Selective Catalytic Retard (NSCR) | ☐ |
| Other | ☐ | | |

Description:

| | | | |
|---|---|---|---|
| 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: Fueled with landfill gas

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

**78901 OCEAN ENERGY HOLDINGS BOP220001 E13 (Other Equipment)**
**Print Date: 11/30/2023**

| | |
|---|---|
| Make: | SCS Engineers |
| Manufacturer: | SCS Engineers |
| Model: | Custom |
| Equipment Type: | Gas treatment equipment |
| Capacity: | 6,500.00 |
| Units: | SCFM |
| Description: | |

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: Details will be provided prior to operation

**OCEAN ENERGY HOLDINGS (78901)** Date: 2/28/2024

**BOP220001**

# New Jersey Department of Environmental Protection
## Control Device Inventory

| CD NJID | Facility's Designation | Description | CD Type | Install Date | Grand-Fathered | Last Mod. (Since 1968) | CD Set ID |
|---|---|---|---|---|---|---|---|
| CD1 | TOX | Thermal Oxidizer | Oxidizer (Thermal) | 3/1/2024 | No | | |
| CD2 | CSF | Off Spec Candlestick Flare | Flare | 3/1/2024 | No | | |
| CD3 | | SCR | Selective Catalytic Reduction | 3/1/2024 | No | | |
| CD4 | | SCR | Selective Catalytic Reduction | 3/1/2024 | No | | |
| CD5 | | SCR | Selective Catalytic Reduction | 3/1/2024 | No | | |
| CD6 | | SCR | Selective Catalytic Reduction | 3/1/2024 | No | | |
| CD7 | | SCR | Selective Catalytic Reduction | 3/1/2024 | No | | |
| CD8 | | SCR | Selective Catalytic Reduction | 3/1/2024 | No | | |
| CD9 | | Oxidation Catalyst | Oxidizer (Catalytic) | 3/1/2024 | No | | |
| CD10 | | Oxidation Catalyst | Oxidizer (Catalytic) | 3/1/2024 | No | | |
| CD11 | | Oxidation Catalyst | Oxidizer (Catalytic) | 3/1/2024 | No | | |
| CD12 | | Oxidation Catalyst | Oxidizer (Catalytic) | 3/1/2024 | No | | |
| CD13 | | Oxidation Catalyst | Oxidizer (Catalytic) | 3/1/2024 | No | | |
| CD14 | | Oxidation Catalyst | Oxidizer (Catalytic) | 3/1/2024 | No | | |

**78901 OCEAN ENERGY HOLDINGS BOP220001 CD1 (Oxidizer (Thermal))**
**Print Date: 11/30/2023**

| | |
|---|---|
| Make: | John Zink |
| Manufacturer: | John Zink |
| Model: | ZBRID |
| Minimum Chamber Temperature (°F): | 1500 |
| Minimum Residence Time (sec): | |
| Fuel Type: | Natural gas |
| Description: | |
| Maximum Rated Gross Heat Input (MMBtu/hr): | 36.8 |
| 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? | ○ Yes ● No |
| Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? | ○ Yes ● No |
| Have you attached a diagram showing the location and/or configuration of this control apparatus? | ○ Yes ● No |
| Comments: | |

**78901 OCEAN ENERGY HOLDINGS BOP220001 CD2 (Flare)**
**Print Date: 11/30/2023**

| | |
|---|---|
| Make: | Perennial Energy |
| Manufacturer: | Perennial Energy |
| Model: | Custom |
| Type: | OP |
| Minimum Residence Time (sec): | |
| Maximum Rated Gross Heat Input (MMBtu/hr): | 198.50 |
| Auxilliary Fuel: | Natural gas |
| Description: | |
| Method of Pilot Flame Monitoring: | thermocouple |
| Monitoring Location: | Local |
| Automatic Gas Shutoff After Loss of Flame? | ○ Yes ● No |
| Automatic Reignition After Loss of Flame? | ○ Yes ● No |
| Minimum Gas Flow Rate (acfm): | 400.0 |
| Minimum Operating Temperature (ºF): | |
| Minimum Heat Content at Burner Tip (Btu/ft³): | 485.00 |
| Flare Operation Type: | Emergency Use |
| Does Flare have smokeless design? | ○ Yes ● No |
| Is Flare equipped with flame retainer? | ○ Yes ● No |
| Is Flare equipped with flame arrestor? | ○ Yes ● No |
| Is Flare equipped with LEL monitor? | ○ Yes ● No |
| Flare Stack Diameter (inches): | 14.00 |
| Lower Heat Content of source gas (BTU/scf): | |
| Lower Heat Content of Supplemental Fuel (BTU/scf): | 920 |
| Destruction and Removal Efficency (%): | |
| How was Efficency determined? | |
| 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? | ○ Yes ○ No |
| Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? | ○ Yes ● No |

| | |
|---|---|
| | ○ Yes ● No |
| Have you attached a diagram showing the location and/or configuration of this control apparatus? | ○ Yes ● No |
| Comments: | Additonal details will be provided prior to operation. |

**OCEAN ENERGY HOLDINGS (78901)**
**BOP220001**

Date: 2/28/2024

## New Jersey Department of Environmental Protection
## Emission Points Inventory

| PT NJID | Facility's Designation | Description | Config. | Equiv. Diam. (in.) | Height (ft.) | Dist. to Prop. Line (ft) | Exhaust Temp. (deg. F) | | | Exhaust Vol. (acfm) | | | Discharge Direction | PT Set ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Avg. | Min. | Max. | Avg. | Min. | Max. | | |
| PT1 | MRPC Engine1 | Exhaust Stack | Round | 12 | 38 | 382 | 825.0 | 850.0 | 825.0 | 6,249.0 | 6,249.0 | 6,249.0 | Up | |
| PT2 | MRPC Engine2 | Exhaust Stack | Round | 12 | 38 | 388 | 825.0 | 825.0 | 825.0 | 6,249.0 | 6,249.0 | 6,249.0 | Up | |
| PT3 | MRPC Engine3 | Exhaust Stack | Round | 12 | 38 | 391 | 825.0 | 825.0 | 825.0 | 6,249.0 | 6,249.0 | 6,249.0 | Up | |
| PT4 | MRPC Engine4 | Exhaust Stack | Round | 12 | 38 | 394 | 825.0 | 825.0 | 825.0 | 6,249.0 | 6,249.0 | 6,249.0 | Up | |
| PT5 | MRPC Engine5 | Exhaust Stack | Round | 12 | 38 | 400 | 825.0 | 825.0 | 825.0 | 6,249.0 | 6,249.0 | 6,249.0 | Up | |
| PT6 | MRPC Engine6 | Exhaust Stack | Round | 12 | 38 | 404 | 825.0 | 825.0 | 825.0 | 6,249.0 | 6,249.0 | 6,249.0 | Up | |
| PT7 | OEC Engine 1 | OEC Engine 1 exhaust stack | Round | 16 | 38 | 400 | 920.0 | 850.0 | 960.0 | 13,500.0 | 12,000.0 | 13,900.0 | Up | |
| PT8 | OEC Engine 2 | OEC Engine 2 exhaust stack | Round | 16 | 38 | 400 | 920.0 | 850.0 | 960.0 | 13,500.0 | 12,000.0 | 13,900.0 | Up | |
| PT9 | OEC Engine 3 | OEC Engine 3 exhaust stack | Round | 16 | 38 | 400 | 920.0 | 850.0 | 960.0 | 13,500.0 | 12,000.0 | 13,900.0 | Up | |
| PT10 | OEC Engine 4 | OEC Engine 4 exhaust stack | Round | 16 | 38 | 400 | 920.0 | 850.0 | 960.0 | 13,500.0 | 12,000.0 | 13,900.0 | Up | |
| PT11 | OEC Engine 5 | OEC Engine 5 exhaust stack | Round | 16 | 38 | 400 | 920.0 | 850.0 | 960.0 | 13,500.0 | 12,000.0 | 13,900.0 | Up | |
| PT12 | OEC Engine 6 | OEC Engine 6 exhaust stack | Round | 16 | 38 | 400 | 920.0 | 850.0 | 960.0 | 13,500.0 | 12,000.0 | 13,900.0 | Up | |
| PT13 | TOX | Thermal Oxidizer Stack | Round | 84 | 40 | 400 | 1,600.0 | 1,400.0 | 1,800.0 | 31,000.0 | 18,500.0 | 4,900.0 | Up | |
| PT14 | CSF | Off Spec Candlestick Flare Stack | Round | 14 | 40 | 400 | 1,500.0 | 1,400.0 | 1,600.0 | 1,885.0 | 400.0 | 3,370.0 | Up | |

**OCEAN ENERGY HOLDINGS (78901)**
**BOP220001**

Date: 2/28/2024

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

**U 1 MRPC Engine1 CAT 3516 Lean Burn Reciprocating Engine, 1138 BHP, each**

| UOS NJID | Facility's Designation | UOS Description | Operation Type | Signif. Equip. | Control Device(s) | Emission Point(s) | SCC(s) | Annual Oper. Hours Min. | Annual Oper. Hours Max. | VOC Range | Flow (acfm) Min. | Flow (acfm) Max. | Temp. (deg F) Min. | Temp. (deg F) Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OS1 | MRPC Engine1 | Normal Firing Landfill Gas | Normal - Steady State | E1 | | PT1 | 2-01-008-02 | 7,500.0 | 8,760.0 | | 6,249.0 | 6,249.0 | 825.0 | 825.0 |

**U 2 MRPC Engine2 CAT 3516 Lean Burn Reciprocating Engine, 1138 BHP, each**

| UOS NJID | Facility's Designation | UOS Description | Operation Type | Signif. Equip. | Control Device(s) | Emission Point(s) | SCC(s) | Annual Oper. Hours Min. | Annual Oper. Hours Max. | VOC Range | Flow (acfm) Min. | Flow (acfm) Max. | Temp. (deg F) Min. | Temp. (deg F) Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OS1 | MRPC Engine2 | Normal Firing Landfill Gas | Normal - Steady State | E2 | | PT2 | 2-01-008-02 | 7,500.0 | 8,760.0 | | | | | |

**OCEAN ENERGY HOLDINGS (78901)**
**BOP220001**

Date: 2/28/2024

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

**U 3 MRPC Engine3 CAT 3516 Lean Burn Reciprocating Engine, 1138 BHP, each**

| UOS NJID | Facility's Designation | UOS Description | Operation Type | Signif. Equip. | Control Device(s) | Emission Point(s) | SCC(s) | Annual Oper. Hours Min. | Annual Oper. Hours Max. | VOC Range | Flow (acfm) Min. | Flow (acfm) Max. | Temp. (deg F) Min. | Temp. (deg F) Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OS1 | MRPC Engine3 | Normal Firing Landill Gas | Normal - Steady State | E3 | | PT3 | 2-01-008-02 | 7,500.0 | 8,760.0 | | | | | |

**U 4 MRPC Engine4 CAT 3516 Lean Burn Reciprocating Engine, 1138 BHP, each**

| UOS NJID | Facility's Designation | UOS Description | Operation Type | Signif. Equip. | Control Device(s) | Emission Point(s) | SCC(s) | Annual Oper. Hours Min. | Annual Oper. Hours Max. | VOC Range | Flow (acfm) Min. | Flow (acfm) Max. | Temp. (deg F) Min. | Temp. (deg F) Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OS1 | MRPC Engine4 | Normal Firing Landfill Gas | Normal - Steady State | E4 | | PT4 | 2-01-008-02 | 7,500.0 | 8,760.0 | | | | | |

**OCEAN ENERGY HOLDINGS (78901)**
**BOP220001**

Date: 2/28/2024

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

**U 5 MRPC Engine5 CAT 3516 Lean Burn Reciprocating Engine, 1138 BHP, each**

| UOS NJID | Facility's Designation | UOS Description | Operation Type | Signif. Equip. | Control Device(s) | Emission Point(s) | SCC(s) | Annual Oper. Hours Min. | Annual Oper. Hours Max. | VOC Range | Flow (acfm) Min. | Flow (acfm) Max. | Temp. (deg F) Min. | Temp. (deg F) Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OS1 | MRPC Engine5 | Normal Firing Landfill Gas | Normal - Steady State | E5 | | PT5 | 2-01-008-02 | 7,500.0 | 8,760.0 | | | | | |

**U 6 MRPC Engine6 CAT 3516 Lean Burn Reciprocating Engine, 1138 BHP, each**

| UOS NJID | Facility's Designation | UOS Description | Operation Type | Signif. Equip. | Control Device(s) | Emission Point(s) | SCC(s) | Annual Oper. Hours Min. | Annual Oper. Hours Max. | VOC Range | Flow (acfm) Min. | Flow (acfm) Max. | Temp. (deg F) Min. | Temp. (deg F) Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OS1 | MRPC Engine6 | Normal Firing Landill Gas | Normal - Steady State | E6 | | PT6 | 2-01-008-02 | 7,500.0 | 8,760.0 | | | | | |

**U 7 OEC1- OEC6 Six CAT 3520 Lean Burn Reciprocating Engines, 2233 BHP, each**

| UOS NJID | Facility's Designation | UOS Description | Operation Type | Signif. Equip. | Control Device(s) | Emission Point(s) | SCC(s) | Annual Oper. Hours Min. | Annual Oper. Hours Max. | VOC Range | Flow (acfm) Min. | Flow (acfm) Max. | Temp. (deg F) Min. | Temp. (deg F) Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OS1 | OEC1 | Lean Burn CAT 3520 Engine -OEC1 | Normal - Steady State | E7 | | PT7 | 2-01-008-02 | 7,500.0 | 8,760.0 | | 11,320.0 | 12,780.0 | 850.0 | 960.0 |

**OCEAN ENERGY HOLDINGS (78901)**
**BOP220001**

Date: 2/28/2024

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

**U 7 OEC1- OEC6 Six CAT 3520 Lean Burn Reciprocating Engines, 2233 BHP, each**

| UOS NJID | Facility's Designation | UOS Description | Operation Type | Signif. Equip. | Control Device(s) | Emission Point(s) | SCC(s) | Annual Oper. Hours Min. | Annual Oper. Hours Max. | VOC Range | Flow (acfm) Min. | Flow (acfm) Max. | Temp. (deg F) Min. | Temp. (deg F) Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OS2 | OEC2 | Lean Burn CAT 3520 Engine -OEC2 | Normal - Steady State | E8 | | PT8 | 2-01-008-02 | 7,500.0 | 8,760.0 | | 11,320.0 | 12,780.0 | 850.0 | 960.0 |
| OS3 | OEC3 | Lean Burn CAT 3520 Engine -OEC3 | Normal - Steady State | E9 | | PT9 | 2-01-008-02 | 7,500.0 | 8,760.0 | | 11,320.0 | 12,780.0 | 850.0 | 960.0 |
| OS4 | OEC4 | Lean Burn CAT 3520 Engine -OEC4 | Normal - Steady State | E10 | | PT10 | 2-01-008-02 | 7,500.0 | 8,760.0 | | 11,320.0 | 12,780.0 | 850.0 | 960.0 |
| OS5 | OEC5 | Lean Burn CAT 3520 Engine -OEC5 | Normal - Steady State | E11 | | PT11 | 2-01-008-02 | 7,500.0 | 8,760.0 | | 11,320.0 | 12,780.0 | 850.0 | 960.0 |
| OS6 | OEC6 | Lean Burn CAT 3520 Engine -OEC6 | Normal - Steady State | E12 | | PT12 | 2-01-008-02 | 7,500.0 | 8,760.0 | | 11,320.0 | 12,780.0 | 850.0 | 960.0 |
| OS7 | OEC1 | Lean Burn CAT 3520 Engine -OEC1 Combusting Natural Gas | Normal - Steady State | E7 | CD3 (P)<br>CD9 (P) | PT7 | 2-02-002-02 | 0.0 | 8,760.0 | | 12,000.0 | 13,500.0 | 850.0 | 960.0 |
| OS8 | OEC2 | Lean Burn CAT 3520 Engine -OEC2 Combusting Natural Gas | Normal - Steady State | E8 | CD10 (P)<br>CD4 (P) | PT8 | 2-02-002-02 | 0.0 | 8,760.0 | | 12,000.0 | 13,500.0 | 850.0 | 960.0 |
| OS9 | OEC3 | Lean Burn CAT 3520 Engine -OEC3 Combusting Natural Gas | Normal - Steady State | E9 | CD11 (P)<br>CD5 (P) | PT9 | 2-02-002-02 | 0.0 | 8,760.0 | | 12,000.0 | 13,500.0 | 850.0 | 960.0 |
| OS10 | OEC4 | Lean Burn CAT 3520 Engine -OEC4 Combusting Natural Gas | Normal - Steady State | E10 | CD12 (P)<br>CD6 (P) | PT10 | 2-02-002-02 | 0.0 | 8,760.0 | | 12,000.0 | 13,500.0 | 850.0 | 960.0 |
| OS11 | OEC5 | Lean Burn CAT 3520 Engine -OEC5 Combusting Natural Gas | Normal - Steady State | E11 | CD13 (P)<br>CD7 (P) | PT11 | 2-02-002-02 | 0.0 | 8,760.0 | | 12,000.0 | 13,500.0 | 850.0 | 960.0 |
| OS12 | OEC6 | Lean Burn CAT 3520 Engine -OEC6 Combusting Natural Gas | Normal - Steady State | E12 | CD14 (P)<br>CD8 (P) | PT12 | 2-02-002-02 | 0.0 | 8,760.0 | | 12,000.0 | 13,500.0 | 850.0 | 960.0 |

**OCEAN ENERGY HOLDINGS (78901)**
**BOP220001**

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

**U 8 RNG RNG Plant Operation**

| 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 | Normal | Normal Operation (Thermal Oxidizer) | Normal - Steady State | E13 | CD1 (P) | PT13 | 3-99-999-98 | 0.0 | 8,760.0 | | 18,500.0 | 36,977.0 | 1,400.0 | 1,800.0 |
| OS2 | Off-Spec | Off Specification Gas (Candlestick Flare) | Malfunction | E13 | CD2 (S) | PT14 | 3-99-999-98 | 0.0 | 420.0 | | 1,400.0 | 1,600.0 | 1,400.0 | 1,600.0 |

Date: 2/28/2024

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

**Group NJID:** GR1 Six 3516 Cap

**Members:**

| Type | ID | OS | Step |
|---|---|---|---|
| U | U 1 | OS0 Summary | |
| U | U 2 | OS0 Summary | |
| U | U 3 | OS0 Summary | |
| U | U 4 | OS0 Summary | |
| U | U 5 | OS0 Summary | |
| U | U 6 | OS0 Summary | |

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

☑ Other

**Other (explain):** Emissions and Fuel Cap on Emission Units for six CAT 3516 Engines

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

N/A

**Operating Circumstances:**

N/A