



## State of New Jersey

Department of Environmental Protection  
Air, Energy and Materials Sustainability

Division of Air Quality

Bureau of Stationary Sources

401 E. State Street, 2nd Floor, P.O. Box 420, Mail Code 401-02  
Trenton, NJ 08625-0420

PHILIP D. MURPHY  
*Governor*

SHEILA Y. OLIVER  
*Lt. Governor*

SHAWN M. LATOURETTE  
*COMMISSIONER*

### Air Pollution Control Operating Permit Significant Modification

**Permit Activity Number: BOP210008**

**Program Interest Number: 21753**

Mailing Address	Plant Location
PETER CANAL EXECUTIVE DIRECTOR BAYSHORE RGNL SEWERAGE AUTH 100 OAK ST Union Beach, NJ 07735	BAYSHORE RGNL SEWER AUTH 100 Oak St Union Beach Monmouth County

**Initial Operating Permit Approval Date:**

**January 23, 2018**

**Operating Permit Approval Date:**

**DRAFT**

**Operating Permit Expiration Date:**

**January 22, 2023 (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 Adam Pagarigan at (609) 777-0595.

Approved by:

\_\_\_\_\_  
Art Lehberger

Enclosure

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

**Facility Name: BAYSHORE RGNL SEWER AUTH**  
**Program Interest Number: 21753**  
**Permit Activity Number: BOP210008**

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## Section A

**Facility Name: BAYSHORE RGNL SEWER AUTH**  
**Program Interest Number: 21753**  
**Permit Activity Number: BOP210008**

### **POLLUTANT EMISSIONS SUMMARY**

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

Facility's Potential Emissions from all Significant Source Operations (tons per year)										
Source Categories	VOC (total)	NO <sub>x</sub>	CO	SO <sub>2</sub>	TSP (total)	PM <sub>10</sub> (total)	PM <sub>2.5</sub> <sup>2</sup> (total)	Pb	HAPs* (total)	CO <sub>2</sub> e <sup>3</sup>
Emission Units Summary	1.88	16.6	13.1	5.76	2.57	2.53	2.48	0.00103	0.564	
Batch Process Summary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Group Summary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Emissions	1.88	16.6	13.1	5.76	2.57	2.53	2.48	0.00103	0.564	8423

Table 2: Estimate of total emissions from all Insignificant Source Operations<sup>1</sup> and total emissions from Non-Source Fugitives at the facility.

Emissions from all Insignificant Source Operations and Non-Source Fugitive Emissions (tons per year)									
Source Categories	VOC (total)	NO <sub>x</sub>	CO	SO <sub>2</sub>	TSP (total)	PM <sub>10</sub> (total)	PM <sub>2.5</sub> <sup>2</sup> (total)	Pb	HAPs (total)
Insignificant Source Operations	0.047	0.252	0.107	0.001	0.03	0.03	N/A	N/A	0.000222
Non-Source Fugitive Emissions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

VOC: Volatile Organic Compounds

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

CO: Carbon Monoxide

SO<sub>2</sub>: Sulfur Dioxide

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

TSP: Total Suspended Particulates

Other: Any other air contaminant

regulated under the Federal CAA

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

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

Pb: Lead

HAPs: Hazardous Air Pollutants

CO<sub>2</sub>e: Carbon Dioxide equivalent

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

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

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

<sup>2</sup> PM<sub>2.5</sub> has been included in air permitting rules as of December 9, 2017. Consequently, PM<sub>2.5</sub> totals in this section may not be up to date. The Department is in the process of updating these limits during each permit modification, and the entire permit will be updated at the time of permit renewal]

<sup>3</sup> Total CO<sub>2</sub>e emissions for the facility.

## Section A

**Facility Name: BAYSHORE RGNL SEWER AUTH**  
**Program Interest Number: 21753**  
**Permit Activity Number: BOP210008**

### **POLLUTANT EMISSIONS SUMMARY**

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

HAP	TPY
Lead	0.217
Arsenic	0.00591
Beryllium	0.00394
Cadmium	0.0158
Chromium	0.0495
Hexavalent Chromium	0.000485
Nickel	0.133
Mercury	0.063
HCl	1.88
Dioxins/Furans	5.83E-08
Benzo a Pyrene	0.0016
Benzene	0.0285
Formaldehyde	0.227

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

Other Air Contaminant	TPY
H2S	0.061
Ammonia	0.153

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<sup>4</sup> Do not sum the values below for the purpose of establishing a total HAP potential to emit. See previous page for the allowable total HAP emissions.

## Section B

**Facility Name: BAYSHORE RGNL SEWER AUTH**  
**Program Interest Number: 21753**  
**Permit Activity Number: BOP210008**

### **GENERAL PROVISIONS AND AUTHORITIES**

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

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

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

Administrative Amendments [N.J.A.C. 7:27-22.20(c)];  
Seven-Day Notice changes [N.J.A.C. 7:27-22.22(e)];  
Minor Modifications [N.J.A.C. 7:27-22.23(e)];  
Significant Modifications [N.J.A.C. 7:27-22.24(e)]; and  
Renewals [N.J.A.C. 7:27-22.30(b)].
20. The operating permit renewal application consists of a RADIUS application and the application attachment available at the Department's website <https://dep.nj.gov/boss/applications-and-forms/> (Attachment to the RADIUS Operating Permit Renewal Application). Both the RADIUS application and the Application Attachment, along with any other supporting documents must be submitted using the Department's Portal



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

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

## Section C

**Facility Name: BAYSHORE RGNL SEWER AUTH**

**Program Interest Number: 21753**

**Permit Activity Number: BOP210008**

### **STATE-ONLY APPLICABLE REQUIREMENTS**

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

### **STATE-ONLY APPLICABLE REQUIREMENTS**

The following applicable requirements are not federally enforceable:

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

**Facility Name: BAYSHORE RGNL SEWER AUTH**  
**Program Interest Number: 21753**  
**Permit Activity Number: BOP210008**

### **FACILITY SPECIFIC REQUIREMENTS AND INVENTORIES**

#### **FACILITY SPECIFIC REQUIREMENTS PAGE INDEX**

<b><u>Subject Item and Name</u></b>	<b><u>Page Number</u></b>
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**Facility (FC):**

FC	1
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**Insignificant Sources (IS):**

IS NJID	IS Description	
IS10	Natural gas fired heaters less than 1 MM BTU/hr heat input	7
IS20	Wastewater treatment plant sources @ < 100 ppb any TXS, and <3,500 ppb of total VOC	8
IS30	Distillate oil tanks not exceeding 10,000 gal capacity	9
IS60	Stationary liquid sodium hypochlorite, polymer, and sodium hydroxide storage tanks with a capacity not exceeding 10,000 gallons and no emissions	10
IS80	Storage Tank for SCR Urea reactant 1400 gal capacity	11

**Emission Units (U):**

U NJID	U Designation	U Description	
U1	EMG #1,2 & 3	Three Emergency Generators - Two 17.0 MMBTU/hr and One 10.5 MMBTU/hr Firing Diesel Fuel	12
U4	EG #4,#5, #6	Three 1500 kW NG Storm Generators #4, #5, #6 Storm Anticipation/Demand Response/Testing & Maintenance/Emergency	20
U42	Niro	Niro Fluidized Bed Incinerator	38
U43	Dorr Oliver	Dorr Oliver Fluidized Bed Incinerator	92
U45	Sludge Conc	Sludge Concentration Tanks	154
U51	Dewater Rm	Belt Presses in Sludge Dewatering Room	158

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

**Permit Being Modified**

**Permit Class:** BOP      **Number:** 210001

**Description  
of Modifications:**

This permit modification includes the following changes:

1. New emission unit U4 with operating scenarios OS1 to OS6 were created for three (3) 1500kW output natural gas engines currently permitted pursuant to GOP-004 for emergency use only. Each engine is equipped with Selective Catalytic Reduction (SCR)/Oxidation System to control emissions. Each engine has two (2) operating scenarios: Storm Anticipation/Demand Response, and Normal Testing & Maintenance. The U4 engines are subject to NSPS JJJJ Standard of Performance for Stationary Spark Ignition Internal Combustion Engines.
2. Insignificant Source (IS) IS80 Storage Tank with 1400 gallons capacity was added to IS inventory to store the SCR Urea reactant.
3. IS40 Parts Washer was deleted from the IS inventory and all its applicable requirements.

BOP210008

**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.  The NJDEP online web portal can be accessed at: <a href="http://www.state.nj.us/dep/online/">http://www.state.nj.us/dep/online/</a> . The Compliance Certification forms and instructions for submitting to EPA are available by selecting Documents and Forms and then Periodic Compliance Certification. [N.J.A.C. 7:27-22]
8	Prevention of Air Pollution from Consumer Products and Architectural Coatings: The permittee shall comply with all applicable provisions of N.J.A.C. 7:27-24 and [N.J.A.C. 7:27-23]	None.	None.	None.
9	Any operation of equipment which causes off-property effects, including odors, or which might reasonably result in citizen's complaints shall be reported to the Department to the extent required by the Air Pollution Control Act, N.J.S.A. 26:2C-19(e). [N.J.S.A. 26: 2C-19(e)]	Other: Observation of plant operations. [N.J.S.A. 26: 2C-19(e)].	Other: Maintain a copy of all information submitted to the Department. [N.J.S.A. 26: 2C-19(e)].	Notify by phone: Upon occurrence of event. A person who causes a release of air contaminants in a quantity or concentration which poses a potential threat to public health, welfare or the environment or which might reasonably result in citizen complaints shall immediately notify the Department. Such notification shall be made by calling the Environmental Action Hotline at (877) 927-6337. [N.J.S.A. 26: 2C-19(e)]
10	Prevention of Significant Deterioration: The permittee shall comply with all applicable provisions of Prevention of Significant Deterioration (PSD). [40 CFR 52.21]	None.	None.	None.

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

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

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

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



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

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

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	Stack testing after permit expiration: If an operating permit has expired, the conditions of the operating permit, including the requirements for stack testing 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.

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

**Subject Item:** IS10 Natural gas fired heaters less than 1 MM BTU/hr heat input

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

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

**Subject Item:** IS20 Wastewater treatment plant sources @ < 100 ppb any TXS, and <3,500 ppb of total VOC

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	VOC (Total): < 3500 ppbw. Maximum allowable VOC concentration in the wastewater. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain record of analysis.[N.J.A.C. 7:27-22.16(o)].	None.
2	TXS: < 100 ppbw. Maximum allowable concentration of any toxic substance (TXS) in the wastewater. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain record of analysis.[N.J.A.C. 7:27-22.16(o)].	None.
3	Odor: Any tank, vessel or wastewater treatment source shall not emit any air contaminant which may cause an odor detectable outside the property boundaries of the facility. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

**Subject Item:** IS30 Distillate oil tanks not exceeding 10,000 gal capacity

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). [N.J.A.C. 7:27-9.2(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
2	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time the fuel was stored in New Jersey may be stored, offered for sale, sold, delivered or exchanged in trade, for use in New Jersey, after the effective date of the applicable standard in Table 1B. [N.J.A.C. 7:27- 9.2(a)]	None.	None.	None.
3	Tank contents limited to distillate fuel oil. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

**Subject Item:** IS60 Stationary liquid sodium hypochlorite, polymer, and sodium hydroxide storage tanks with a capacity not exceeding 10,000 gallons and no emissions

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The vapor pressure of the liquid in each tank, excluding the vapor pressure of water, shall be less than 0.02 psia at the liquid's actual temperature or at 70 degrees Fahrenheit, whichever is higher. [N.J.A.C. 7:27-22.1]	None.	None.	None.
2	The tanks shall not emit any air contaminants which may cause an odor detectable outside the property boundaries of the facility. [N.J.A.C. 7:27-22.1]	None.	None.	None.
3	The tank contents shall be limited to sodium hypochlorite, polymer, and sodium hydroxide, and the tank capacity shall not exceed 10,000 gallons. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

**Subject Item:** IS80 Storage Tank for SCR Urea reactant 1400 gal capacity

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The vapor pressure of the liquid in tank, excluding the vapor pressure of water, shall be less than 0.02 psia at the liquid's actual temperature or at 70 degrees Fahrenheit, whichever is higher. [N.J.A.C. 7:27-22.1]	None.	None.	None.
2	The tank shall not emit any air contaminants which may cause an odor detectable outside the property boundaries of the facility. [N.J.A.C. 7:27-22.1]	None.	None.	None.
3	The tank contents shall be limited to urea reactant for SCR , and the tank capacity shall not exceed 1,400 gallons. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

**Emission Unit:** U1 Three Emergency Generators - Two 17.0 MMBTU/hr and One 10.5 MMBTU/hr Firing Diesel Fuel

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR Part 63 Subpart A 40 CFR Part 63 Subpart ZZZZ [40 CFR Federal Rules Summary]	None.	None.	None.
2	Each emergency generator shall be located at the facility and produce mechanical or thermal energy, or electrical power exclusively for use at the facility. Each emergency generator shall be operated only: 1. During the performance of normal testing and maintenance procedures, as recommended in writing by the manufacturer and/or as required in writing by a Federal or State law or regulation, 2. When there is power outage or the primary source of mechanical or thermal energy fails because of an emergency, or 3. When there is a voltage reduction issued by PJM and posted on the PJM internet website (www.pjm.com) under the "emergency procedures" menu. [N.J.A.C. 7:27-19.1]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The Permittee shall maintain on site the following information:  1. For each time the emergency generator is specifically operated for testing or maintenance: i. The reason for its operation; ii. The date(s) of operation and the start up and shut down time; and iii. The name of the operator;  2. If a voltage reduction is the reason for the use of the emergency generator, a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction. . [N.J.A.C. 7:27-19.11(b)]	None.



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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	The emergency generators shall not be used: 1. For normal testing and maintenance on days when the Department forecasts air quality anywhere in New Jersey to be "unhealthy for sensitive groups," "unhealthy," or "very unhealthy" as defined in the EPA's Air Quality Index at <a href="http://airnow.gov/">http://airnow.gov/</a> , as supplemented or amended and incorporated herein by reference, unless required in writing by a Federal or State law or regulation. Procedures for determining the air quality forecasts for New Jersey are available at the Department's air quality permitting web site at <a href="http://www.state.nj.us/dep/aqpp/aqforecast">http://www.state.nj.us/dep/aqpp/aqforecast</a> ; and 2. As a source of energy or power after the primary energy or power source has become operable again. If the primary energy or power source is under the control of the owner or operator of the emergency generator, the owner or operator shall make a reasonable, timely effort to repair the primary energy or power source. [N.J.A.C. 7:27-19.2(d)]	None.	None.	None.
4	TSP <= 0.096 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	NOx (Total) <= 3.75 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	CO <= 0.89 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	SO2 <= 0.129 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	PM-10 (Total) <= 0.055 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	Generator fuel limited to #2 fuel oil or diesel fuel. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	Hours of Operation <= 100 hr/yr per emergency generator for testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	Hours of Operation: Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall maintain on site and record the the total operating time for testing or maintenance based on the generator's hour meter. [N.J.A.C. 7:27-19.11]	None.
11	The owner or operator of an emergency CI RICE constructed or reconstructed before June 12, 2006 shall change oil and filter every 500 hours of operation or annually, whichever comes first, as prescribed in Table 2d, item 4a to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6603(a)]	Other: The owner or operator shall change oil and filter every 500 hours of operation or annually, whichever comes first. The owner or operator has an option of utilizing an oil analysis program, at the same frequency specified for changing the oil, in order to extend the specified oil change requirement, per 40 CFR 63.6625(i). The owner or operator must develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with Table 6 item 9 to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6640(a)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator must keep records of the oil and filter change. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)(2)]	None.
12	The owner or operator of an emergency CI RICE constructed or reconstructed before June 12, 2006 shall inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary, as prescribed in Table 2d, item 4b and 4c to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6603(a)]	Other: The owner or operator shall inspect air cleaner every 1000 hours or annually, whichever comes first and inspect all hoses and belts every 500 hours of operation or annually, whichever comes first. The owner or operator must develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with Table 6 item 9 to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6640(a)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator must keep records of the maintenance procedures and air cleaner, belt and hoses replacements events. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)(2)]	None.
13	The engine must be in compliance with all applicable emission limitations and operating limitations in Subpart ZZZZ of 40 CFR 63 at all times. [40 CFR 63.6605(a)]	None.	None.	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	At all times the owner or operator must operate and maintain a RICE including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.6605(b)]	None.	None.	None.
15	An owner or operator of an existing stationary emergency RICE must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or the owner or operator must develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e)]	Other: Monitored according to the manufacturer's emission-related written instructions or the maintenance plan developed by the owner or operator. [40 CFR 63.6625(e)].	Other: The owner or operator must keep records of the maintenance procedures. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)].	None.
16	The owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]	Other: Monitored according to the manufacturer's emission-related operation and maintenance instructions; or the maintenance plan developed by the owner or operator which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with Table 6 item 9 to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6640(a)].	Other: The owner or operator must keep records of the maintenance procedures and replacements events. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)].	None.

**New Jersey Department of Environmental Protection  
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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	The owner or operator may operate an emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 63.6640(f)(2i)]	Monitored by hour/time monitor continuously. The owner or operator of an emergency stationary internal combustion engine must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]	Recordkeeping by manual logging of parameter or storing data in a computer data system annually. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 63.6655(f)(2)]	None.
18	The owner or operator shall comply with the General Provisions as shown in Table 8 to Subpart ZZZZ of 40 CFR 63 that apply to an existing emergency or black start CI RICE constructed or reconstructed before June 12, 2006 and located at an area source of HAP emissions except for a residential, commercial, or institutional emergency stationary RICE. [40 CFR 63.6665]	None.	None.	None.

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**Emission Unit:** U1 Three Emergency Generators - Two 17.0 MMBTU/hr and One 10.5 MMBTU/hr Firing Diesel Fuel

**Operating Scenario:** OS1 Emergency Generator #1 17.0 MMBTU/hr

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
2	TSP <= 7.4 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
4	TSP <= 0.6 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	NOx (Total) <= 27.5 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
6	CO <= 6.5 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	SO2 <= 0.7 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	Maximum Gross Heat Input <= 17 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(e)]	None.	Other: Maintain record of manufacturer specifications including maximum gross heat input rate.[N.J.A.C. 7:27-22.16(o)].	None.

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**Emission Unit:** U1 Three Emergency Generators - Two 17.0 MMBTU/hr and One 10.5 MMBTU/hr Firing Diesel Fuel

**Operating Scenario:** OS2 Emergency Generator #2 17.0 MMBTU/hr

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
2	TSP <= 7.4 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
4	TSP <= 0.6 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	NOx (Total) <= 27.5 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
6	CO <= 6.5 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	SO2 <= 0.7 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	Maximum Gross Heat Input <= 17 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(e)]	None.	Other: Maintain record of manufacturer specifications including maximum gross heat input rate.[N.J.A.C. 7:27-22.16(o)].	None.

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Facility Specific Requirements**

**Emission Unit:** U1 Three Emergency Generators - Two 17.0 MMBTU/hr and One 10.5 MMBTU/hr Firing Diesel Fuel

**Operating Scenario:** OS3 Emergency Generator #3 10.5 MMBTU/hr

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
2	TSP <= 6.1 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
4	TSP <= 0.713 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	NOx (Total) <= 20 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
6	CO <= 4.8 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	SO2 <= 1.18 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	Maximum Gross Heat Input <= 10.5 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(e)]	None.	Other: Maintain record of manufacturer specifications including maximum gross heat input rate.[N.J.A.C. 7:27-22.16(o)].	None.

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**Emission Unit:** U4 Three 1500 kW NG Storm Generators #4, #5, #6 Storm Anticipation/Demand Response/Testing & Maintenance/Emergency

**Subject Item:** CD4 Gen #4 SCR/Oxidation System, CD5 Gen #5 SCR/Oxidation System, CD6 Gen #6 SCR/Oxidation System

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Temperature Downstream of SCR System $\geq 572$ and Temperature Downstream of SCR System $\leq 977$ degrees F. [N.J.A.C. 7:27-22.16(a)]	Temperature Downstream of SCR System: Monitored by temperature instrument continuously, based on a 1 hour block average. 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)]	Temperature Downstream of SCR System: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously with data recorded every 15 minutes. [N.J.A.C. 7:27-22.16(o)]	None.
2	Flowrate $\geq 0.4$ and Flowrate $\leq 0.6$ gal/hr. Urea reactant flowrate to SCR during operation based on manufacturer specifications. [N.J.A.C. 7:27-22.16(a)]	Flowrate: Monitored by material feed/flow monitoring continuously, based on 1 minute intervals during operation. [N.J.A.C. 7:27-22.16(o)]	Flowrate: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously during operation with data recorded every 15 minutes. [N.J.A.C. 7:27-22.16(o)]	None.



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	The catalyst arrays shall be maintained and replaced in accordance with the recommendations of the manufacturer, and as necessary based on emission levels as indicated during the periodic emission monitoring. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by urea consumption and periodic emissions monitoring every 200 hours of operation.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping of manufacturer's design specification and recommended maintenance procedures on-site for the life of the equipment. A record of maintenance performed must be manually logged or stored in a computer data system upon occurrence of event and must be made readily available during inspection by the Department. The permittee shall maintain the following records:  1. Equipment, Emission Unit and Operating Scenario number; 2. The date maintenance was performed; 3. The name, title and affiliation of the person who performed the maintenance or periodic emissions monitoring; 4. A description of the maintenance activity; 5. Date of periodic emissions monitoring; 6. Urea consumption rate (gal/hr), NOx inlet (g/hp-hr), NOx outlet (g/hp-hr) & NOx target (g/hp-hr); 7. Date of catalyst array maintenance and/or replacement as necessary. [N.J.A.C. 7:27-22.16(o)].	None.
4	The SCR control device shall be operated at all times that the engine is operating. Reagent shall be injected at all times during engine operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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**Emission Unit:** U4 Three 1500 kW NG Storm Generators #4, #5, #6 Storm Anticipation/Demand Response/Testing & Maintenance/Emergency

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR Part 60 Subpart A 40 CFR Part 60 Subpart JJJJ  [40 CFR Federal Rules Summary]	None.	None.	None.
2	<p><b>STACK TESTING SUMMARY</b> The permittee shall conduct a stack test using a protocol approved by the Department to demonstrate compliance with emission limits for VOC, NOx, CO, Ammonia and Formaldehyde as specified in the compliance plan for U4 OS1, U4 OS3 and U4 OS5. During each stack test run, the engine shall be operated within 10 percent of 100 percent peak load. The initial PMP test shall be performed concurrently with the initial stack test.</p> <p><b>THIS STACK TEST IS SUBJECT TO THE SIGNIFICANT MODIFICATION SUPPLEMENTAL FEES PURSUANT TO N.J.A.C. 7:27-22.31.</b> [40CFR60.4244(a)] and [N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: The stack test must be conducted within 180 days after initial startup of the new source or within 60 days of approval of a timely submitted protocol, whichever comes later.</p> <p>Pursuant to N.J.A.C. 7:27-16.23(c) and 19.15(c), the initial stack test to demonstrate compliance with VOC/NOx RACT standards shall be conducted within 180 days from the date on which source operation commences operation.</p> <p>If a source is subject to NSPS, extending the testing date beyond 180 days after the source's initial startup requires prior approval from US EPA. [N.J.A.C. 7:27-22.18] and [N.J.A.C. 7:27-22.16(o)].</p>	Other: Recordkeeping as required under the applicable operating scenario.[N.J.A.C. 7:27-22.16(o)].	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 within 60 days from the date of the approved operating permit BOP210008. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 60 days after performing the stack test as specified in 40CFR60.4245(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]</p>

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<p><b>PERIODIC STACK TESTING SUMMARY</b> The permittee shall conduct a periodic stack test required by 40 CFR 60 Subpart JJJJ using a protocol approved by the Department to demonstrate compliance with emission limits for VOC, NOx and CO as specified in the compliance plan for U4 OS1, U4 OS3 and U4 OS5.</p> <p>During each stack test run, the engine shall be operated within 10 percent of 100 percent peak load. [40CFR60.4244(a)] and [N.J.A.C. 7:27-22.16(a)]</p>	Other: Monitoring as required under the applicable operating scenario. [N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 no later than 180 days prior to the testing due date or request from EMS, in writing, to use a previously approved protocol no later than 90 days prior to the testing due date. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT) that is downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>, unless another format is approved by EMS. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 60 days after performing the stack test as specified in 40CFR60.4245(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	<p>STACK TESTING SUMMARY The permittee shall conduct a stack test no later than every 5 years (See General Provisions) from the date of last stack test using an approved protocol to demonstrate compliance with emission limits for VOC, NOx, CO, and Formaldehyde as specified in the compliance plan for U4 OS1, U4 OS3 and U4 OS5.</p> <p>Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitoring as required under the applicable operating scenario. [N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario.[N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 no later than 12 months prior to the completion of the five year period since the last stack test. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="http://www.epa.gov/ttnchie1/ert">http://www.epa.gov/ttnchie1/ert</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date. 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 60 days after performing the stack test as specified in 40CFR60.4245(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]</p>

**New Jersey Department of Environmental Protection  
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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	The permittee shall perform Periodic Monitoring Procedure (PMP) tests to ensure the reciprocating engine is operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions [N.J.A.C. 7:27-22.16(a)]	<p>Monitored by periodic emission monitoring each month during operation. The minimum duration between Periodic Monitoring Procedure (PMP) tests shall be 15 calendar days. The permittee shall measure the concentrations in the effluent stream of NOx, CO and O2 and convert them to units of pounds per hour (lb/hr) in accordance with Technical Manual 1005.</p> <p>If an engine operates intermittently, it does not have to have periodic emission monitoring performed if it is operated less than 200 hours during that month, unless the engine has operated 200 or more hours since the engine last had periodic emission monitoring performed; in that case, periodic emission monitoring must be performed during any month that the engine reaches 200 hours of operation since the last periodic emission monitoring event. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event The permittee shall maintain the following records:</p> <ol style="list-style-type: none"> <li>1. Date of periodic emissions monitoring;</li> <li>2. Equipment, Emission Unit and Operating Scenario number;</li> <li>3. Measured concentrations of NOx and CO (ppmvd) and O2 (%);</li> <li>4. Calculated emissions of NOx and CO (lb/hr and g/bhp-hr);</li> <li>5. A description of any corrective action taken;</li> <li>6. Results from any subsequent measurements performed after taking any corrective action, including concentrations and calculated emission values in pounds per hour and grams per brake horsepower hour.</li> </ol> <p>If the equipment did not operate during a monitoring period, record "Did not operate" for that period. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Other (provide description): Other. If either of the NOx or CO PMP test results exceed the lb/hr or g/bhp-hr permit limits ("exceedance"), the permittee shall:</p> <ol style="list-style-type: none"> <li>1. Take corrective action or cease operation within 15 minutes of the exceedance.</li> <li>2. Notify the Department within 24 hours of the exceedance by calling the Environmental Action Hotline at (877) 927-6337.</li> <li>3. Submit a report within 30 days of the exceedance for all periodic emission monitoring performed in the 12 months prior to this exceedance with the items listed in 1-6 of the Recordkeeping Requirement to the appropriate regional enforcement office.</li> <li>4. Retest the equipment within 24 hours of completing corrective action or restarting operation, whichever is sooner.</li> <li>5. Repeat the steps above until the exceedance has been eliminated or the equipment is removed from service; and</li> <li>6. Submit a report within 30 days of completing corrective action (Step 5) for the test that showed the exceedance and each subsequent test performed following corrective action with the items listed in 1-6 of the Recordkeeping Requirement to the appropriate regional enforcement office. [N.J.A.C. 7:27-22.18(h)]</li> </ol>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	The owner or operator of a stationary reciprocating engine that has a maximum rated power output of 37 kW or more shall adjust the combustion process in accordance with the procedure set forth at N.J.A.C. 7:27-19.16 and in accordance with the manufacturer's recommended procedures and maintenance schedules. [N.J.A.C. 7:27-16.10(e)] and [N.J.A.C. 7:27-19.8(f)]	Monitored by periodic emission monitoring upon performing combustion adjustment. Monitoring shall be performed in accordance with the specific procedures for combustion adjustment monitoring specified in NJDEP Technical Manual 1005.  [N.J.A.C. 7:27-19.16(g)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon performing combustion adjustment. The permittee shall record the following information for each adjustment in a log book or computer data system: 1. The date and times the adjustment began and ended; 2. The name, title, and affiliation of the person who performed the procedure and adjustment; 3. The type of procedure and maintenance performed; 4. The concentration of NO <sub>x</sub> , CO, and O <sub>2</sub> measured before and after the adjustment was made; and 5. The type and amount of fuel use over the 12 months prior to the adjustment. The records shall be kept for a minimum of 5 years and be readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(h)]	None.

**New Jersey Department of Environmental Protection  
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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	<p>The three engines shall be located at the facility and generate electrical power for use at the Bayshore Regional Sewerage Authority and the Monmouth County Bayshore Outfall Authority PI#13463. The engines shall not be connected to the electrical power distribution grid and operated only:</p> <ol style="list-style-type: none"> <li>1. During Storm Anticipation operating scenario the permittee may test and operate the engine up to 24 hours prior to a large storm event in order to avoid power outage and operational issues;</li> <li>2. During the performance of normal testing and maintenance procedures, as recommended in writing by the equipment manufacturer and/or as required in writing by a Federal or State law or regulation;</li> <li>3. During demand response mode when there is a reported peak demand period or a voltage reduction period issued by PJM and posted on the PJM internet website (www.pjm.com) under the "emergency procedures" menu, or</li> <li>4. When there is power outage or the primary source of mechanical or thermal energy fails because of an emergency.</li> </ol> <p>[N.J.A.C. 7:27-22.16(a)]</p>	<p>Monitored by hour/time monitor continuously using non-resettable hour meter.</p> <p>In addition, the owner or operator shall monitor, once per month, the total operating time from the engine's hour meter; hours of operation for emergency use; and the combined hours of operation for storm anticipation, demand response, testing and maintenance is calculated by the following: Hours of operation for emergency use (per month) = (The monthly total operating time from the engine's hour meter) - (The monthly total operating time for storm anticipation, demand response, testing &amp; maintenance). [N.J.A.C. 7:27-22.16(o)]</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The permittee shall maintain on site and record the following information:</p> <ol style="list-style-type: none"> <li>1. Once per month, the total operating time from the engine's hour meter and the monthly hours of operation for emergency use. Document if the emergency use was due to internal or external loss of primary source of energy, or due to a fire or flood. If internal loss at the facility, document the emergency and that occurred, the damages to the primary source of energy and the amount of time needed for repairs;</li> <li>2. For each time the engine is specifically operated for testing or maintenance, storm anticipation or demand response operating scenario: <ol style="list-style-type: none"> <li>i. The reason for its operation;</li> <li>ii. The date(s) of operation and the start up and shut down time;</li> <li>iii. The total operating time for testing or maintenance, storm anticipation or demand response operating scenario based on the engine's hour meter; and</li> <li>iv. The name of the operator; and</li> </ol> </li> <li>3. For each time the engine is operated during demand response when there is a reported peak demand period or a voltage reduction period. Maintain a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction.</li> </ol> <p>. [N.J.A.C. 7:27-22.16(o)]</p>	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	Hours of Operation <= 1,581 hr/yr for non-emergency storm anticipation, demand response, and normal testing & maintenance operations. (E4, E5, E6 combined operation hours). [N.J.A.C. 7:27-22.16(a)]	Hours of Operation: Monitored by hour/time monitor continuously using non-resettable hour meter. [N.J.A.C. 7:27-22.16(o)]	Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Record the following information based on the engines's hour meter: i. The reason for its operation. i.e., Storm Anticipation, Normal Testing and Maintenance, or Demand Response; ii. The date(s) of operation and the start up and shut down time; iii. The total operating time for storm preparation, normal testing & maintenance, and demand response based on the engines's hour meter for any 12 consecutive months and iv. The name of the operator. [N.J.A.C. 7:27-22.16(o)]	None.
9	VOC (Total) <= 0.792 tons/yr based on permitted total operating hours for the three engines. This limit includes formaldehyde emissions. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	NOx (Total) <= 0.57 tons/yr based on permitted total operating hours for the three engines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	CO <= 1.9 tons/yr based on permitted total operating hours for the three engines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	TSP <= 0.105 tons/yr based on permitted total operating hours for the three engines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	PM-10 (Total) <= 0.442 tons/yr based on permitted operating hours of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	PM-2.5 (Total) <= 0.442 tons/yr based on permitted operating hours of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	Ammonia <= 0.153 tons/yr based on permitted total operating hours for the three engines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	Formaldehyde <= 0.227 tons/yr based on permitted total operating hours for the three engines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
17	Maximum Gross Heat Input <= 14.6 MMBTU/hr (HHV) for each engine based on manufacturer specifications. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records showing the maximum heat input rate. .[N.J.A.C. 7:27-22.16(o)].	None.
18	Natural Gas Usage <= 21.7 MMft <sup>3</sup> per any 12 consecutive months period based on 1581 hours per year operation for the three engines. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain record of calculations.[N.J.A.C. 7:27-22.16(o)].	None.
19	The owner or operator of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine. (NSPS JJJJ). [40 CFR 60.4234]	Other: The owner or operator must demonstrate compliance as prescribed in 40 CFR 60 Subpart JJJJ. [40 CFR 60].	Other: The owner or operator must keep records of the documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4)].	None.
20	The owner or operator may not install stationary SI ICE that do not meet the applicable requirements in 40 CFR 60.4233 after the deadline established in 40 CFR 60.4236(a) and (b), except for engines that were removed from one existing location and reinstalled at a new location. (NSPS JJJJ). [40 CFR 60.4236]	Other: The owner or operator must demonstrate compliance as prescribed in 40 CFR 60 Subpart JJJJ. [40 CFR 60].	Other: The owner or operator must keep records of the documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	The owner or operator of a non - certified SI ICE engine with maximum engine power > 500 HP (> 375 kW) must keep a maintenance plan and records of conducted maintenance, and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. Additionally, the owner or operator must conduct an initial performance test and conduct subsequent performance testing in accordance with 40 CFR 60.4244 every 8760 hours or 3 years, whichever comes first, as prescribed in 40 CFR 60.4243(b)(2)(ii) to demonstrate compliance. (NSPS JJJJ). [40 CFR 60.4243(b)(2)(ii)]	Other: The owner or operator must demonstrate compliance as prescribed in 40 CFR 60.4243(b)(2). [40 CFR 60.4243].	Other: The owner or operator must keep records of the documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4)].	None.
22	The owner or operator of a SI ICE natural gas engine may operate an engine using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owner or operator is required to conduct a performance test to demonstrate compliance with the emission standards in 40 CFR 60.4233. (NSPS JJJJ). [40 CFR 60.4243(e)]	None.	Other: The owner or operator must keep records of the hours that propane was used. [40 CFR 60.4243(e)].	None.
23	The owner or operator shall maintain and operate the air-to-fuel ratio controllers appropriately to ensure proper operation of the engine and control device to minimize emissions at all times. (NSPS JJJJ). [40 CFR 60.4243(g)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
24	The owner or operators of all SI ICE must keep records of the information in 40 CFR 60.4245(a)(1) through (4) as follows: All notification submitted to comply with 40 CFR 60 Subpart JJJJ and all documentation supporting any notification; maintenance conducted on the engine; for a certified engine, keep documentation from the manufacturer that the engine is certified; if engine is not a certified engine or is a certified engine operating in a non-certified manner, documentation that the engine meets the emission standards. (NSPS JJJJ). [40 CFR 60.4245(a)]	None.	Other: The owner or operators of all SI ICE must keep records of the information in 40 CFR 60.4245(a)(1) through (4) as follows: (1) All notification submitted to comply with 40 CFR 60 Subpart JJJJ and all documentation supporting any notification; (2) maintenance conducted on the engine; (3) for a certified engine, keep documentation from the manufacturer that the engine is certified; (4) if engine is not a certified engine or is a certified engine operating in a non-certified manner, documentation that the engine meets the emission standards. [40 CFR 60.4245(a)].	None.
25	The owner or operator of SI ICE engine with a maximum engine power $\geq 500$ HP ( $\geq 375$ kW) that have not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231 must submit an initial notification as required in 40 CFR 60.7(a)(1). (NSPS JJJJ). [40 CFR 60.4245(c)]	None.	None.	Submit notification: Once initially The owner or operator must submit an initial notification as required in 40 CFR 60.7(a)(1) to EPA Region 2 and Regional Enforcement Office of NJDEP. The notification must include the information outlined in 40 CFR 60.4245(c)(1) through (5): (1) Name and address of the owner or operator; (2) The address of the affected source; (3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement; (4) Emission control equipment; and (5) Fuel used. [40 CFR 60.4245(c)]
26	The owner or operator of SI ICE engine shall comply with the applicable General Provisions in 40 CFR 60 Subpart A as listed in Table 3 in 40 CFR 60 Subpart JJJJ. (NSPS JJJJ). [40 CFR 60.4246]	None.	None.	None.

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

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**Emission Unit:** U4 Three 1500 kW NG Storm Generators #4, #5, #6 Storm Anticipation/Demand Response/Testing & Maintenance/Emergency  
**Operating Scenario:** OS1 EG #4 Storm Preparation and Demand Response, OS3 EG #5 Storm Preparation and Demand Response, OS5 EG #6 Storm Preparation and Demand Response

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions $\leq$ 6.92 lb/hr from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
2	Opacity $\leq$ 20 % , exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
3	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	NOx (Total) $\leq$ 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, 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 upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
5	CO $\leq$ 500 ppmvd @ 15% O <sub>2</sub> . [N.J.A.C. 7:27-16.10(b)]	CO: Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
6	NOx (Total) $\leq$ 0.15 grams/brake horsepower-hour. The maximum emission factor is based on manufacturer specifications. [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 upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
7	CO $\leq$ 0.5 grams/brake horsepower-hour. The maximum emission factor is based on manufacturer specifications. [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 upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	VOC (Total) $\leq$ 1.01 lb/hr. This limit includes formaldehyde emissions. Maximum emission rate is based on manufacturer emission factor and maximum heat input. [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 upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
9	NOx (Total) $\leq$ 0.72 lb/hr Maximum emission rate is based on manufacturer emission factor and maximum heat input. [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 upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
10	CO $\leq$ 2.4 lb/hr Maximum emission rate is based on manufacturer emission factor and maximum heat input. [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 upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
11	TSP $\leq$ 0.133 lb/hr Maximum emission rate is based on AP-42 emission factor and maximum heat input. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	PM-10 (Total) $\leq$ 0.56 lb/hr Maximum emission rate is based on AP-42 emission factor and maximum heat input. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	PM-2.5 (Total) $\leq$ 0.56 lb/hr based on PM10 emission. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	Ammonia $\leq$ 0.192 lb/hr Maximum emission rate is based on manufacturer emission factor and maximum heat input. [N.J.A.C. 7:27-22.16(a)]	Ammonia: Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Ammonia: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
15	Formaldehyde $\leq$ 0.288 lb/hr Maximum emission rate is based on manufacturer emission factor and maximum heat input. [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 upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]

**New Jersey Department of Environmental Protection  
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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	The owner or operator of a new non-certified SI ICE natural gas or lean burn LPG with a maximum engine power of $\geq 1350$ HP ( $\geq 1010$ kW) manufactured after July 1, 2010 must meet the emission standards for engines HP $\geq 500$ summarized in Table 1 in 40 CFR 60 Subpart JJJJ as follows: NO <sub>x</sub> $\leq 1.0$ g/HP-hr ( 1.3 g/kW-hr), CO $\leq 2.0$ g/HP-hr (2.7 g/kW-hr), VOC $\leq 0.7$ g/HP-hr (1 g/kW-hr) or NO <sub>x</sub> $\leq 82$ ppmvd @15% O <sub>2</sub> , CO $\leq 270$ ppmvd @15% O <sub>2</sub> , VOC $\leq 60$ ppmvd @15% O <sub>2</sub> . (NSPS JJJJ). [40 CFR 60.4233(e)]	Monitored by stack emission testing at the approved frequency, based on the average of three 1-hour tests. The permittee shall conduct an initial performance test and conduct subsequent performance testing every 8760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance, per 40 CFR 60.4243(b)(2)(ii). Each performance test must be conducted according to the requirements in 40 CFR 60.8 and 40 CFR 60.4244 and under the specific conditions specified in Table 2 to 40 CFR 60 Subpart JJJJ. The tests must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR 60.8(c). Three separate test runs for each performance test must be conducted, each test run must last at least 1 hour. Compliance with the emission limits shall be determined based on calculations in 40 CFR 60.4244(d) through (g). [40 CFR 60.4243(b)(2)]	Recordkeeping by stack test results at the approved frequency. The owner or operator of a SI ICE engine must keep documentation demonstrating compliance with the applicable emission standards. [40 CFR 60.4245(a)]	Submit a stack test report: Within 60 days of stack testing. The owner or operator of a SI ICE engine must submit the results of stack tests to EPA Region 2 and to the Regional Enforcement Office of NJDEP. [40 CFR 60.4245(d)]

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**Emission Unit:** U4 Three 1500 kW NG Storm Generators #4, #5, #6 Storm Anticipation/Demand Response/Testing & Maintenance/Emergency  
**Operating Scenario:** OS2 EG #4 Normal Testing and Maintenance, OS4 EG #5 Normal Testing and Maintenance, OS6 EG #6 Normal Testing and Maintenance

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 6.92 lb/hr from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
2	Opacity <= 20 % , exclusive of visible condensed water vapor, except for a period of not longer than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
3	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	CO <= 500 ppmvd @ 15% O <sub>2</sub> . [N.J.A.C. 7:27-16.10(b)]	None.	None.	None.
5	NO <sub>x</sub> (Total) <= 0.9 grams/brake horsepower-hour. [N.J.A.C. 7:27-19.8(e)2]	None.	None.	None.
6	NO <sub>x</sub> (Total) <= 0.15 grams/brake horsepower-hour. The maximum emission factor is based on manufacturer specifications. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 0.5 grams/brake horsepower-hour. The maximum emission factor is based on manufacturer specifications. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	NO <sub>x</sub> (Total) <= 1 grams/brake horsepower-hour as specified in Table 1 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4233(e)]	None.	None.	None.
9	CO <= 2 grams/brake horsepower-hour as specified in Table 1 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4233(e)]	None.	None.	None.



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	VOC (Total) <= 0.7 grams/brake horsepower-hour as specified in Table 1 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4233(e)]	None.	None.	None.
11	VOC (Total) <= 1.01 lb/hr. This limit includes formaldehyde emissions. Maximum emission rate is based on manufacturer emission factor and maximum heat input. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	NOx (Total) <= 0.72 lb/hr Maximum emission rate is based on manufacturer emission factor and maximum heat input. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	CO <= 2.4 lb/hr Maximum emission rate is based on manufacturer emission factor and maximum heat input. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	TSP <= 0.133 lb/hr Maximum emission rate is based on AP-42 emission factor and maximum heat input. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	PM-10 (Total) <= 0.56 lb/hr Maximum emission rate is based on AP-42 emission factor and maximum heat input. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	PM-2.5 (Total) <= 0.56 lb/hr Maximum emission rate is based on AP-42 emission factor and maximum heat input. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
17	Ammonia <= 0.192 lb/hr Maximum emission rate is based on manufacturer emission factor and maximum heat input. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
18	Formaldehyde <= 0.288 lb/hr Maximum emission rate is based on manufacturer emission factor and maximum heat input. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

Emission Unit: U42 Niro Fluidized Bed Incinerator

Subject Item: CD5501 NIRO EnviroCare VenturiPak Scrubber

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Minimum Pressure Drop Across Entire Wet Scrubbing System $\geq$ 48.3 inches w.c.. Minimum pressure drop across each wet scrubber used to meet the particulate matter, lead and cadmium emission limits in Table 2 of Subpart LLL, equal to the lowest 4-hour average pressure drop across each such wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter, lead and cadmium emission limits. [40 CFR 62.15985(b)]	Minimum Pressure Drop Across Entire Wet Scrubbing System: Monitored by pressure drop instrument continuously based on 12-hour block average of one hour block averages. [40 CFR 62.15995(a)(3)(ii)]	Minimum Pressure Drop Across Entire Wet Scrubbing System: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously with data recorded every 15 minutes. [40 CFR 62.16020(a)(1)(i)]	Submit a report: Annually to the Administrator and to the Department no later than 12 months following the submission of the initial or previous compliance report. The permittee shall submit an annual compliance report that includes the items listed in 40 CFR 62.16030(c) paragraphs (1) through (16). [40 CFR 62.16030(c)]
2	Scrubbing Medium Flow Rate $\geq$ 517 gal/min. The minimum combined scrubber liquid flow rate (measured at the inlet to each wet scrubber to the venturi and impingement trays), equal to the lowest 4-hour average liquid flow rate measured during the most recent performance test demonstrating compliance with all applicable emission limits. [40 CFR 62.15985(c)]	Scrubbing Medium Flow Rate: Monitored by scrubber flow rate instrument continuously based on 12-hour block average of one hour averages. [40 CFR 62.15995(a)(3)(ii)]	Scrubbing Medium Flow Rate: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously with data recorded every 15 minutes. [40 CFR 62.16020(a)(1)(i)]	Submit a report: Annually to the Administrator and to the Department no later than 12 months following the submission of the initial or previous compliance report. The permittee shall submit an annual compliance report that includes the items listed in 40 CFR 62.16030(c) paragraphs (1) through (16). [40 CFR 62.16030(c)]
3	The permittee is not required to establish an operating limit and monitor scrubber liquid pH if continuous monitoring system is used to demonstrate compliance with the emission limits for hydrogen chloride or sulfur dioxide. [40 CFR 62.15985(a)(1)]	None.	None.	None.

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Emission Unit: U42 Niro Fluidized Bed Incinerator

Subject Item: CD5502 Niro Star Wet Electrostatic Precipitator

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Secondary Voltage and Current $\geq$ 1.2 kVA. The minimum power input to the electrostatic precipitator collection plates, equal to the lowest 4-hour average secondary electric power measured during the most recent performance test demonstrating compliance to particulate matter, lead and cadmium emission limits. [40 CFR 62.15985(f)]	Secondary Voltage and Current: Monitored by volt meter continuously. Electric power meter continuously based on 12 hour block average. The Permittee shall follow the data measurement and recording frequencies and data averaging times specified in Table 4 to 40CFR62 Subpart LLL. [40 CFR 62.16020(a)(1)(i)]	Secondary Voltage and Current: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously based on 12-hour block average of one hour data recordings. [40 CFR 62.16025(f)(3)(ii)]	Submit a report: Annually to the Administrator and to the Department no later than 12 months following the submission of the initial or previous compliance report. The permittee shall submit an annual compliance report that includes the items listed in 40 CFR 62.16030(c) paragraphs (1) through (16). [40 CFR 62.16030(c)]
2	Flowrate $\geq$ 0 gal/min. The minimum effluent water flow rate at the outlet of the electrostatic precipitator, equal to the lowest 4-hour average effluent water flow rate at the outlet of the electrostatic precipitator measured during the most recent performance test demonstrating compliance with the particulate matter, lead and cadmium emission limits . [40 CFR 62.15985(g)]	Other: Monitored by water flowrate instrument at the outlet of the wet electrostatic precipitator: The Permittee shall follow the data measurement and recording frequencies and data averaging times specified in Table 4 to 40CFR 62 Subpart LLL.[40 CFR 62.15985].	Flowrate: Recordkeeping by data acquisition system (DAS) / electronic data storage each hour during operation. [40 CFR 62.16025(f)(3)(ii)]	Submit a report: Annually to the Administrator and to the Department no later than 12 months following the submission of the initial or previous compliance report. The permittee shall submit an annual compliance report that includes the items listed in 40 CFR 62.16030(c) paragraphs (1) through (16). [40 CFR 62.16030(c)]
3	The wet electrostatic precipitator shall be operated at all times sewage sludge is being charged to the Niro incinerator (E5501). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	The electrostatic precipitator shall be operated and maintained in accordance with the manufacturer recommendations. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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Emission Unit: U42 Niro Fluidized Bed Incinerator

Subject Item: CD5503 CPPE Mercury GAC Adsorber for Niro

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The permittee shall install and operate a sulfur impregnated granular activated carbon (GAC) bed of at least 29,000 pounds. The GAC shall be designed to control mercury emissions generated from the combustion of sludge from the Niro sludge incinerator (E5501). [N.J.A.C. 7:27-22.16(e)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All documentation of construction shall be kept on-site, and be made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop $\geq 2$ and Pressure Drop $\leq 15$ inches w.c. The pressure drop range across the carbon adsorption unit. [40 CFR 62.15965(a)]	Pressure Drop: Monitored by pressure drop instrument continuously. [40 CFR 62.16005(a)]	Pressure Drop: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously with data recorded every 15 minutes. [40 CFR 62.16020(a)(1)(i)]	Submit a report: Annually to the Administrator and to the Department no later than 12 months following the submission of the initial or previous compliance report. The permittee shall submit an annual compliance report that includes the items listed in 40 CFR 62.16030(c) paragraphs (1) through (16). [40 CFR 62.16030(c)]
3	Temperature $\geq 105$ and Temperature $\leq 185$ degrees F. The temperature of vapor stream to the carbon adsorption unit. [40 CFR 62.15965(a)]	Temperature: Monitored by temperature instrument continuously, based on 15 minute intervals. [N.J.A.C. 7:27-22.16005(a)]	Temperature: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously with data recorded every 15 minutes. [40 CFR 62.16020(a)(1)(i)]	Submit a report: Annually to the Administrator and to the Department no later than 12 months following the submission of the initial or previous compliance report. The permittee shall submit an annual compliance report that includes the items listed in 40 CFR 62.16030(c) paragraphs (1) through (16). [40 CFR 62.16030(c)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	The permittee shall perform periodic inspections and measurements of available sulfur across various layers of carbon adsorber bed (CD5503) consistent with manufacturer's specifications and recommendations to ensure the mercury emissions are reduced below the emission standards, and the carbon bed have not reached the end of its useful life. [N.J.A.C. 7:27-22.16(a)]	Other: The permittee shall monitor the performance of the carbon bed semiannually according to the manufacturer's specifications to ensure the carbon bed has not reached the end of its useful life.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall maintain the following records: 1. Dates of carbon adsorber inspections and measurements of available sulfur across various layers of carbon adsorber bed (CD5503); 2. Results of performance measurements across various layers of carbon adsorber; 3. Date of carbon adsorber replacement. [N.J.A.C. 7:27-22.16(o)]	Conduct an inspection: Semiannually beginning within 6 months of initial start-up. The permittee shall replace the carbon adsorber before it has reached the end of its useful life based on the inspections and performance test results. [N.J.A.C. 7:27-22.16(o)]
5	The permittee shall replace the carbon bed based on performance tests for mercury conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in Table 2 to 40 CFR 62 Subpart LLL and according to the testing, monitoring, and calibration requirements specified in 40 CFR 62.16015(a). [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall maintain records of dates of carbon replacement. [N.J.A.C. 7:27-22.16(o)]	None.
6	Saturated or partially used adsorption material shall be disposed of in a manner that minimizes releases of air contaminants to the atmosphere. This shall be done in accordance with all applicable State and Federal solid waste management regulations. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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**Emission Unit:** U42 Niro Fluidized Bed Incinerator**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR Part 60 Subpart A 40 CFR Part 61 Subpart A 40 CFR Part 62 Subpart LLL 40 CFR Part 60 Subpart O 40 CFR Part 61 Subpart C 40 CFR Part 61 Subpart E 40 CFR Part 503 Subpart E  [40 CFR Federal Rules Summary]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<p><b>PERIODIC STACK TESTING SUMMARY</b> The permittee shall conduct a periodic stack test required by 40 CFR 62 Subpart LLL using a protocol approved by the Department to demonstrate compliance with emission limits for NO<sub>x</sub>, CO, SO<sub>2</sub>, TSP, Lead, Cadmium, HCl, Mercury and Dioxins/Furans (Total) as specified in the compliance plan for U42 OS1 Niro Incinerator (E5501).</p> <p>Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>For 40 CFR 62 Subpart LLL, the permittee shall operate the sewage sludge incinerator at a minimum of 85 percent of the maximum permitted capacity for each stack test run, as specified in 40CFR62.16015(a)11.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	Other: Monitoring as required under the applicable operating scenario.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping as required under the applicable operating scenario.[N.J.A.C. 7:27-22.16(o)].	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 no later than 180 days prior to the testing due date or request from EMS, in writing, to use a previously approved protocol no later than 90 days prior to the testing due date. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT) that is downloaded at: <a href="http://www.epa.gov/ttnchie1/ert">http://www.epa.gov/ttnchie1/ert</a> , unless another format is approved by EMS. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date. A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 60 days after performing the stack test as specified in 40CFR62.16030(h)2. The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)], [N.J.A.C. 7:27-22.19(d)] and. [N.J.A.C. 7:27-22.18(h)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<p>The permittee shall conduct an annual performance test for each pollutant in Table 2 of 40CFR62 Subpart LLL between 11 and 13 calendar months after the previous performance test or within 60 days of a process change.</p> <p>The permittee can conduct performance tests less often for a given pollutant, as specified in the following paragraphs:</p> <p>(i) The permittee can conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the emission limit specified in Table 2 of 40CFR62 Subpart LLL , and there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, the permittee does not have to conduct a performance test for that pollutant for the next 2 years. The permittee must conduct a performance test during the third year and no more than 37 months after the previous performance test.</p> <p>(ii) If the SSI unit continues to meet the emission limit for the pollutant, the permittee may choose to conduct performance tests for the pollutant every third year if the emissions are at or below 75-percent of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance test must be conducted no more than 37 months after the previous performance test. [40 CFR 62.16000(a)]</p>	<p>Other: Conduct the performance test using the test methods, averaging methods and minimum sampling volumes or durations as specified in Table 2 of 40CFR62 Subpart LLL and according to the testing, monitoring and calibration requirements specified in 40 CFR 62.16015(a).[40 CFR 62.16000(a)].</p>	<p>Other: (1) Maintain records of the results of initial, annual and any subsequent performance tests conducted to determine compliance with the emission limits and standards and/or to establish operating limits, as applicable.</p> <p>(2) Retain a copy of the complete performance test report, including calculations.</p> <p>(3) Keep a record of the hourly dry sludge feed rate measured during performance test runs as specified in 40CFR62.16015(a)(2)(i).</p> <p>(4) Keep any necessary records to demonstrate that the performance test was conducted under conditions representative of normal operations.[40 CFR 62.16025(e)].</p>	<p>Submit a report: Annually to the Administrator and to the Department . The permittee shall submit an annual compliance report as specified in 40 CFR 62.16030(c). If the permittee elects to conduct performance tests less frequently as allowed in 40CFR62.16000(a)(3) and did not conduct a performance test during the reporting period, the permittee must include the dates of the last two performance tests, a comparison of the emission level you achieved in the last two performance tests to the 75-percent emission limit threshold specified in §62.16000(a)(3), and a statement as to whether there have been any process changes and whether the process change resulted in an increase in emissions. [40 CFR 62.16000(d)]</p>



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4	Continued: (iii) If a performance test shows emissions exceeded 75-percent of the emission limit for a pollutant, the permittee must conduct annual performance tests for that pollutant until all performance tests over 2 consecutive years show compliance. [40 CFR 62.16000(a)(3)]	Other: See above monitoring requirements.[40 CFR 62.15955].	Other: See above recordkeeping requirements.[40 CFR 62.16025(e)].	Other (provide description): Other. See above submittal requirements. [40 CFR 62.16000(d)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	<p><b>STACK TESTING SUMMARY</b> The permittee shall conduct a stack test at least 18 months prior to the expiration of the initial or renewed operating permit using an approved protocol to demonstrate compliance with emission limits for VOC, NOx, CO, SO2, TSP, PM-10, Lead, Arsenic, Beryllium, Cadmium, Chromium, HCl, Mercury, Nickel, Dioxins/Furans (Total), Benzo(A) Pyrene, and Benzene as specified in the compliance plan for U42 OS1 Niro Incinerator.</p> <p>Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>For 40 CFR 62 Subpart LLL, the permittee shall operate the sewage sludge incinerator at a minimum of 85 percent of the maximum permitted capacity for each stack test run, as specified in 40CFR62.16015(a)11.</p> <p>The permittee may propose, in the stack test protocol, to use CEMS data to satisfy the stack testing requirements, for SO2 and/or CO, with EMS approval. In order for EMS to approve using CEMS data at the time of the stack test, the CEMS must be certified and be in compliance with all daily, quarterly and annual quality assurance requirements. The CEMS shall monitor and record emissions in units identical to those required by the applicable stack testing conditions of this permit. CEMS data, if allowed by this permit, shall be taken at the same worst case conditions as described above.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitoring as required under the applicable operating scenario.</p> <p>PERMITTEES OPERATING AFTER EXPIRATION DATE OF THE OPERATING PERMIT SHALL FOLLOW THE STACK TESTING SCHEDULE SPECIFIED IN THE REF.#6 LINE ITEM BELOW.[N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario.[N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule.. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 at least 30 months prior to the expiration of the approved operating permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office 60 days after performing the stack test as specified in 40CFR62.16030(h)2. The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)], [N.J.A.C. 7:27-22.19(d)] and . [N.J.A.C. 7:27-22.18(h)]</p>

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6	<p><b>STACK TESTING SCHEDULE FOR EXPIRED PERMIT</b></p> <p>If an operating permit has expired, the permittee shall conduct a stack test no later than 42 months after the date of expiration of the operating permit using an approved protocol to demonstrate compliance with emission limits for VOC, NO<sub>x</sub>, CO, SO<sub>2</sub>, TSP, PM-10, Lead, Arsenic, Beryllium, Cadmium, Chromium, HCl, Mercury, Nickel, Dioxins/Furans (Total), Benzo(A) Pyrene, and Benzene as specified in the compliance plan for U42 OS1 Niro Incinerator.</p> <p>Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>For 40 CFR 62 Subpart LLL, the permittee shall operate the sewage sludge incinerator at a minimum of 85 percent of the maximum permitted capacity for each stack test run, as specified in 40CFR62.16015(a)11.</p> <p>The permittee may propose, in the stack test protocol, to use CEMS data to satisfy the stack testing requirements, for NO<sub>x</sub> and/or CO, with EMS approval. In order for EMS to approve using CEMS data at the time of the stack test, the CEMS must be certified and be in compliance with all daily, quarterly and annual quality assurance requirements. The CEMS shall monitor and record emissions in units identical to those required by the applicable stack testing conditions of this permit. CEMS data, if allowed by this permit, shall be taken at the same worst case conditions as described above.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitoring as required under the applicable operating scenario.[N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario.[N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. If an operating permit has expired, the permittee shall 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 30 months after the date of expiration of the operating permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office 60 days after performing the stack test as specified in 40CFR62.16030(h)2. The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e) and. [N.J.A.C. 7:27-22.18(h)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	<p>CEMS REQUIREMENTS SUMMARY</p> <p>The Permittee shall operate CEMS according to the approved certification and in compliance with daily, quarterly, and annual quality assurance requirements. The CEMS shall include continuous monitoring of all necessary parameters (e.g. oxygen, moisture, temperature, flow rate) to allow the required corrections to be applied to demonstrate compliance with the emission limits.</p> <p>The Permittee shall request approval from the Department's Emission Measurement Section (EMS) to allow continued use of the existing CEMS when a change to the units of measurement is made to a permit limit. [N.J.A.C. 7:27-22.16(a)]</p>	None.	Other: Maintain readily accessible records of the Permittee's written request to EMS, and the response from EMS . [N.J.A.C. 7:27-22.16(o)].	Comply with the requirement: Upon occurrence of event. Submit a written request to the EMS within 30 days from the date of the approved operating permit to determine whether a full CEMS recertification is required, whether the change can follow the procedures for data recording and storage equipment upgrades found in the Department's Technical Manual 1005 Section IV.B.3(f), or if continued use of the existing CEMS is allowed. [N.J.A.C. 7:27-22]
8	<p>The owner or operator shall develop a QA/QC plan for each CEMS/COMS required by this permit prepared in accordance with the NJDEP Technical Manual 1005 posted on the AQPP webpage at <a href="http://www.state.nj.us/dep/aqpp">http://www.state.nj.us/dep/aqpp</a>. [N.J.A.C. 7:27-22.16(a)]</p>	Other: The QA/QC coordinator shall be responsible for reviewing the QA/QC plan on an annual basis. [N.J.A.C. 7:27-22.16(o)].	Other: Maintain readily accessible records of the QA/QC plan including QA data and quarterly reports. [N.J.A.C. 7:27-22.16(o)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	Opacity <= 10 % , excluding condensed water vapor, except for a period of not longer than 3 minutes in a consecutive 30 minute period. [N.J.A.C. 7:27-22.16(e)]	<p>Opacity: Monitored by visual determination each week during operation. Visual inspections shall consist of a visual survey of PT2 during daylight hours to identify if the stack has visible emissions, (other than condensed water vapor), greater than the prescribed standard. If visible emissions are observed, the permittee shall do the following:</p> <p>(1) Verify that the equipment and /or control device causing the emission is operating according to manufacturer's specifications and the operating permit compliance plan. If the equipment or control device is not operating properly, the permittee shall take corrective action immediately to eliminate the excess emissions. The permittee must report any permit violation to NJDEP pursuant to N.J.A.C. 7:27- 22.19.</p> <p>(2) If the corrective action taken in step one does not correct the opacity problem within 24 hours, the permittee shall perform a check via a certified opacity reader, in accordance with N.J.A.C. 7:27B-2. Such a test shall be conducted once per day until corrective action is taken to successfully correct the opacity problem. The permittee must report any continuing permit violation to NJDEP pursuant to N.J.A.C. 7:27-22.19. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Opacity: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The permittee shall maintain the following records: (1) Date and time of inspection; (2) Emission point number; (3) Operational status of equipment; (4) Observed results and conclusions; (5) Description of corrective actions taken, if necessary; (6) Date and time opacity problem was solved, if applicable; (7) N.J.A.C. 7:27B-2 results, if conducted; and (8) Name of person(s) conducting inspection. [N.J.A.C. 7:27-22.16(o)]</p>	None.
10	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). [N.J.A.C. 7:27-9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.

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11	Fuel Oil Usage <= 1.58 MMgals of fuel oil #2 for any 12 consecutive months for Niro incinerator. [N.J.A.C. 7:27-22.16(a)]	Fuel Oil Usage: Monitored by fuel usage totalizing meter continuously. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The flow measuring device shall be certified by the manufacturer to have an accuracy of +/- 5%. [N.J.A.C. 7:27-22.16(o)]	Fuel Oil Usage: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The permittee shall maintain records of fuel oil usage during each calendar month. The fuel usage for any 12 consecutive months shall be computed by adding the fuel consumption in a given month to that consumed in the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.
12	At no time shall the Dorr-Oliver incinerator (E4201) and the Niro Incinerator (E5501) burn sludge simultaneously. The Dorr Oliver incinerator shall be used only during periods when the Niro incinerator is not operating or during period of scheduled maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall keep operating logs in log books to accurately maintain the following records in a manner approved by the Central Enforcement Office: Incinerator operating time, including cold and warm start-up periods, and the time of initial sludge introduction and the time sludge feed ended to the incinerator; any equipment malfunctions and corrective actions. [N.J.A.C. 7:27-22.16(o)]	None.
13	No customer sludge shall be burned in the incinerator. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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14	<p>The metal content of the sludge fed to the incinerator shall be no more than the parts per million by weight (ppmw) based on weighted 12 month rolling average, listed below:</p> <p>Arsenic      10 ppmw  Beryllium     8 ppmw  Cadmium      16 ppmw  Chromium    125 ppmw  Mercury       6 ppmw  Nickel        270 ppmw  [N.J.A.C. 7:27-22.16(e)]</p>	<p>Monitored by sludge sampling once per calendar day during operation. A daily sludge sample shall be taken from the sludge entering the incinerator. The daily samples shall be composited and analyzed monthly in accordance with the Water Pollution Control Act N.J.A.C. 7:14C- 1.</p> <p>Every month, the following computation shall be performed: ppmw in the monthly composite sample is multiplied by the dry weight of the sludge burned in this month (lb). The rolling 12 month weighted average is determined every month by summing the results for the most recent 12 months, including the last month and dividing by the weight of dry sludge (lb) burned in those 12 months. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Recordkeeping by certified lab analysis results each month during operation. Each record of the weight, concentration (certified lab analysis results), and monthly averages must be maintained, in a manner approved by the REO, for 5 years after recording. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Submit a report: On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). Analysis of the HAP metals concentrations shall be submitted quarterly, within 30 calendar days after the end of each calendar quarter to the Regional Enforcement Office. Each quarterly report shall include the results of the analysis of each month composite samples analyzed during the 12 months period ending with each month in the reporting quarter. [N.J.A.C. 7:27-22.16(o)]</p>
15	<p>Lead Concentration in Sludge &lt;= 220 ppmw. This is a monthly limit based on monthly composite sample. [N.J.A.C. 7:27-22.16(e)]</p>	<p>Lead Concentration in Sludge: Monitored by sludge sampling once per calendar day during operation, based on one calendar month. A daily sludge sample shall be taken from the sludge entering the incinerator. The daily samples will be composited and analyzed monthly in accordance with the Water Pollution Control Act N.J.A.C. 7:14C- 1. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Lead Concentration in Sludge: Recordkeeping by certified lab analysis results each month during operation. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Submit a report: On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). Analysis of the HAP metals concentrations shall be submitted quarterly, within 30 calendar days after the end of each calendar quarter to the Regional Enforcement Office. Each quarterly report shall include the results of the analysis of each month composite samples analyzed during the 12 months period ending with each month in the reporting quarter. [N.J.A.C. 7:27-22.16(o)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	Mercury Concentration in Sludge $\leq 7$ ppmw. This is a monthly limit based on monthly composite sample. [N.J.A.C. 7:27-22.16(e)]	Mercury Concentration in Sludge: Monitored by sludge sampling once per calendar day during operation, based on one calendar month. A daily sludge sample shall be taken from the sludge entering the incinerator. The daily samples will be composited and analyzed monthly in accordance with the Water Pollution Control Act N.J.A.C. 7:14C- 1. [N.J.A.C. 7:27-22.16(o)]	Mercury Concentration in Sludge: Recordkeeping by certified lab analysis results each month during operation. [N.J.A.C. 7:27-22.16(o)]	Submit a report: On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). Analysis of the HAP metals concentrations shall be submitted quarterly, within 30 calendar days after the end of each calendar quarter to the Regional Enforcement Office. Each quarterly report shall include the results of the analysis of each month composite samples analyzed during the 12 months period ending with each month in the reporting quarter. [N.J.A.C. 7:27-22.16(o)]
17	The permittee shall conduct simultaneous metal analysis in the sludge being charged to the incinerator during stack testing. The analysis shall be conducted for the following metals: arsenic, beryllium, cadmium, lead, nickel, chromium (total), and mercury. This analysis shall be included in the stack testing protocol. [N.J.A.C. 7:27-22.16(a)]	Monitored by sludge sampling upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by certified lab analysis results upon occurrence of event. Keep copy of completed test report on site. [N.J.A.C. 7:27-22.16(o)]	None.
18	VOC (Total) $\leq 1.31$ tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
19	NOx (Total) $\leq 12.3$ tons/yr based on Subchapter 19.28(a) 2.5 lb/ton dry sludge input and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
20	CO $\leq 10$ tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
21	SO2 $\leq 5.37$ tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
22	TSP $\leq 2.37$ tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.



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23	PM-10 (Total) <= 2.37 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
24	Lead Emissions <= 0.000995 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
25	Arsenic Emissions <= 0.00591 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
26	Beryllium Emissions <= 0.00394 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
27	Cadmium Emissions <= 0.000215 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
28	Chromium Emissions <= 0.0495 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
29	Nickel Emissions <= 0.133 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
30	Mercury Emissions <= 0.00497 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
31	Hydrogen chloride <= 0.104 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
32	Dioxins/Furans (Total) <= 5.825E-8 tons/yr reported as TCDD (2,3,7,8-) based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
33	Benzo (A) Pyrene Emissions <= 0.0016 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
34	Benzene <= 0.0285 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
35	Bed Operating Temperature $\geq$ 1,378 degrees F. The minimum combustion chamber operating temperature (or minimum afterburner temperature), equal to the lowest 4-hour average combustion chamber operating temperature measured during the most recent performance test demonstrating compliance with all applicable emission limits. [40 CFR 62.15985(e)]	Bed Operating Temperature: Monitored by temperature instrument continuously based on 12 hour block average. [40 CFR 62.15985]	Bed Operating Temperature: Recordkeeping by data acquisition system (DAS) / electronic data storage every 15 minutes. Record the 12-hour block average of combustion chamber temperatures. [40 CFR 62.16025(f)(3)(i)]	Submit a report: Annually. The permittee must submit an annual compliance report no later than 12 months following the submission of the initial or previous compliance report. [40 CFR 62.16030(c)]
36	Minimum Operating Temperature at the Exit of the Combustion Section $\geq$ 1,500 degrees F except during start-up periods. The permittee shall not feed sludge to the incinerator until the incinerator exit temperature reaches 1200 degrees Fahrenheit. The temperature at the exit of the combustion section of the incinerator shall reach 1500 degrees F within thirty (30) minutes after sludge is added. The permittee shall cease sludge feed to the incinerator if the temperature at the exit of the combustion section is less than 1500 degrees F (1-minute average). [N.J.A.C. 7:27-22.16(e)]	Minimum Operating Temperature at the Exit of the Combustion Section: Monitored by temperature instrument continuously, based on 1 minute intervals. Temperature shall be monitored at the exit of the combustion chamber before the heat exchanger. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(o)]	Minimum Operating Temperature at the Exit of the Combustion Section: Recordkeeping by strip chart or data acquisition (DAS) system continuously. [N.J.A.C. 7:27-22.16(o)]	None.
37	Residence Time $\geq$ 1 seconds. The residence time of the gases in the freeboard area of the fluidized bed incinerator must be at least 1 second at a temperature equal to or higher than 1,500 degrees F. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
38	The permittee shall immediately cease charging waste to the incinerator if the temperature monitor at the gas exiting the combustion section is inoperable. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
39	Oxygen $\geq$ 3 % by volume (dry basis) in flue gas. [N.J.A.C. 7:27-22.16(e)]	Oxygen: Monitored by continuous emission monitoring system continuously, based on 5-minute blocks. [N.J.A.C. 7:27-22.16(o)]	Oxygen: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal . [N.J.A.C. 7:27-22.16(o)]
40	If the continuous oxygen monitor becomes inoperable, sewage sludge feed to the incinerator may continue for a period of up to 24-hours, provided the CO monitor is operational, and the average concentration of CO in the flue gas does not exceed 100 ppmvd for any 1-hour block period as measured by the CO CEM. If at the end of the 24-hour period, the oxygen monitor remains inoperable, sewage sludge feed to the incinerator shall be ceased. [N.J.A.C. 7:27-22.16(e)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall record any equipment malfunctions and corrective actions taken. [N.J.A.C. 7:27-22.16(o)]	None.
41	The permittee shall cease charging sludge to the incinerator during periods of scrubber (CD5501), wet ESP (CD5502) or Hg GAC Carbon Adsorber (CD5503) downtime. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall record equipment malfunctions including dates, times, durations and corrective actions taken. [N.J.A.C. 7:27-22.16(o)]	None.
42	All requests, reports, applications, submittal, and other communications required by 40 CFR 60 shall be submitted in duplicate to the EPA Region II Administrator: United States Environmental Protection Agency, Region II Air Compliance Branch 290 Broadway New York, NY 10007-1866. [40 CFR 60.4(a)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
43	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)]
44	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. (NSPS Subpart A) [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)]
45	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 40 CFR 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.	Submit notification: Prior to occurrence of event (60 days or as soon as practicable before change is commenced). [40 CFR 60.a(4)]
46	Maintain records of the occurrence and duration of any startup, 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.	Recordkeeping by manual logging of parameter upon occurrence of event or maintain readily accessible records of the occurrence and duration of any startup, shutdown, or malfunction in a permanently bound logbook or data acquisition system (DAS)/electronic data storage. [40 CFR 60.7(b)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
47	The owner or operator shall submit to the Administrator, for each pollutant monitored, an excess emissions and monitoring systems performance report and/or summary report form. [40 CFR 60.7(c)]	None.	None.	<p>Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Semi-annually beginning on the 30th day of the 6th month following initial performance tests. The report shall be postmarked by the 30th day following the end of each calendar half. The report shall be in a format as specified at 40 CFR 60.7(d). The summary report form shall contain the information and be in the format shown in figure 1 at 40 CFR 60.7(d) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.</p> <p>(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.</p> <p>(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted. [40 CFR 60.7(c)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
48	Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous emissions monitoring system (CEMS), monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. [40 CFR 60.7(f)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system continuously. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows: 1) Owners or operators required to install a CEMS where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard. 2) Owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator. [40 CFR 60.7(f)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
49	The owner or operator of such facility shall conduct performance test(s) within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by this part, and at such other times as may be required by the Administrator under section 114 of the Act, except as specified in paragraphs (a)(1),(a)(2), (a)(3), and (a)(4) of 40 CFR 60.8. [40 CFR 60.8(a)]	None.	None.	The owner or operator of such facility shall furnish the Administrator a written report of the results of such performance test(s). Submit a report: As per the approved schedule. [40 CFR 60.8(a)]
50	The owner or operator shall conduct performance tests and data reduced in accordance with the test methods and procedures contained in each applicable subpart, unless otherwise specified and approved by the Administrator. (NSPS Subpart A) [40 CFR 60.8(b)]	None.	None.	None.
51	The owner or operator shall provide the Administrator at least 30 days prior notice of any performance test and shall provide adequate performance testing facilities as specified in 40 CFR Part 60.8(e). (NSPS Subpart A) [40 CFR 60.8(d)]	None.	None.	None.
52	At all times, including periods of startup, 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. [40 CFR 60.11(d)]	None.	None.	None.
53	Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. [40 CFR 60.8(f)]	None.	None.	None.

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<b>Ref.#</b>	<b>Applicable Requirement</b>	<b>Monitoring Requirement</b>	<b>Recordkeeping Requirement</b>	<b>Submittal/Action Requirement</b>
54	Compliance with NSPS standards specified in this permit, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in NSPS. [40 CFR 60.11(a)]	None.	None.	None.
55	No owner or operator 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.
56	All continuous monitoring systems shall be in continuous operation and shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period, except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d) of this section. [40 CFR 60.13(e)]	None.	None.	None.
57	Continuous monitoring systems or monitoring devices shall be installed so that representative measurements of emissions or process parameters are obtained. [40 CFR 60.13(f)]	None.	None.	None.



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
58	Owners or operators of all continuous monitoring other than opacity shall reduce all data to 1-hour averages for time periods as defined in 40 CFR 60.2. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorder during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. For owners or operators complying with the requirements in 40 CFR 60.7(f)(1) or (2), averages must include any data recorded during periods of monitor breakdown or malfunction. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O <sub>2</sub> ). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity). [40 CFR 60.13(h)]	None.	None.	None.
59	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.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
60	The owner or operator shall install and operate a flow measuring device to determine the mass of sludge charged to the incinerator [40 CFR 60.153(a)(1)]	Monitored by sludge feed/charge rate monitoring continuously, based on a 1 hour block average. The flow measuring device shall be certified by the manufacturer and shall have an accuracy of +/- 5% over its operating range. [40 CFR 60.153(a)(1)]	Recordkeeping by records of calculations based on 40 CFR 60.154(b) continuously. Records shall be maintained for a minimum of 2 years from the date of recording. [40 CFR 60.153(c)(3)]	Submit a report: Semi-annually on January 31 and July 31 of each year. The owner or operator shall report REO the rate of sludge charged to the incinerator over each 1-hour incinerator operating period for each calendar day that an increase in oxygen content of exhaust gas or scrubber pressure drop is reported pursuant to 40 CFR Part 60.155(a)(2) or (a)(1). [40 CFR 60.155(b)(4)]
61	Opacity <= 20 %. No owner or operator of any sewage sludge incinerator shall discharge or cause the discharge into the atmosphere of any gases which exhibit 20 percent opacity or greater, exclusive of condensed water vapor. [40 CFR 60.152(a)(2)]	Opacity: Monitored by stack emission testing once initially. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity. [40 CFR 60.154(b)(6)]	Opacity: Recordkeeping by stack test results upon occurrence of event. [40 CFR 60.8]	Submit a stack test report: Within 60 days of stack testing. The owner or operator shall submit the results of performance tests to the Administrator. [40 CFR 60.8]
62	Oxygen: The owner or operator shall install, calibrate, maintain, and operate a monitoring device that continuously measures and records the oxygen content of the incinerator exhaust gas. The oxygen monitoring device shall be certified by the manufacturer and shall have an accuracy of +/- 5% over its operating range and shall be calibrated according to method(s) prescribed by the manufacturer at least once each 24-hour operating period. [40 CFR 60.153(b)(2)]	Oxygen: Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [40 CFR 60.153(b)(2)]	Oxygen: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Records shall be maintained for a minimum of 2 years from the date of recording. [40 CFR 60.153(c)(2)]	Submit a report: Semi-annually on January 31 and July 31 of each year. The owner or operator shall submit to REO a record of the average oxygen content in the exhaust gas for each period of 1 hour or more that the oxygen content of the incinerator exhaust gas exceeds the average oxygen content measured during the most recent performance test by more than 3 percent. [40 CFR 60.155(a)(2)]
63	The owner or operator shall install, calibrate, maintain, and operate temperature measuring devices in the bed and outlet of the fluidized bed incinerator. Each temperature measuring device shall be certified by the manufacturer and shall have an accuracy of +/- 5% over its operating range. [40 CFR 60.153(b)(3)]	Monitored by temperature instrument continuously, based on a 1 hour block average. [40 CFR 60.153(b)(3)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Records shall be maintained for a minimum of 2 years from the date of recording. [40 CFR 60.153(c)(3)]	Submit a report: Semi-annually on January 31 and July 31 of each year. The owner or operator shall report REO the temperatures in the bed and the outlet averaged over a 1-hour period for each calendar day that an increase in oxygen content of exhaust gas or scrubber pressure drop is reported pursuant to 40 CFR Part 60.155(a)(2) or (a)(1). [40 CFR 60.155(b)(3)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
64	The owner or operator shall install, calibrate, maintain and operate a device for measuring the fuel flow to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of +/- 5 percent over its operating range. [40 CFR 60.153(b)(4)]	Monitored by fuel flow/firing rate instrument continuously, based on an 8 hour rolling average based on a 1 hour block average. [40 CFR 60.153(b)(4)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Records shall be maintained for a minimum of 2 years from the date of recording. [40 CFR 60.153(c)(3)]	Submit a report: Semi-annually on January 31 and July 31 of each year. The owner or operator shall report REO the incinerator fuel use averaged over each 8-hour incinerator operating period for each calendar day that an increase in oxygen content of exhaust gas or scrubber pressure drop is reported pursuant to 40 CFR Part 60.155(a)(2) or (a)(1). [40 CFR 60.155(b)(5)]
65	The owner or operator shall collect a sample of the sludge fed to the incinerator and analyze the sample for dry sludge content and volatile solids content. [40 CFR 60.153(b)(5)]	Monitored by sludge sampling once per calendar day during operation. Sludge samples shall be collected and analyzed using the methods specified at 40 CFR 60.154(b)(5), except that the determination of volatile solids, step (3)(b) of the method may not be deleted. [40 CFR 60.153(b)(5)]	Recordkeeping by certified lab analysis results upon occurrence of event. Records shall be maintained for a minimum of 2 years from the date of recording. [40 CFR 60.153(c)(3)]	Submit a report: Semi-annually on January 31 and July 31 of each year. The owner or operator shall report REO the moisture, volatile and solids content of the daily grab sample of sludge charged to the incinerator for each calendar day that an increase in oxygen content of exhaust gas or scrubber pressure drop is reported pursuant to 40 CFR Part 60.155(a)(2) or (a)(1). [40 CFR 60.155(b)(6)]
66	Pressure Drop Across the Scrubber: The owner or operator shall install, calibrate, maintain, and operate a monitoring device that continuously measures and records the pressure drop of the gas flow through the wet scrubbing device. Where a combination of wet scrubbing is used in series, the pressure drop of the gas flow through the combined system shall be continuously monitored. [40 CFR 60.153(b)(1)]	Pressure Drop Across the Scrubber: Monitored by pressure drop instrument continuously. The pressure drop monitoring device shall be certified by the manufacturer and shall have an accuracy of +/- 1 inch water gauge and shall be calibrated on an annual basis in accordance with the manufacturer's instructions. [40 CFR 60.153(b)(1)]	Pressure Drop Across the Scrubber: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Records shall be maintained for a minimum of 2 years from the date of recording. [40 CFR 60.153(c)(1)]	Submit a report: Semi-annually on January 31 and July 31 of each year. The owner or operator shall submit a report to the Administrator, in writing, a record of average pressure drop measurements for each period of 15 minutes duration or more during which the pressure drop of the scrubber was less than by a percentage, calculated according to the equation below, the average scrubber pressure drop measured during the most recent performance test. $P = -111E + 72.5$ where P = Percent reduction in pressure drop, and E = Average particulate matter emissions (kg/megagram). [40 CFR 60.155(a)(1)(i)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
67	No changes in the operation shall be made, which would potentially increase beryllium emissions above that determined during the most recent source test, until a new emission level has been estimated by calculation. [40 CFR 61.33(c)]	None.	None.	None.
68	No changes in the operation shall be made, which would potentially increase mercury emissions above that determined during the most recent source test or sludge test, until a new emission level has been estimated by calculation and the results reported to the Administrator. [40 CFR 61.53(d)(4)]	None.	None.	None.
69	The permittee shall not operate Incinerator #1 and Incinerator #2 simultaneously. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall maintain a record each time the incinerators are operated. [N.J.A.C. 7:27-22.16(e)]	None.
70	Lead Concentration in Sludge: The average daily concentration for lead in sewage sludge fed to a sewage sludge incinerator shall not exceed the concentration calculated using the following equation: $C = [0.1 \times \text{NAAQS} \times 86,400] / [\text{DF} \times (1 - \text{CE}) \times \text{SF}]$ Where: C = Average daily concentration of lead in sewage sludge NAAQS = National Ambient Air Quality Standard for lead in micrograms per cubic meter DF = Dispersion factor in micrograms per cubic meter per gram per second CE = Sewage sludge incinerator control efficiency for lead in hundredths SF = Sewage sludge feed rate in metric tons per day (dry weight basis) The dispersion factor DF and control efficiency CE shall be determined in accordance with 40CFR503.43(e). [40 CFR 503.43(c)]	Lead Concentration in Sludge: Monitored by calculations once initially was already completed. If any significant changes in geographic or physical characteristics occurred at the incinerator site or in incinerator operating conditions, a new air dispersion modeling or performance testing shall be required to determine a new dispersion factor or a new control efficiency that will be used to calculate revised pollutant limits. [40 CFR 503.43]	Lead Concentration in Sludge: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall maintain all relevant records in accordance with 40CFR503.47. [40 CFR 503.47]	Submit a report: Other, the pollutant limit shall be submitted to the REO no later than 30 days after completion of the air dispersion modeling and performance test. [40 CFR 503.43(e)(4)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
71	<p>The average daily concentration for arsenic, cadmium, chromium, and nickel in sewage sludge fed to a sewage sludge incinerator shall not exceed the concentration calculated using the following equation:</p> $C = [RSC \times 86,400] / [DF \times (1-CE) \times SF]$ <p>Where:  C = Average daily concentration of lead in sewage sludge  RSC = Risk specific concentration for arsenic, cadmium, chromium, and nickel in micrograms per cubic meter from Table 1 and 2 of 40CFR503.43  DF = Dispersion factor in micrograms per cubic meter per gram per second  CE = Sewage sludge incinerator control efficiency for lead in hundredths  SF = Sewage sludge feed rate in metric tons per day (dry weight basis)  The dispersion factor DF and control efficiency CE shall be determined in accordance with 40CFR503.43(e). [40 CFR 503.43(d)]</p>	<p>Monitored by calculations once initially was already completed. If any significant changes in geographic or physical characteristics occurred at the incinerator site or in incinerator operating conditions, a new air dispersion modeling or performance testing shall be required to determine a new dispersion factor or a new control efficiency that will be used to calculate revised pollutant limits. [40 CFR 503.43]</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall maintain all relevant records in accordance with 40CFR503.47. [40 CFR 503.47]</p>	<p>Submit a report: Other, the pollutant limits shall be submitted to the REO no later than 30 days after completion of the air dispersion modeling and performance test. [40 CFR 503.43(e)(4)]</p>
72	<p>An instrument that continuously measures and records information used to determine the moisture content in the sewage sludge incinerator stack exit gas shall be installed, calibrated, operated, and maintained for the sewage sludge incinerators. [40 CFR 503.45(c)]</p>	<p>Monitored by continuous emission monitoring system continuously. [40 CFR 503.45(c)]</p>	<p>Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [40 CFR 503.47(h)]</p>	<p>None.</p>
73	<p>The operation of a sewage sludge incinerator shall not cause the operating combustion temperature of the sewage sludge incinerator to exceed the performance test combustion temperature by more than 20 percent. [40 CFR 503.45(e)]</p>	<p>Monitored by temperature instrument continuously. [40 CFR 503.45(d)]</p>	<p>Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [40 CFR 503.47(f)]</p>	<p>None.</p>
74	<p>The permittee shall develop the information in 40 CFR 503.47 (b) through 40 CFR 503.47 (n) and shall retain the information for five years. [40 CFR 503.47(a)]</p>	<p>None.</p>	<p>Other: Records shall be maintained for five years.[40 CFR 503.47(a)].</p>	<p>None.</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
75	The permittee shall submit a final control plan and achieve final compliance by the final compliance date. The final control plan shall include a description of the devices for air pollution control and process changes that will be used to comply with the emissions limits and standards and other requirements of 40 CFR Part 62 Subpart LLL Federal Plan. [40 CFR 62.15875]	None.	Other: Maintain an onsite a copy of the final control plan.[40 CFR 62.15900(b)].	Submit a plan: As per the approved schedule. Submit the final control plan to the EPA regional office and permitting authority or delegated authority that includes the four items described in paragraphs (a)(1) through (4) of 40 CFR 62.15900: (1) A description of the devices for air pollution control and process changes that you will use to comply with the emission limits and standards and other requirements of this subpart; (2) The type(s) of waste to be burned, if waste other than sewage sludge is burned in the unit; (3) The maximum design sewage sludge burning capacity; and (4) If applicable, the petition for site-specific operating limits under 40 CFR 62.15965. [40 CFR 62.15900(a)]
76	If the permittee fail to submit a final control plan and achieve final compliance by March 17, 2017, the permittee must submit a notification to the EPA regional office and permitting authority or delegated authority postmarked within 10 business days after the compliance date in Table 1 of 40CFR 62 Subpart LLL. The permittee must inform the permitting authority that the permittee did not achieve compliance, and you must continue to submit reports each subsequent calendar month until a final control plan is submitted and final compliance is met. An SSI unit that operates out of compliance after the final compliance date would be in violation of the federal plan and subject to enforcement action. [40 CFR 62.15895]	None.	None.	Submit notification: Every month. Submit a notification to the EPA regional office and permitting authority or delegated authority postmarked within 10 business days after the compliance date in Table 1 to Subpart LLL. The permittee must inform the Administrator that you did not achieve compliance, and you must continue to submit reports each subsequent calendar month until a final control plan is submitted and final compliance is met. [40 CFR 62.15895]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
77	The permittee cannot operate the SSI unit unless a fully trained and qualified SSI unit operator is accessible, either at the facility or can be at the facility within 1 hour. The trained and qualified SSI unit operator may operate the SSI unit directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified SSI unit operators are temporarily not accessible, you must follow the procedures in 40 CFR 62.15945. [40 CFR 62.15920(a)]	None.	Other: Maintain documentation of training. Operator training and qualification must be obtained through by completing the requirements included in paragraph (c) of 40 CFR 62.15920(c).[40 CFR 62.15920(b)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
78	<p>Training must be obtained by completing an incinerator operator training course that includes, at a minimum, the three elements described in paragraphs (c)(1) through (3) of 40 CFR 62.15920:</p> <p>(1) Training on the 10 subjects listed in the following section:</p> <p>(i) Environmental concerns, including types of emissions;</p> <p>(ii) Basic combustion principles, including products of combustion;</p> <p>(iii) Operation of the specific type of incinerator to be used by the operator, including proper startup, sewage sludge feeding and shutdown procedures;</p> <p>(iv) Combustion controls and monitoring;</p> <p>(v) Operation of air pollution control equipment and factors affecting performance (if applicable);</p> <p>(vi) Inspection and maintenance of the incinerator and air pollution control devices;</p> <p>(vii) Actions to prevent malfunctions or to prevent conditions that may lead to malfunctions;</p> <p>(viii) Bottom and fly ash characteristics and handling procedures;</p> <p>(ix) Applicable federal, state and local regulations, including Occupational Safety and Health Administration workplace standards; and</p> <p>(x) Pollution prevention.</p> <p>(2) An examination designed and administered by the instructor administering the subjects in paragraph (c)(1) of this section.</p> <p>(3) Written material covering the training course topics that may serve as reference material following completion of the course.</p> <p>[40 CFR 62.15920(c)]</p>	None.	<p>Other: Maintain documentation of training at the facility including the the documentation of the operator training procedures specified under 40 CFR 62.15920(c)(1) and make the documentation readily accessible to all SSI unit operators.[40 CFR 62.15950(a)].</p>	None.



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
79	In order to complete qualification an operator must pass an examination designed and administered by the instructor administering the subjects in paragraph (c)(1) of 40 CFR 62.15920. [40 CFR 62.15920(c)(2)]	None.	Other: Maintain documentation of training. Written material covering the training course topics that may serve as reference material following completion of the course.[40 CFR 62.15920(c)(3)].	None.
80	Operator training must be completed by the later of the following three dates: 1.) The final compliance date, 2.) 6 months after the SSI startup or, 3.) 6 months after an employee assumes responsibility of operating or supervising operation of the SSI unit. [40 CFR 62.15925]	None.	Other: Maintain documentation of training.[40 CFR 62.15920(c)].	None.
81	Operator qualification is valid from the date on which the training course is completed and the operator successfully passes the examination required under 40 CFR 62.15920(c)(2). [40 CFR 62.15930(b)]	None.	Other: Maintain documentation of training.[40 CFR 62.15920(c)].	None.
82	Maintaining operator qualification requires an annual refresher course or review including coverage of the following topics: 1.) Update of regulations 2.) Proper incinerator operation procedures 3.) Inspection and maintenance 4.) Prevention of malfunctions or conditions leading to malfunction 5.) Discussion of operating problems encountered by attendees [40 CFR 62.15935]	None.	Other: Maintain documentation of annual training.[40 CFR 62.15920(c)].	None.
83	The permittee must renew a lapsed operator qualification before the operator begin operation of an SSI unit by one of the two methods specified in paragraphs (a) and (b) of 40 CFR 62.15940: (a) For a lapse of less than 3 years, you must complete a standard annual refresher course described in 40 CFR 62.15935; and (b) For a lapse of 3 years or more, you must repeat the initial qualification requirements in 40 CFR 62.15920. [40 CFR 62.15940]	None.	Other: Maintain documentation of training.[40 CFR 62.15920(c)].	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
84	When a qualified operator is not accessible for more than 8 hours, the SSI unit may be operated for less than 2 weeks by other plant personnel who are familiar with the operation of the SSI unit and who have completed a review of the information specified in 40 CFR 62.15950 within the past 12 months. However, you must record the period when a qualified operator was not accessible and include this deviation in the annual report as specified under 40 CFR 62.16030(c) [40 CFR 62.15945(a)]	None.	Other: Maintain records showing the periods when no qualified operators were accessible for more than 8 hours, but less than 2 weeks, as required in 40 CFR 62.15945(a).[40 CFR 62.16025(c)(3)].	Submit documentation of compliance: As per the approved schedule A Qualified Operator Deviation Report must be submitted if all qualified operators are not accessible to the SSI unit for less than 2 weeks. [40 CFR 62.16030(c)]

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
85	<p>When a qualified operator is not accessible for 2 weeks or more:</p> <p>(1) Notify the Administrator of this deviation in writing within 10 days. In the notice, state what caused this deviation, what you are doing to ensure that a qualified operator is accessible, and when you anticipate that a qualified operator will be accessible.</p> <p>(2) Submit a status report to the Administrator every 4 weeks outlining what you are doing to ensure that a qualified operator is accessible, stating when you anticipate that a qualified operator will be accessible, and requesting approval from the Administrator to continue operation of the SSI unit. You must submit the first status report 4 weeks after you notify the Administrator of the deviation as specified in 40 CFR 62.15945(b)(1).</p> <p>(i) If the Administrator notifies you that your request to continue operation of the SSI unit is disapproved, the SSI unit may continue operation for 30 days, and then must cease operation.</p> <p>(ii) Operation of the unit may resume if a qualified operator is accessible as required under 40 CFR 62.15920(a). You must notify the Administrator within 5 days of having resumed operations and of having a qualified operator accessible.</p> <p>[40 CFR 62.15945(b)]</p>	None.	Other: Maintain records showing the periods when no qualified operators were accessible for 2 weeks or more along with copies of reports submitted as required in 40 CFR 62.15945(b).[40 CFR 62.16025(c)(4)].	<p>Submit notification: As per the approved schedule to EPA regional office and permitting authority or delegated authority. If all qualified operators are not accessible for 2 weeks or more, you must take the following actions:</p> <p>(i) Submit a notification of the deviation within 10 days that includes the three items in paragraphs (e)(1)(i)(A) through (C) of 40 CFR 62.16030.</p> <p>(A) A statement of what caused the deviation.</p> <p>(B) A description of actions taken to ensure that a qualified operator is accessible.</p> <p>(C) The date when you anticipate that a qualified operator will be available.</p> <p>(ii) Submit a status report to the Administrator every 4 weeks that includes the three items in paragraphs (e)(1)(ii)(A) through (C) of 62.16030.</p> <p>(A) A description of actions taken to ensure that a qualified operator is accessible.</p> <p>(B) The date when you anticipate that a qualified operator will be accessible.</p> <p>(C) Request for approval from the Administrator to continue operation of the SSI unit. [40 CFR 62.16030(e)(1)]</p>

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
86	The permittee must establish a program for reviewing the information listed in 40 CFR 62.15920 (c)(1) with each qualified incinerator operator and other plant personnel who may operate the unit according to the provisions of 40 CFR 62.15945(a), according to the following schedule: (1) The initial review of the information listed in 40 CFR 62.15920(c)(1) must be conducted within 6 months after the effective date of this subpart or prior to an employee's assumption of responsibilities for operation of the SSI unit, whichever date is later; (2) Subsequent annual reviews of the information listed in 40 CFR 62.15920(c)(1) must be conducted no later than 12 months following the previous review. [40 CFR 62.15950(b)]	None.	Other: Maintain documentation of training.[40 CFR 62.15920(c)].	None.
87	If your unit was shut down by the Administrator or permitting authority or delegated authority, under the provisions of 40 CFR 62.15945(b)(2)(i), due to a failure to provide an accessible qualified operator, you must notify the EPA regional office and permitting authority or delegated authority within five days of meeting 40 CFR 62.15945(b)(2)(ii) that you are resuming operation. [40 CFR 62.16030(e)(2)]	None.	None.	Submit notification: As per the approved schedule. Submit notification to the EPA regional office and permitting authority or delegated authority within five days of meeting 40 CFR 62.15945(b)(2)(ii) that you are resuming operation. [40 CFR 62.16030(e)(2)]

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
88	The permittee must meet the emission limits and standards specified in Table 2 of 40 CFR Part 62 Subpart LLL by the final compliance date. The emission limits and standards apply at all times the unit is operating and during periods of malfunction. The emission limits and standards apply to emissions from a bypass stack or vent while sewage sludge is in the combustion chamber. [40 CFR 62.15955]	<p>Monitored by stack emission testing once initially and annually thereafter. Demonstrate initial compliance using the performance test required in 40 CFR 60.8.</p> <p>The owner or operator must demonstrate that the SSI unit meets the emission limits and standards specified in Table 2 to 40 CFR 62 Subpart LLL for particulate matter, hydrogen chloride, carbon monoxide, dioxins/furans (total mass basis or toxic equivalency basis), mercury, nitrogen oxides, sulfur dioxide, cadmium, lead, and fugitive emissions from ash handling using the performance test. The performance test must be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in Table 2 to 40 CFR 62 Subpart LLL and according to the performance testing, monitoring, and calibration requirements specified in 40 CFR 62.16015(a)1 through (a)11. . [40 CFR 62.15980(a)]</p>	<p>Other: The permittee must maintain records of performance tests for a period of at least 5 years. All records must be available on site in either paper copy or computer-readable format that can be printed upon request.</p> <p>The permittee shall maintain the following records:</p> <p>(1) The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and standards and/or to establish operating limits, as applicable. (2) A copy of the complete performance test report, including calculations. (3) A record of the hourly dry sludge feed rate measured during performance test runs as specified in 40 CFR 62.16015(a)(2)(i). (4) Any necessary records to demonstrate that the performance test was conducted under conditions representative of normal operations, including a record of the moisture content measured as required in 40 CFR 62.16015(a)(2)(ii) for each grab sample taken of the sewage sludge burned during the performance test. [40 CFR 62.16025(e)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule to the Administrator and to the Department - Emissions Measurement Section (EMS). The permittee shall submit the following information no later than 60 days following the initial performance test.</p> <p>(1) Company name, physical address, and mailing address. (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. (3) Date of report. (4) The complete test report for the initial performance test results obtained by using the test methods specified in Table 2 to this subpart. (5) If an initial performance evaluation of a continuous monitoring system was conducted, the results of that initial performance evaluation. (6) The values for the site-specific operating limits established pursuant to 40 CFR 62.15960 and 62.15965 and the calculations and methods, as applicable, used to establish each operating limit. [40 CFR 62.16030(b)]</p>

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
89	The permittee has the option to demonstrate compliance with the emission limits specified in Table 2 of 40 CFR Part 62 Subpart LLL using a continuous emissions monitoring system. [40 CFR 62.15980(b)]	Monitored by continuous emission monitoring system continuously. The permittee must use the continuous emissions monitoring system and follow the requirements specified in 40 CFR 62.16015(b). Measure the emissions according to 40 CFR 60.13 to calculate 1-hour arithmetic averages, corrected to 7-percent oxygen (or carbon dioxide). The permittee must demonstrate initial compliance using a 24-hour block average of these 1-hour arithmetic average emission concentrations, calculated using Equation 19-19 in section 12.4.1 of Method 19 of 40 CFR part 60, appendix A-7. [40 CFR 62.15980(b)(2)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The permittee must use the continuous emissions monitoring system and follow the requirements specified in 40 CFR 62.16015(b). [40 CFR 62.16000(b)]	<p>Submit notification: As per the approved schedule. Submit a notification to the EPA regional office and permitting authority or delegated authority and meet following the requirements:</p> <p>(1) You must notify the Administrator 1 month before starting use of the continuous emissions monitoring system.</p> <p>(2) You must notify the Administrator 1 month before stopping use of the continuous emissions monitoring system, in which case you must also conduct a performance test within prior to ceasing operation of the system.</p> <p>(3) You must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the emissions to the atmosphere.</p> <p>(4) During each relative accuracy test run of the continuous emissions monitoring system using the performance specifications in 40 CFR 62.16015 (b)(3)(ii), emission data for each regulated pollutant and oxygen must be collected concurrently by both the continuous emissions monitoring systems and the test methods specified in 40 CFR 62.16015(b)(4)(i) through (viii). Relative accuracy testing must be at representative operating conditions while the SSI unit is charging sewage sludge.</p> <p>(5) You may request that compliance with the emission limits be determined using carbon dioxide measurements corrected to an equivalent of 7-percent oxygen.</p> <p>(6) You must operate the continuous monitoring system and collect data with the continuous monitoring system as specified in 40CFR62.16015(b)(6)(i) through (v). [40 CFR 62.16015(b)]</p>

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
90	The permittee shall petition the Administrator for specific operating parameters, operating limits, and averaging periods to be established during the initial performance test and to be monitored continuously thereafter. The permittee is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. [40 CFR 62.15965(b)]	None.	None.	Submit a performance test protocol: As per the approved schedule to the Administrator and to the Department - Emissions Measurement Section (EMS). The permittee is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. The Permittee shall not conduct the initial performance test until after the petition has been approved by the Administrator, and the Permittee shall comply with the operating limits as written, pending approval by the Administrator. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves the Permittee of the responsibility to comply with any provision of 40 CFR62 Subpart LLL. [40 CFR 62.15965(b)(1)]
91	The permittee must establish and meet the site-specific operating limits specified in 40 CFR 62.15985(b) through 40 CFR 62.15985(h), or established in 40 CFR 62.15965, as applicable, during the initial performance tests required in 40 CFR 62.15980. [40 CFR 62.15985(a)]	Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. The permittee must follow the data measurement and recording frequencies and data averaging times specified in Table 4 to this subpart or as established in 40 CFR 62.15965, and the permittee shall follow the testing, monitoring, and calibration requirements specified in 40 CFR 62.16015 and 62.16020 or established in 40 CFR 62.15965. [40 CFR 62.15985(a)]	Other: Maintain records of the values for the site-specific operating limits established pursuant to 40 CFR 62.15960 and 62.15965 and the calculations and methods, as applicable, used to establish each operating limit.[40 CFR 62.15960].	Submit a report: As per the approved schedule. Submit the Initial compliance report including the values for the site-specific operating limits established pursuant to 42 CFR 62.15960 and 62.15965 and the calculations and methods, as applicable, used to establish each operating limit. [40 CFR 62.16030(b)(6)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
92	The permittee must meet, as applicable, the operating limits and requirements specified in 40 CFR 62.15960 paragraphs (a) through (d) by the final compliance date. The operating parameters for which you will establish operating limits for a wet scrubber and electrostatic precipitator are listed in Table 4 to 40CFR62 Subpart LLL. The permittee must comply with the operating requirements in paragraph (f) and paragraph (g) of 40 CFR 62.15960 for meeting any new operating limits, re-established in 40 CFR 62.16005. The operating limits apply at all times that sewage sludge is in the combustion chamber [40 CFR 62.15960]	Other: The initial performance test must be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in Table 2 to 40CFR62 Subpart LLL and according to the performance testing, monitoring, and calibration requirements specified in 40 CFR 62.16015(a) and (b).[40 CFR 62.15980].	Other: The owner or operator must maintain records of performance tests for a period of at least 5 years. All records must be available on-site in either paper copy or computer-readable format that can be printed upon request. [40 CFR 62.16025].	None.
93	The permittee must meet a site-specific operating limit for minimum operating temperature of the combustion chamber (or afterburner combustion chamber) that you establish in 40 CFR 62.15985. [40 CFR 62.15960(a)]	None.	None.	None.
94	The permittee must meet a site-specific operating limits that you establish in 40 CFR 62.15985 for each operating parameter associated with each air pollution control device (wet scrubber, electrostatic precipitator and afterburner). [40 CFR 62.15960(b)]	None.	None.	None.



**New Jersey Department of Environmental Protection  
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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
95	The permittee must meet the operating requirements in the site-specific fugitive emission monitoring plan, submitted as specified in 40 CFR 62.15995(d) to ensure that the ash handling system will meet the emission standard for fugitive emissions from ash handling. [40 CFR 62.15960(d)]	Other: The Permittee shall confirm the operating limits according to 40 CFR 62.16005(d)(1) or re-establish operating limits according to 40 CFR 62.16005(d)(2). The operating limits must be established so as to assure ongoing compliance with the emission limits. These requirements also apply to the operating requirements in the fugitive emissions monitoring plan specified in 40 CFR 62.15960(d). (1) The Permittee's operating limits must be based on operating data recorded during any performance test required in 40 CFR 62.16000(a) or any performance evaluation required in 40 CFR 62.16000(b)(4). (2) The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. [40 CFR 62.16005(d)].	None.	Submit a plan: As per the approved schedule. Submit a monitoring plan, at least 60 days before the initial compliance test date, specifying the ash handling system operating procedures that the Permittee will follow to ensure that the fugitive emissions limit is met. 40 CFR 60.5200(d) &. [40 CFR 60.5200(g)]
96	The permittee must monitor the feed rate and moisture content of the sewage sludge fed to the sewage sludge incinerator, as specified: (1) Continuously monitor the sewage sludge feed rate and calculate a daily average for all hours of operation during each 24-hour period. Keep a record of the daily average feed rate, as specified in 40 CFR 62.16025(f)(3)(ii). (2) Take at least one grab sample per day of the sewage sludge fed to the sewage sludge incinerator. If the permittee takes more than one grab sample in a day, calculate the daily average for the grab samples. Keep a record of the daily average moisture content, as specified in 40 CFR 60.5230(f)(3)(ii). [40 CFR 62.15960(f)]	Monitored by sludge feed/charge rate monitoring continuously, based on a daily average. [40 CFR 62.15960(f)(1)]	Recordkeeping by manual logging of parameter or storing data in a computer data system daily. All daily average values recorded for the feed rate and moisture content of the sewage sludge fed to the sewage sludge incinerator, monitored and calculated as specified in 40 CFR 62.16025(f)(3)ii. [40 CFR 62.16025(f)(3)(ii)]	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
97	If the permittee use an air pollution control device other than a wet scrubber, fabric filter, electrostatic precipitator, activated carbon injection, or afterburner to comply with the emission limits in 40 CFR 62.15955, you must meet the applicable operating limits and requirements in 40 CFR 60.4850, and establish applicable operating limits according to 40 CFR 62.15985. [40 CFR 62.15965(a)]	Other: The initial performance test must be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in Table 2 to 40CFR62 Subpart LLL and according to the testing, monitoring, and calibration requirements specified in 40 CFR 62.16015(a) and (b).[40 CFR 62.15980].	Other: The owner or operator must maintain records of performance tests for a period of at least 5 years. All records must be available on-site in either paper copy or computer-readable format that can be printed upon request.[40 CFR 62.16025].	<p>Submit notification: As per the approved schedule. Submit a petition to the Administrator for specific operating parameters, operating limits, and averaging periods to be established during the initial performance test and to be monitored continuously thereafter. The permittee is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Your petition must include the following five items:</p> <p>(i) Identification of the specific parameters you propose to monitor.</p> <p>(ii) A discussion of the relationship between these parameters and emissions of regulated pollutants, identifying how emissions of regulated pollutants change with changes in these parameters, and how limits on these parameters will serve to limit emissions of regulated pollutants.</p> <p>(iii) A discussion of how you will establish the upper and/or lower values for these parameters that will establish the operating limits on these parameters, including a discussion of the averaging periods associated with those parameters for determining compliance.</p> <p>(iv) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments.</p> <p>(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters. [40 CFR 62.15965(b)]</p>

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
98	The emission limits and standards apply at all times and during periods of malfunction. The operating limits apply at all times that sewage sludge is in the combustion chamber (i.e., until the sewage sludge feed to the combustor has been cut off for a period of time not less than the sewage sludge incineration residence time). For determining compliance with the CO concentration limit using CO CEMS, the correction to 7 percent oxygen does not apply during periods of startup or shutdown. Use the measured CO concentration without correcting for oxygen concentration in averaging with other CO concentrations (corrected to 7 percent O <sub>2</sub> ) to determine the 24-hour average value. [40 CFR 62.15970]	None.	None.	None.
99	The permittee shall conduct an air pollution control device inspection according to 40 CFR 62.16015 (c) by the final compliance date. If a new air pollution control device is installed after the final compliance date, inspection of the air pollution control device must be conducted within 60 days after installation of the control device. All necessary repairs must be completed by the Permittee within 10 operating days following the air pollution control device inspection unless the Permittee obtains written approval from the Administrator establishing a date whereby all necessary repairs of the SSI unit must be completed. [40 CFR 62.15990]	Other: Air pollution control device inspection must include: 1.) Inspection of air pollution control device for proper operation, 2.) General observation of equipment to assure it is well maintained and in good operating condition. 3.) Develop a site-specific monitoring plan according to the requirements of 40 CFR 62.15995. [40 CFR 62.16015(c)].	Other: Maintain records of the results of initial and annual air pollution control device inspections, including any required maintenance and any repairs not completed within 10 days of an inspection or the timeframe established by the Administrator.[40 CFR 62.16025(d)].	Submit a report: Annually. The Permittee must submit an annual compliance report. The Permittee must submit its first annual compliance report no later than 12 months following the submission of the initial compliance report. The Permittee must submit subsequent annual compliance reports no more than 12 months following the previous annual compliance report. [40 CFR 62.16030(c)]
100	The permittee shall prepare and submit to the Administrator for approval a site-specific monitoring plan for each continuous monitoring system (CMS) according to the requirements in 40 CFR 62.15995 section a through c. [40 CFR 62.15995]	None.	Other: Maintain records of monitoring plans required under 40 CFR 62.15995, and records of performance evaluations required under 40 CFR 62.16000(b)(5).[40 CFR 62.16025(k)].	Submit a plan: As per the approved schedule. Site-specific monitoring plans must be submitted to the administrator according to the requirements in 40 CFR 62.15995 section (a) and (b) for approval at least 60 days before initial performance evaluation of a continuous monitoring system. [40 CFR 62.15995(f)]

**New Jersey Department of Environmental Protection  
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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
101	Conduct an initial performance evaluation of each continuous monitoring system (CMS) in accordance with the monitoring plan and to 40 CFR 60.13(c). [40 CFR 62.15995(c)]	None.	None.	Conduct a performance evaluation and calibration check: Once initially. Conduct performance evaluation for each CMS at frequency specified in monitoring plan at least 60 days of installation of the continuous monitoring system. [40 CFR 62.15995(c)]
102	The permittee shall submit a monitoring plan specifying the ash handling system operating procedures that will meet the fugitive emissions limit specified in Table 2 of 40CFR62 Subpart LLL  [40 CFR 62.15995(d)]	None.	None.	Submit a plan: As per the approved schedule. Submit the monitoring plan for your ash handling system at least 60 days before your initial compliance test date. [40 CFR 62.15995(g)]
103	Monitoring plans involving alternate monitoring requirements to demonstrate compliance may be submitted to the Administrator for approval, subject to the provisions of 40 CFR 62.15995(e)(1) through (6).  [40 CFR 62.15995(e)]	None.	None.	Submit a plan: As per the approved schedule. An alternate monitoring plan must be submitted for approval no later than notification of the initial performance test. [40 CFR 62.15995(e)(3)]
104	An updated monitoring plan must be submitted If there are any changes in monitoring procedures, or if there is a process change. [40 CFR 62.15995(h)]	None.	None.	None.
105	The Permittee shall demonstrate that the SSI unit meets the operating limits established according to 40 CFR 62.15985 and 40 CFR 62.16005(d) for each applicable operating parameter. [40 CFR 62.16005(a)(1)]	Monitored by parametric monitoring system continuously. The Permittee must continuously monitor the operating parameters using the continuous monitoring equipment and according to the procedures specified in 40 CFR 62.16020. To determine compliance, the Permittee shall use the data averaging period specified in Table 4 to 40CFR62 Subpart LLL. [40 CFR 62.16005(a)]	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
106	Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in 40 CFR 62.16005(a) constitutes a deviation from your operating limits established. [40 CFR 62.16005(b)]	Monitored by parametric monitoring system continuously based on the averaging time specified in Table 4 to 40CFR62 Subpart LLL. [40 CFR 62.16005(a)]	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Record any deviation that is above the maximum operating limit or below the minimum operating limit established under 40CFR62 Subpart LLL.</p> <p>For each deviation where the Permittee are using a continuous monitoring system to comply with an associated emission limit or operating limit, report the items described:</p> <ol style="list-style-type: none"> <li>1. Company name and address</li> <li>2. Statement by a responsible official</li> <li>3. The total operating time of each affected SSI</li> <li>4. The calendar dates and times the unit deviated from the emission limits, emission standard, or operating limits</li> <li>5. The averaged and recorded data for those dates</li> <li>6. Duration and cause of each deviation</li> <li>7. A copy of any performance test report that showed a deviation from the emission limits or standards</li> <li>8. A brief description of any malfunction, a description of actions taken during the malfunction to minimize emissions, and corrective action taken</li> </ol> <p>. [40 CFR 62.16030(d)]</p>	<p>Submit a report: As per the approved schedule Submit initial, annual, and deviation reports electronically or in paper format, postmarked on or before the submittal due dates.</p> <p>Within 60 days after the date of completing each performance test, as defined in 40 CFR 63.2, conducted to demonstrate compliance with this subpart, the Permittee shall submit relative accuracy test audit (i.e., reference method) data and performance test (i.e., compliance test) data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) (see <a href="http://www.epa.gov/ttn/chief/ert/ert_tool.htm">http://www.epa.gov/ttn/chief/ert/ert_tool.htm</a> or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.</p> <p>. [40 CFR 62.16030(h)]</p>

BOP210008

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

Emission Unit: U42 Niro Fluidized Bed Incinerator

Operating Scenario: OS1 Niro Fluidized Bed Incinerator - Emissions controlled by Scrubber (CD5501), WESP (CD5502) &amp; Mercury GAC Adsorber (CD5503)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Sludge Feed Rate $\leq$ 2,250 lb/hr on a dry basis. [N.J.A.C. 7:27-22.16(e)]	Maximum Sludge Feed Rate: Monitored by sludge feed/charge rate monitoring continuously, based on a 1 hour block average. Maximum sludge feed rate, in dry pounds per hour, shall be calculated based on wet sludge feed rate and average sludge cake solids content. [N.J.A.C. 7:27-22.16(o)]	Maximum Sludge Feed Rate: Recordkeeping by strip chart or data acquisition (DAS) system continuously. The permittee shall maintain the operating logs and record quantity of dry sewage sludge charged to incinerator daily. [N.J.A.C. 7:27-22.16(o)]	None.
2	VOC (Total) $\leq$ 0.3 lb/hr. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
3	NOx (Total) $\leq$ 2.81 lb/hr based on Subchapter 19.28(a) 2.5 lb/ton dry sludge input. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The permittee shall conduct stack testing upon occurrence of Subpart LLL pollutant performance test and no more than 37 months after the previous test. See stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results upon occurrence of event Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
4	NOx (Total) $\leq$ 2.5 lb/ton dry sludge input. [N.J.A.C. 7:27-19.28(a)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The permittee shall conduct stack testing upon occurrence of Subpart LLL pollutant performance test and no more than 37 months after the previous test. See stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack test requirements in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	NO <sub>x</sub> (Total) ≤ 150 ppmvd @ 7% O <sub>2</sub> . [40 CFR 62.15955]	NO <sub>x</sub> (Total): Monitored by stack emission testing annually. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [40 CFR 62.16000(a)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Submit a stack test report: Within 60 days of stack testing. Submit a report to the EPA regional office and permitting authority or delegated authority as specified in Table 6 of 40 CFR 62 Subpart LLL. [40 CFR 62.16030]
6	CO ≤ 2.29 lb/hr based on Subpart LLL concentration limit and maximum exhaust gas flowrate. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The permittee shall conduct stack testing upon occurrence of Subpart LLL pollutant performance test and no more than 37 months after the previous test. See stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
7	CO ≤ 64 ppmvd @ 7% O <sub>2</sub> . [40 CFR 62.15955]	CO: Monitored by stack emission testing annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: Within 60 days of stack testing. Submit a report to the EPA regional office and permitting authority or delegated authority as specified in Table 6 of 40 CFR 62 Subpart LLL. [40 CFR 62.16030(d)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	CO <= 64 ppmvd @ 7% O <sub>2</sub> . [40 CFR 62.15955]	CO: Monitored by continuous emission monitoring system continuously based on 24-hour block average of 1-hour arithmetic average emission concentrations. [40 CFR 62.16000(b)(2)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously Maintain records of all 1-hour average concentrations of carbon monoxide, and the calibration and maintenance log for the instrument used to measure the carbon monoxide concentration. 40CFR503.40(c)(3) and. [40 CFR 62.16025(f)(1)]	Submit a report: As per the approved schedule. Submit a deviation report to the EPA regional office and permitting authority or delegated authority by August 1 for data collected during the first half of the calendar year; and by February 1 for data collected during the second half of the calendar year. The permittee shall also submit the monthly average carbon monoxide concentrations in the exit gas by February 19 of each year. 40 CFR 503(c)(4) and. [40 CFR 62.16030(d)]
9	CO <= 100 ppmvd @ 7% O <sub>2</sub> except during start-up periods. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
10	SO <sub>2</sub> <= 1.23 lb/hr based on Subpart LLL concentration limit and maximum exhaust gas flowrate. [N.J.A.C. 7:27-22.16(a)]	SO <sub>2</sub> : Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The permittee shall conduct stack testing upon occurrence of Subpart LLL pollutant performance test and no more than 37 months after the previous test. See stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	SO <sub>2</sub> : Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
11	SO <sub>2</sub> <= 15 ppmvd @ 7% O <sub>2</sub> . [40 CFR 62.15955]	SO <sub>2</sub> : Monitored by stack emission testing annually. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [40 CFR 62.16000(a)]	SO <sub>2</sub> : Recordkeeping by stack test results upon occurrence of event Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: Within 60 days of stack testing. Submit a report to the EPA regional office and permitting authority or delegated authority as specified in Table 6 of 40 CFR 62 Subpart LLL. [40 CFR 62.16030]



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	SO <sub>2</sub> ≤ 15 ppmvd @ 7% O <sub>2</sub> . [40 CFR 62.15955]	SO <sub>2</sub> : Monitored by continuous emission monitoring system continuously based on 24-hour block average of 1-hour arithmetic average emission concentrations. [40 CFR 62.16000(b)(2)]	SO <sub>2</sub> : Recordkeeping by data acquisition system (DAS) / electronic data storage every 15 minutes and calculate the hourly arithmetic average. Maintain records of all 1-hour average concentration. [40 CFR 62.16025(f)(1)]	Submit a report: As per the approved schedule. Submit a deviation report to the EPA regional office and permitting authority or delegated authority by August 1 for data collected during the first half of the calendar year; and by February 1 for data collected during the second half of the calendar year. [40 CFR 62.16030(d)]
13	SO <sub>2</sub> ≤ 50 ppmvd @ 7% O <sub>2</sub> . [N.J.A.C. 7:27-22.16(e)]	SO <sub>2</sub> : Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	SO <sub>2</sub> : Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
14	TSP ≤ 0.54 lb/hr. [N.J.A.C. 7:27-22.16(e)]	TSP: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The permittee shall conduct stack testing upon occurrence of Subpart LLL pollutant performance test and no more than 37 months after the previous test. See stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
15	TSP ≤ 18 mg/dscm @ 7% O <sub>2</sub> . [40 CFR 62.15955]	TSP: Monitored by stack emission testing annually. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [40 CFR 62.16000(a)]	TSP: Recordkeeping by stack test results upon occurrence of event Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a report to the EPA regional office and permitting authority or delegated authority as specified in Table 6 of 40 CFR 62 Subpart LLL. [40 CFR 62.16030]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	TSP <= 1.3 lb/ton dry sludge input. [40 CFR 60.152(a)(1)]	TSP: Monitored by stack emission testing once initially, based on the average of three 1-hour tests The owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.154, except as provided for in 40 CFR 60.8(b). [40 CFR 60.154]	TSP: Recordkeeping by stack test results once initially. [40 CFR 60.8]	Submit a report: Within 60 days of stack testing. The owner or operator shall submit the results of performance tests to the Administrator. [40 CFR 60.8]
17	PM-10 (Total) <= 0.54 lb/hr based on sludge content and control efficiency. [N.J.A.C. 7:27-22.16(e)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
18	Lead Emissions <= 0.000227 lb/hr based on Subpart LLL concentration limit and maximum exhaust gas flowrate. [N.J.A.C. 7:27-22.16(a)]	Lead Emissions: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The permittee shall conduct stack testing upon occurrence of Subpart LLL pollutant performance test and no more than 37 months after the previous test. See stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Lead Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
19	Lead Emissions <= 0.0074 mg/dscm @ 7% O <sub>2</sub> . [40 CFR 62.15955]	Lead Emissions: Monitored by stack emission testing annually. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [40 CFR 62.16000(a)]	Other: Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits.[40 CFR 62.16025(e)].	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
20	Arsenic Emissions <= 0.00135 lb/hr based on sludge content and control efficiency. [N.J.A.C. 7:27-22.16(e)]	Arsenic Emissions: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	Beryllium Emissions $\leq$ 0.0009 lb/hr based on sludge content and control efficiency. [N.J.A.C. 7:27-22.16(e)]	Beryllium Emissions: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
22	Cadmium Emissions $\leq$ 0.0000491 lb/hr based on Subpart LLL concentration limit and maximum exhaust gas flowrate. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The permittee shall conduct stack testing upon occurrence of Subpart LLL pollutant performance test and no more than 37 months after the previous test. See stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by stack test results upon occurrence of event. Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
23	Cadmium Emissions $\leq$ 0.0016 mg/dscm @ 7% O <sub>2</sub> . [40 CFR 62.15955]	Cadmium Emissions: Monitored by stack emission testing annually. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by stack test results upon occurrence of event. Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
24	Chromium Emissions $\leq$ 0.0113 lb/hr based on sludge content and control efficiency. [N.J.A.C. 7:27-22.16(e)]	Chromium Emissions: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Chromium Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
25	Dioxins/Furans (TEQ) $\leq 0.1$ ng/dscm @ 7% O <sub>2</sub> or Dioxins/Furans (total mass basis) $\leq 1.2$ ng/dscm. [40 CFR 62.15955]	Dioxins/Furans (TEQ): Monitored by stack emission testing annually. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [40 CFR 62.16000(a)]	Dioxins/Furans (TEQ): Recordkeeping by stack test results upon occurrence of event Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Submit a stack test report: Within 60 days of stack testing. Submit a report to the EPA regional office and permitting authority or delegated authority as specified in Table 6 of 40 CFR 62 Subpart LLL. [40 CFR 62.16030]
26	TCDD Emissions (2,3,7,8-) $\leq 1.33\text{E-}8$ lb/hr based on sludge content and control efficiency. [N.J.A.C. 7:27-22.16(e)]	TCDD Emissions (2,3,7,8-): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The permittee shall conduct stack testing upon occurrence of Subpart LLL pollutant performance test and no more than 37 months after the previous test. See stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	TCDD Emissions (2,3,7,8-): Recordkeeping by stack test results upon occurrence of event Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [N.J.A.C. 7:27-22.16(o)]	Submit a stack test protocol: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)]
27	Mercury Emissions $\leq 0.000765$ lb/hr. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The permittee shall conduct stack testing upon occurrence of Subpart LLL pollutant performance test and no more than 37 months after the previous test. See stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by stack test results upon occurrence of event Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
28	Mercury Emissions $\leq 0.037$ mg/dscm @ 7% O <sub>2</sub> . [40 CFR 62.15955]	Mercury Emissions: Monitored by stack emission testing annually. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [40 CFR 62.16000(a)]	Mercury Emissions: Recordkeeping by stack test results upon occurrence of event. Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Submit a stack test report: Within 60 days of stack testing. Submit a report to the EPA regional office and permitting authority or delegated authority as specified in Table 6 of 40 CFR 62 Subpart LLL. [40 CFR 62.16030]
29	Nickel Emissions $\leq 0.0304$ lb/hr based on sludge content and control efficiency. [N.J.A.C. 7:27-22.16(e)]	Nickel Emissions: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
30	Hydrogen chloride $\leq 0.024$ lb/hr based on Subpart LLL concentration limit and maximum exhaust gas flowrate. [N.J.A.C. 7:27-22.16(a)]	Hydrogen chloride: Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The permittee shall conduct stack testing upon occurrence of Subpart LLL pollutant performance test and no more than 37 months after the previous test. See stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Hydrogen chloride: Recordkeeping by stack test results upon occurrence of event. Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
31	Hydrogen chloride $\leq 0.51$ ppmvd @ 7% O <sub>2</sub> . [40 CFR 62.15955]	Hydrogen chloride: Monitored by stack emission testing annually. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	Hydrogen chloride: Recordkeeping by stack test results upon occurrence of event. Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
32	Benzo (A) Pyrene Emissions <= 0.000366 lb/hr based on sludge content and control efficiency. [N.J.A.C. 7:27-22.16(e)]	Benzo (A) Pyrene Emissions: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Benzo (A) Pyrene Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
33	Benzene <= 0.0065 lb/hr based on sludge content and control efficiency. [N.J.A.C. 7:27-22.16(e)]	Benzene: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]

BOP210008

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Emission Unit: U43 Dorr Oliver Fluidized Bed Incinerator

Subject Item: CD5601 Dorr-Oliver VenturiPak scrubber

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>Minimum Pressure Drop Across Entire Wet Scrubbing System: The permittee shall establish the site-specific operating limits specified in 40CFR 62.15985(b) of this section. [40CFR 62.15985(a)]. The permittee shall establish the minimum pressure drop across each wet scrubber used to meet the particulate matter, lead and cadmium emission limits in Table 2 Subpart LLL, equal to the lowest 4-hour average pressure drop across each such wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter, lead and cadmium emission limits.</p> <p>[40 CFR 62.15985(b)]</p>	<p>Minimum Pressure Drop Across Entire Wet Scrubbing System: Monitored by pressure drop instrument continuously based on 12-hour block average of one hour block averages. [40 CFR 62.15995(a)(3)(ii)]</p>	<p>Minimum Pressure Drop Across Entire Wet Scrubbing System: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously with data recorded every 15 minutes. [40 CFR 62.16020(a)(1)(i)]</p>	<p>Submit a report: As per the approved schedule. The permittee shall submit the initial compliance report and the information required in 40CFR62.16030(b) no later than 60 days following the initial performance test. The permittee shall submit an annual compliance report no later than 12 months following the submission of the initial or previous compliance report. .</p> <p>. [40 CFR 62.16030(c)]</p>
2	<p>Scrubbing Medium Flow Rate: The permittee shall establish the site-specific operating limits specified in 40CFR 62.15985(c) of this section. [40CFR 62.15985(a)]. The permittee shall establish the minimum scrubber liquid flow rate (measured at the inlet to each wet scrubber), equal to the lowest 4-hour average liquid flow rate measured during the most recent performance test demonstrating compliance with all applicable emission limits. [40 CFR 62.15985(c)]</p>	<p>Scrubbing Medium Flow Rate: Monitored by scrubber flow rate instrument continuously based on 12-hour block average of one hour averages. [40 CFR 62.15995(a)(3)(ii)]</p>	<p>Scrubbing Medium Flow Rate: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously with data recorded every 15 minutes. [40 CFR 62.16020(a)(1)(i)]</p>	<p>Submit a report: As per the approved schedule. The permittee shall submit the initial compliance report and the information required in 40CFR62.16030(b) no later than 60 days following the initial performance test. The permittee shall submit an annual compliance report no later than 12 months following the submission of the initial or previous compliance report. [40 CFR 62.16030(c)]</p>
3	<p>The permittee is not required to establish an operating limit and monitor scrubber liquid flow rate or scrubber liquid pH if continuous monitoring system is used to demonstrate compliance with the emission limits for hydrogen chloride or sulfur dioxide. [40 CFR 62.15985(a)(1)]</p>	<p>None.</p>	<p>None.</p>	<p>None.</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	The permittee shall submit a permit modification application to the Department to establish the minimum pressure drop across each wet scrubber and the minimum scrubbing medium flow rate for CD5601 based on the lowest 4-hour average operating parameter measured during the most recent performance test demonstrating compliance with all applicable emission limits. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit the required air permit application(s): As per the approved schedule. The permittee shall submit a permit modification within 60 days of the initial performance tests demonstrating compliance to emission limits in Table 2 40CFR 62 Subpart LLL. [N.J.A.C. 7:27-22.16(o)]



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Emission Unit: U43 Dorr Oliver Fluidized Bed Incinerator

Subject Item: CD5603 MercuryPak Sorbent Polymer Composite (SPC) Adsorber

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The permittee shall install and operate sorbent polymer composite (SPC) adsorber modules according to the manufacturer's specifications. The SPC absorber modules shall be designed to control mercury emissions generated from the combustion of sludge from the Dorr Oliver sludge incinerator #2. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All documentation of construction shall be kept on-site, and be made available upon request by the Department. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop: across the SPC Module. The permittee shall establish the site-specific operating limits specified in 40 CFR 62.15985. [40 CFR 62.15965(a)]	Pressure Drop: Monitored by pressure drop instrument continuously based a 12-hour block average. [40 CFR 62.16005(a)]	Pressure Drop: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously with data recorded every 15 minutes. [40 CFR 62.16020(a)(1)(i)]	Submit a report: As per the approved schedule. The permittee shall submit the initial compliance report and the information required in 40CFR62.16030(b) no later than 60 days following the initial performance test. The permittee shall submit an annual compliance report no later than 12 months following the submission of the initial or previous compliance report. [40 CFR 62.16030(c)]  [40 CFR 62.16030(c)]
3	Temperature: of vapor stream to the SPC Module. The permittee shall establish the site-specific operating limits specified in 40 CFR 62.15985. [40 CFR 62.15965(a)]	Temperature: Monitored by temperature instrument continuously based a 12-hour block average. [N.J.A.C. 7:27-22.16005(a)]	Temperature: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously with data recorded every 15 minutes. [40 CFR 62.16020(a)(1)(i)]	Submit a report: As per the approved schedule. The permittee shall submit the initial compliance report and the information required in 40CFR62.16030(b) no later than 60 days following the initial performance test. The permittee shall submit an annual compliance report no later than 12 months following the submission of the initial or previous compliance report. [40 CFR 62.16030(c)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	The permittee shall petition the Administrator for specific operating parameters, operating limits, and averaging periods to be established during the initial performance test and to be monitored continuously thereafter. [40 CFR 62.15965(b)]	None.	None.	Submit a plan: As per the approved schedule to the EPA Administrator and permitting authority or delegated authority . The permittee is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. The Permittee shall not conduct the initial performance test until after the petition has been approved by the Administrator, and the Permittee shall comply with the operating limits as written, pending approval by the Administrator. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves the Permittee of the responsibility to comply with any provision of 40 CFR62 Subpart LLL. [40 CFR 62.15965(b)(1)]
5	The permittee shall submit a permit modification application to the Department to establish the minimum pressure drop and temperature for CD5603 based on the lowest 4-hour average operating parameter measured during the most recent performance test demonstrating compliance with all applicable emission limits. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit the required air permit application(s): As per the approved schedule. The permittee shall submit a permit modification within 60 days of the initial performance tests demonstrating compliance to emission limits in Table 2 40CFR 62 Subpart LLL. [N.J.A.C. 7:27-22.16(o)]
6	The permittee shall perform periodic inspections and carbon trap measurements across various layers of SPC adsorber (CD5603) consistent with manufacturer's specifications and recommendations to ensure the mercury emissions are reduced below the emission standards, and the SPC adsorber has not reached the end of their useful life. [N.J.A.C. 7:27-22.16(a)]	Monitored by periodic emission monitoring once initially and every 6 months of operation, or at least annually. The permittee shall monitor the performance of the SPC adsorber modules according to the manufacturer's specifications to ensure the SPC adsorber modules have not reached the end of its useful life. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system semiannually: once every six months; six month cycle shall begin on January 1 and July 1 of each year. The permittee shall maintain the following records: 1. Date of modules inspection and carbon trap measurements; 2. Results of performance measurements; 3. Date of modules replacement. [N.J.A.C. 7:27-22.16(o)]	Other (provide description): Upon occurrence of event. The permittee shall replace the SPC mercury control modules if periodic inspections and carbon trap measurements indicate that the modules have nearly reached the end of their useful life. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Saturated or partially used adsorption modules shall be disposed of in a manner that minimizes releases of air contaminants to the atmosphere. This shall be done in accordance with all applicable State and Federal solid waste management regulations. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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**Emission Unit:** U43 Dorr Oliver Fluidized Bed Incinerator**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR Part 60 Subpart A 40 CFR Part 61 Subpart A 40 CFR Part 62 Subpart LLL 40 CFR Part 60 Subpart O 40 CFR Part 61 Subpart C 40 CFR Part 61 Subpart E 40 CFR Part 503 Subpart E  [40 CFR Federal Rules Summary]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<p><b>STACK TESTING SUMMARY</b> The permittee shall conduct a stack test using a protocol approved by the Department to demonstrate compliance with emission limits for VOC, NOx, CO, SO2, TSP, PM-10, Lead, Arsenic, Beryllium, Cadmium, Chromium, Hexavalent Chromium, HCl, Mercury, Nickel, Dioxins/Furans (Total), Benzo(A) Pyrene, and Benzene as specified in the compliance plan for U43 OS1 Dorr Oliver Incinerator (E4201).</p> <p>Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>For 40 CFR 62 Subpart LLL, the permittee shall operate the sewage sludge incinerator at a minimum of 85 percent of the maximum permitted capacity for each stack test run, as specified in 40CFR62.16015(a)11.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: The stack test must be conducted either within 60 days of the protocol approval or within 180 days after initial startup of the new or modified source, whichever comes later.</p> <p>If a source is subject to NSPS, extending the testing date beyond 180 days after the source's initial startup requires prior approval from US EPA. [N.J.A.C. 7:27-22.18] and [N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 within 60 days from the date of the approved operating permit BOP180003. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="http://www.epa.gov/ttnchie1/ert">http://www.epa.gov/ttnchie1/ert</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline as established by the Administrator and NJDEP, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date. A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 60 days after performing the stack test as specified in 40CFR62.16030(h)2. The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)], [N.J.A.C. 7:27-22.19(d)] and. [N.J.A.C. 7:27-22.18(h)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<p><b>PERIODIC STACK TESTING SUMMARY</b> The permittee shall conduct a periodic stack test required by 40 CFR 62 Subpart LLL using a protocol approved by the Department to demonstrate compliance with emission limits for NO<sub>x</sub>, CO, SO<sub>2</sub>, TSP, Lead, Cadmium, HCl, Mercury and Dioxins/Furans (Total) as specified in the compliance plan for U43 OS1 Dorr Oliver Incinerator (E4201).</p> <p>Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>For 40 CFR 62 Subpart LLL, the permittee shall operate the sewage sludge incinerator at a minimum of 85 percent of the maximum permitted capacity for each stack test run, as specified in 40CFR62.16015(a)11.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	Other: Monitoring as required under the applicable operating scenario.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping as required under the applicable operating scenario.[N.J.A.C. 7:27-22.16(o)].	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 no later than 180 days prior to the testing due date or request from EMS, in writing, to use a previously approved protocol no later than 90 days prior to the testing due date. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT) that is downloaded at: <a href="http://www.epa.gov/ttnchie1/ert">http://www.epa.gov/ttnchie1/ert</a> , unless another format is approved by EMS. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date. A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 60 days after performing the stack test as specified in 40CFR62.16030(h)2. The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)], [N.J.A.C. 7:27-22.19(d)] and. [N.J.A.C. 7:27-22.18(h)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	<p><b>STACK TESTING SUMMARY</b></p> <p>The permittee shall conduct a stack test at least 18 months prior to the expiration of the initial or renewed operating permit using an approved protocol to demonstrate compliance with emission limits for VOC, NOx, CO, SO<sub>2</sub>, TSP, PM-10, Lead, Arsenic, Beryllium, Cadmium, Chromium, Hexavalent Chromium, HCl, Mercury, Nickel, Dioxins/Furans (Total), Benzo(A) Pyrene, and Benzene as specified in the compliance plan for U43 OS1 Dorr Oliver Incinerator (E4201).</p> <p>Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>For 40 CFR 62 Subpart LLL, the permittee shall operate the sewage sludge incinerator at a minimum of 85 percent of the maximum permitted capacity for each stack test run, as specified in 40CFR62.16015(a)11.</p> <p>The permittee may propose, in the stack test protocol, to use CEMS data to satisfy the stack testing requirements, for SO<sub>2</sub> and/or CO, with EMS approval. In order for EMS to approve using CEMS data at the time of the stack test, the CEMS must be certified and be in compliance with all daily, quarterly and annual quality assurance requirements. The CEMS shall monitor and record emissions in units identical to those required by the applicable stack testing conditions of this permit. CEMS data, if allowed by this permit, shall be taken at the same worst case conditions as described above.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitoring as required under the applicable operating scenario.</p> <p>PERMITTEES OPERATING AFTER EXPIRATION DATE OF THE OPERATING PERMIT SHALL FOLLOW THE STACK TESTING SCHEDULE SPECIFIED IN THE REF.#5 LINE ITEM BELOW.[N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario..[N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 at least 30 months prior to the expiration of the approved operating permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office 60 days after performing the stack test as specified in 40CFR62.16030(h)2. The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)], [N.J.A.C. 7:27-22.19(d)] and . [N.J.A.C. 7:27-22.18(h)]</p>

**New Jersey Department of Environmental Protection  
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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	<p><b>STACK TESTING SCHEDULE FOR EXPIRED PERMIT</b></p> <p>If an operating permit has expired, the permittee shall conduct a stack test no later than 42 months after the date of expiration of the operating permit using an approved protocol to demonstrate compliance with emission limits for VOC, NOx, CO, SO2, TSP, PM-10, Lead, Arsenic, Beryllium, Cadmium, Chromium, Hexavalent Chromium, HCl, Mercury, Nickel, Dioxins/Furans (Total), Benzo(A) Pyrene, and Benzene as specified in the compliance plan for U43 OS1 Dorr Oliver Incinerator (E4201).</p> <p>Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>The permittee may propose, in the stack test protocol, to use CEMS data to satisfy the stack testing requirements, for NOx and/or CO, with EMS approval. In order for EMS to approve using CEMS data at the time of the stack test, the CEMS must be certified and be in compliance with all daily, quarterly and annual quality assurance requirements. The CEMS shall monitor and record emissions in units identical to those required by the applicable stack testing conditions of this permit. CEMS data, if allowed by this permit, shall be taken at the same worst case conditions as described above.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitoring as required under the applicable operating scenario.[N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario.[N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. If an operating permit has expired, the permittee shall 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 30 months after the date of expiration of the operating permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office 60 days after performing the stack test as specified in 40CFR62.16030(h)2. The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e) and. [N.J.A.C. 7:27-22.18(h)]</p>



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	<p>The permittee shall conduct an annual performance test for each pollutant in Table 2 of 40CFR62 Subpart LLL between 11 and 13 calendar months after the previous performance test or within 60 days of a process change.</p> <p>The permittee can conduct performance tests less often for a given pollutant, as specified in the following paragraphs:</p> <p>(i) The permittee can conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the emission limit specified in Table 2 of 40CFR62 Subpart LLL , and there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, the permittee does not have to conduct a performance test for that pollutant for the next 2 years. The permittee must conduct a performance test during the third year and no more than 37 months after the previous performance test.</p> <p>(ii) If the SSI unit continues to meet the emission limit for the pollutant, the permittee may choose to conduct performance tests for the pollutant every third year if the emissions are at or below 75-percent of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance test must be conducted no more than 37 months after the previous performance test. [40 CFR 62.16000(a)]</p>	<p>Other: Conduct the performance test using the test methods, averaging methods and minimum sampling volumes or durations as specified in Table 2 of 40CFR62 Subpart LLL and according to the testing, monitoring and calibration requirements specified in 40 CFR 62.16015(a).[40 CFR 62.16000(a)].</p>	<p>Other: (1) Maintain records of the results of initial, annual and any subsequent performance tests conducted to determine compliance with the emission limits and standards and/or to establish operating limits, as applicable.</p> <p>(2) Retain a copy of the complete performance test report, including calculations.</p> <p>(3) Keep a record of the hourly dry sludge feed rate measured during performance test runs as specified in 40CFR62.16015(a)(2)(i).</p> <p>(4) Keep any necessary records to demonstrate that the performance test was conducted under conditions representative of normal operations.[40 CFR 62.16025(e)].</p>	<p>Submit a report: Annually to the Administrator and to the Department . The permittee shall submit an annual compliance report as specified in 40 CFR 62.16030(c). If the permittee elects to conduct performance tests less frequently as allowed in 40CFR62.16000(a)(3) and did not conduct a performance test during the reporting period, the permittee must include the dates of the last two performance tests, a comparison of the emission level you achieved in the last two performance tests to the 75-percent emission limit threshold specified in §62.16000(a)(3), and a statement as to whether there have been any process changes and whether the process change resulted in an increase in emissions. [40 CFR 62.16000(d)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Continued: (iii) If a performance test shows emissions exceeded 75-percent of the emission limit for a pollutant, the permittee must conduct annual performance tests for that pollutant until all performance tests over 2 consecutive years show compliance. [40 CFR 62.16000(a)(3)]	Other: See above monitoring requirements.[40 CFR 62.15955].	Other: See above recordkeeping requirements.[40 CFR 62.16025(e)].	Other (provide description): Other. See above submittal requirements. [40 CFR 62.16000(d)]
8	<p><b>CEMS/COMS REQUIREMENTS SUMMARY</b></p> <p>Install and operate Continuous Monitoring Systems (CEMS) and conduct Performance Specification Test (PST) in accordance with the NJDEP Technical Manual 1005, to demonstrate compliance with CO and SO<sub>2</sub> as specified in the compliance plan for OS1.</p> <p>Continuous parametric monitors and continuous parametric data recorders shall be installed and operated to demonstrate compliance with monitoring parameters, for example, flue gas flow rate, temperature, etc. as specified in the compliance plan for OS1.</p> <p>THIS CEMS REQUIREMENT IS SUBJECT TO THE SIGNIFICANT MODIFICATION SUPPLEMENTAL FEES PURSUANT TO N.J.A.C. 7:27-22.31. [N.J.A.C. 7:27-22.16(a)]</p>	Other: Monitoring as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	<p>CEMS/COMS - Submit equipment protocol, submit a PST protocol, conduct PST and submit results: As per the approved schedule Submit equipment protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 within 60 days from the date of the approved permit BOP180003 and submit PSTprotocol within 90 days from the approved permit BOP180003. Within 30 days of PST protocol approval, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>Perform the PST test within 180 days from the date of the approved permit BOP180003 or within 90 days after the initial startup of the new or modified source, or within 90 days after the PST protocol approval, whichever comes later.</p> <p>Submit the performance specification test report to EMS no later than 30 days from the date of testing. The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(k)] and. [N.J.A.C. 7:27-22.18(g)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	<p><b>CEMS/COMS REQUIREMENTS SUMMARY</b></p> <p>The Permittee shall operate CEMS according to the approved certification and in compliance with daily, quarterly, and annual quality assurance requirements. The CEMS shall include continuous monitoring of all necessary parameters (e.g. oxygen, moisture, temperature, flow rate) to allow the required corrections to be applied to demonstrate compliance with the emission limits.</p> <p>The Permittee shall request approval from the Department's Emission Measurement Section (EMS) to allow continued use of the existing CEMS when a change to the units of measurement is made to a permit limit. [N.J.A.C. 7:27-22.16(a)]</p>	None.	Other: Maintain readily accessible records of the Permittee's written request to EMS, and the response from EMS . [N.J.A.C. 7:27-22.16(o)].	Comply with the requirement: Upon occurrence of event. Submit a written request to the EMS within 30 days from the date of the approved operating permit to determine whether a full CEMS recertification is required, whether the change can follow the procedures for data recording and storage equipment upgrades found in the Department's Technical Manual 1005 Section IV.B.3(f), or if continued use of the existing CEMS is allowed. [N.J.A.C. 7:27-22]
10	The owner or operator shall develop a QA/QC plan for each CEMS/COMS required by this permit prepared in accordance with the NJDEP Technical Manual 1005 posted on the AQPP webpage at <a href="http://www.state.nj.us/dep/aqpp">http://www.state.nj.us/dep/aqpp</a> . [N.J.A.C. 7:27-22.16(a)]	Other: The QA/QC coordinator shall be responsible for reviewing the QA/QC plan on an annual basis. [N.J.A.C. 7:27-22.16(o)].	Other: Maintain readily accessible records of the QA/QC plan including QA data and quarterly reports. [N.J.A.C. 7:27-22.16(o)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	Opacity <= 10 % , excluding condensed water vapor, except for a period of not longer than 3 minutes in a consecutive 30 minute period. [N.J.A.C. 7:27-22.16(a)]	<p>Opacity: Monitored by visual determination once per calendar day during operation. Visual inspections shall consist of a visual survey of PT2 during daylight hours to identify if the stack has visible emissions, (other than condensed water vapor), greater than the prescribed standard. If visible emissions are observed, the permittee shall do the following:</p> <p>(1) Verify that the equipment and /or control device causing the emission is operating according to manufacturer's specifications and the operating permit compliance plan. If the equipment or control device is not operating properly, the permittee shall take corrective action immediately to eliminate the excess emissions. The permittee must report any permit violation to NJDEP pursuant to N.J.A.C. 7:27- 22.19.</p> <p>(2) If the corrective action taken in step one does not correct the opacity problem within 24 hours, the permittee shall perform a check via a certified opacity reader, in accordance with N.J.A.C. 7:27B-2. Such a test shall be conducted once per day until corrective action is taken to successfully correct the opacity problem. The permittee must report any continuing permit violation to NJDEP pursuant to N.J.A.C. 7:27-22.19. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Opacity: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The permittee shall maintain the following records: (1) Date and time of inspection; (2) Emission point number; (3) Operational status of equipment; (4) Observed results and conclusions; (5) Description of corrective actions taken, if necessary; (6) Date and time opacity problem was solved, if applicable; (7) N.J.A.C. 7:27B-2 results, if conducted; and (8) Name of person(s) conducting inspection. [N.J.A.C. 7:27-22.16(o)]</p>	None.
12	SO <sub>2</sub> <= 2,000 ppmv at standard conditions. The emission limit applies at all times including startup and shutdown. [N.J.A.C. 7:27- 7.2(b)1]	None.	Other: Maintain records of stack testing results or data acquisition system.[N.J.A.C. 7:27-22.16(o)].	None.
13	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	VOC (Total) $\leq$ 3.5 lb/hr. Maximum allowable emission rate as determined from Tables 16A and 16B, based on VOC vapor pressure and percent VOC in source gas. [N.J.A.C. 7:27-16.16(c)]	Other: Maintain process records sufficient to demonstrate whether the VOC emission rate from actual operations does not exceed the VOC emission rate under operating conditions.[N.J.A.C. 7:27-16.16(g)1].	Other: The owner or operator shall maintain process records sufficient to demonstrate whether the VOC emission rate from actual operations does not exceed the VOC emission rate under operating conditions. For each different kind of batch or continuous process for which the source operation is used record the following information determined in accordance with the Procedure for Using Table 16A: 1. The chemical name and vapor pressure of each VOC used. 2. The percent concentration by volume of VOC in the source gas 3. The volumetric gas flow rate 4. The source gas range classification 5. The maximum allowable emission rate 6. Record the maximum actual emission rate. 7. Maintain any calculation and test data used to determine the actual emission rate. 8. If the source operation is used for more than one process, the dates the source operation is used.  or  Maintain process records sufficient to demonstrate whether the VOC emission rate from actual operations does not exceed the VOC emission rate under operating conditions for emissions after any control.[N.J.A.C. 7:27-16.16(g)1].	None.
15	Fuel Oil Usage $\leq$ 1.58 MMgal/yr for any 12 consecutive months period. [N.J.A.C. 7:27-22.16(a)]	Fuel Oil Usage: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	Fuel Oil Usage: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Total fuel oil usage in gallons per consecutive 12-month period shall be calculated by the sum of the gallons consumed during any month added to the sum of the gallons of fuel consumed during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	The Dorr-Oliver incinerator (E4201) and the Niro Incinerator (E5501) shall not operate and burn sludge simultaneously. The Dorr Oliver incinerator shall be used only during periods when the Niro incinerator is not operating. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall keep operating logs in log books to accurately maintain the following records in a manner approved by the Regional Enforcement Office: The Dorr Oliver Incinerator operating time, including cold and warm start-up periods, and the time of initial sludge introduction and the time sludge feed ended to the Dorr-Oliver incinerator; any equipment malfunctions and corrective actions. [N.J.A.C. 7:27-22.16(o)]	Notify by phone: Upon occurrence of event. The occurrence of starting and stopping sludge feed to the Dorr-Oliver Incinerator must be reported by telephone within 24 hours to the Regional Enforcement office if the occurrence is between 8:00 am and 5:00 pm Monday through Friday or, if the occurrence is beyond normal business hours for the Regional Enforcement Office, the permittee shall call NJDEP Hotline at (877) 927-6337. [N.J.A.C. 7:27-22.16(o)]
17	No customer sludge shall be burned in the incinerator. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
18	The metal content of the sludge fed to the incinerator shall be no more than the parts per million by weight (ppmw) based on weighted 12 month rolling average, listed below:  Arsenic     10 ppmw Beryllium    8 ppmw Cadmium    16 ppmw Chromium   125 ppmw Mercury     6 ppmw Nickel       270 ppmw [N.J.A.C. 7:27-22.16(a)]	Monitored by sludge sampling once per calendar day during operation. A daily sludge sample shall be taken from the sludge entering the incinerator. The daily samples shall be composited and analyzed monthly in accordance with the Water Pollution Control Act N.J.A.C. 7:14C- 1.  Every month, the following computation shall be performed: ppmw in the monthly composite sample is multiplied by the dry weight of the sludge burned in this month (lb). The rolling 12 month weighted average is determined every month by summing the results for the most recent 12 months, including the last month and dividing by the weight of dry sludge (lb) burned in those 12 months. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by certified lab analysis results each month during operation. Each record of the weight, concentration (certified lab analysis results), and monthly averages must be maintained, in a manner approved by the REO, for 5 years after recording. [N.J.A.C. 7:27-22.16(o)]	Submit a report: On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). Analysis of the HAP metals concentrations shall be submitted quarterly, within 30 calendar days after the end of each calendar quarter to the Regional Enforcement Office. Each quarterly report shall include the results of the analysis of each month composite samples analyzed during the 12 months period ending with each month in the reporting quarter. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	Lead Concentration in Sludge <= 220 ppmw. This is a monthly limit based on monthly composite sample. [N.J.A.C. 7:27-22.16(a)]	Lead Concentration in Sludge: Monitored by sludge sampling once per calendar day during operation, based on one calendar month. A daily sludge sample shall be taken from the sludge entering the incinerator. The daily samples will be composited and analyzed monthly in accordance with the Water Pollution Control Act N.J.A.C. 7:14C- 1. [N.J.A.C. 7:27-22.16(o)]	Lead Concentration in Sludge: Recordkeeping by certified lab analysis results each month during operation. [N.J.A.C. 7:27-22.16(o)]	Submit a report: On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). Analysis of the HAP metals concentrations shall be submitted quarterly, within 30 calendar days after the end of each calendar quarter to the Regional Enforcement Office. Each quarterly report shall include the results of the analysis of each month composite samples analyzed during the 12 months period ending with each month in the reporting quarter. [N.J.A.C. 7:27-22.16(o)]
20	Mercury Concentration in Sludge <= 7 ppmw. This is a monthly limit based on monthly composite sample. [N.J.A.C. 7:27-22.16(a)]	Mercury Concentration in Sludge: Monitored by sludge sampling once per calendar day during operation, based on one calendar month. A daily sludge sample shall be taken from the sludge entering the incinerator. The daily samples will be composited and analyzed monthly in accordance with the Water Pollution Control Act N.J.A.C. 7:14C- 1. [N.J.A.C. 7:27-22.16(o)]	Mercury Concentration in Sludge: Recordkeeping by certified lab analysis results each month during operation. [N.J.A.C. 7:27-22.16(o)]	Submit a report: On or before every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). Analysis of the HAP metals concentrations shall be submitted quarterly, within 30 calendar days after the end of each calendar quarter to the Regional Enforcement Office. Each quarterly report shall include the results of the analysis of each month composite samples analyzed during the 12 months period ending with each month in the reporting quarter. [N.J.A.C. 7:27-22.16(o)]
21	The permittee shall conduct simultaneous metal analysis in the sludge being charged to the incinerator during stack testing. The analysis shall be conducted for the following metals: arsenic, beryllium, cadmium, lead, nickel, chromium (total), and mercury. This analysis shall be included in the stack testing report. [N.J.A.C. 7:27-22.16(a)]	Monitored by sludge sampling upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by certified lab analysis results upon occurrence of event. Keep copy of completed test report on site. [N.J.A.C. 7:27-22.16(o)]	Submit test results: As per the approved schedule A certified lab test results must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 60 days after performing the stack testing. [N.J.A.C. 7:27-22.16(o)]
22	VOC (Total) <= 1.31 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
23	NO <sub>x</sub> (Total) <= 12.3 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
24	CO <= 10.3 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
25	SO <sub>2</sub> <= 5.63 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
26	TSP <= 2.37 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
27	PM-10 (Total) <= 2.37 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
28	PM-2.5 (Total) <= 2.37 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
29	Lead Emissions <= 0.00103 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
30	Arsenic Emissions <= 0.00591 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
31	Benzene <= 0.0285 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
32	Benzo (A) Pyrene Emissions <= 0.0016 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
33	Beryllium Emissions <= 0.00394 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
34	Cadmium Emissions <= 0.000222 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
35	Chromium Emissions $\leq$ 0.0495 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
36	Chromium (Hexavalent) Emissions $\leq$ 0.000485 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
37	Hydrogen chloride $\leq$ 0.107 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
38	Mercury Emissions $\leq$ 0.00514 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
39	Nickel Emissions $\leq$ 0.133 tons/yr based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
40	Dioxins/Furans (Total) $\leq$ 1.0E-8 tons/yr reported as TCDD (2,3,7,8-) based on maximum sludge feed rate and 8760 hr/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
41	Minimum Operating Temperature at the Exit of the Combustion Section: The permittee shall establish the site-specific operating limits as specified in 40CFR 62.15985(e) of this section. [40CFR 62.15985(a)]. The permittee shall establish the minimum combustion chamber operating temperature, equal to the lowest 4-hour average combustion chamber operating temperature measured during the most recent performance test demonstrating compliance with all applicable emission limits. [40 CFR 62.15985(e)]	Minimum Operating Temperature at the Exit of the Combustion Section: Monitored by temperature instrument continuously based on 12 hour block average. [40 CFR 62.15985]	Minimum Operating Temperature at the Exit of the Combustion Section: Recordkeeping by data acquisition system (DAS) / electronic data storage every 15 minutes. Record the 12-hour block average of combustion chamber temperatures. [40 CFR 62.16025(f)(3)(i)]	Submit a report: As per the approved schedule. The permittee shall submit the initial compliance report and the information required in 40CFR62.16030(b) no later than 60 days following the initial performance test. The permittee shall submit an annual compliance report no later than 12 months following the submission of the initial or previous compliance report. [40 CFR 62.16030(c)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
42	The permittee shall submit a permit modification application to the Department to establish the minimum combustion chamber operating temperature, equal to the lowest 4-hour average combustion chamber operating temperature measured during the most recent performance test demonstrating compliance with all applicable emission limits. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit the required air permit application(s): As per the approved schedule. The permittee shall submit a permit modification within 60 days of the initial performance tests demonstrating compliance to emission limits in Table 2 40CFR 62 Subpart LLL. [N.J.A.C. 7:27-22.16(o)]
43	Minimum Operating Temperature at the Exit of the Combustion Section $\geq$ 1,500 degrees F. The permittee shall not feed sludge to the incinerator until the incinerator exit temperature reaches 1200 degrees Fahrenheit. The temperature at the exit of the combustion section of the incinerator shall reach 1500 degrees F within thirty (30) minutes after sludge feed is started. The permittee shall cease sludge feed to the incinerator if the temperature at the exit of the combustion section is less than 1500 degrees F (1-minute average). [N.J.A.C. 7:27-22.16(a)]	Minimum Operating Temperature at the Exit of the Combustion Section: Monitored by temperature instrument continuously, based on 1 minute intervals. Temperature shall be monitored at the exit of the combustion chamber before the heat exchanger. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(o)]	Minimum Operating Temperature at the Exit of the Combustion Section: Recordkeeping by strip chart or data acquisition (DAS) system continuously. [N.J.A.C. 7:27-22.16(o)]	None.
44	The permittee shall immediately cease charging sludge to the incinerator if the temperature monitor at the gas exiting the combustion section is inoperable. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall record equipment malfunctions including dates, times, durations and corrective actions taken. [N.J.A.C. 7:27-22.16(o)]	None.
45	Residence Time $\geq$ 1 seconds. The residence time of the gases in the freeboard area of the fluidized bed incinerator must be at least 1 second at a temperature equal to or higher than 1,500 degrees F. [N.J.A.C. 7:27-22.16(a)]	Other: Incinerator design and calculations.[N.J.A.C. 7:27-22.16(o)].	Other: Maintain incinerator design documents and record of initial calculations.[N.J.A.C. 7:27-22.16(o)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
46	Oxygen $\geq$ 3 % by volume (dry basis) in flue gas. [N.J.A.C. 7:27-22.16(a)]	Oxygen: Monitored by continuous emission monitoring system continuously, based on 5-minute blocks. [N.J.A.C. 7:27-22.16(o)]	Oxygen: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
47	If the continuous oxygen monitor becomes inoperable, sewage sludge feed to the incinerator may continue for a period of up to 24-hours, provided the CO monitor is operational, and the average concentration of CO in the flue gas does not exceed 100 ppmvd for any 1-hour block period as measured by the CO CEM. If at the end of the 24-hour period, the oxygen monitor remains inoperable, sewage sludge feed to the incinerator shall be ceased. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall record equipment malfunctions including dates, times, durations and corrective actions taken. [N.J.A.C. 7:27-22.16(o)]	None.
48	The permittee shall cease charging sludge to the incinerator during periods of scrubber (CD5601) or SPC adsorber (CD5603) downtime. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall record equipment malfunctions including dates, times, durations and corrective actions taken. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
49	All requests, reports, applications, submittal, and other communications required by 40 CFR 60 shall be submitted in duplicate to the EPA Region II Administrator: United States Environmental Protection Agency, Region II Air Compliance Branch 290 Broadway New York, NY 10007-1866. [40 CFR 60.4(a)]	None.	None.	None.
50	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)]
51	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. (NSPS Subpart A) [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)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
52	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 40 CFR 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.	Submit notification: Prior to occurrence of event (60 days or as soon as practicable before change is commenced). [40 CFR 60.a(4)]
53	Maintain records of the occurrence and duration of any startup, 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.	Recordkeeping by manual logging of parameter upon occurrence of event or maintain readily accessible records of the occurrence and duration of any startup, shutdown, or malfunction in a permanently bound logbook or data acquisition system (DAS)/electronic data storage. [40 CFR 60.7(b)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
54	The owner or operator shall submit to the Administrator, for each pollutant monitored, an excess emissions and monitoring systems performance report and/or summary report form. [40 CFR 60.7(c)]	None.	None.	<p>Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Semi-annually beginning on the 30th day of the 6th month following initial performance tests. The report shall be postmarked by the 30th day following the end of each calendar half. The report shall be in a format as specified at 40 CFR 60.7(d). The summary report form shall contain the information and be in the format shown in figure 1 at 40 CFR 60.7(d) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.</p> <p>(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.</p> <p>(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted. [40 CFR 60.7(c)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
55	Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous emissions monitoring system (CEMS), monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. [40 CFR 60.7(f)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system continuously. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows: 1) Owners or operators required to install a CEMS where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard. 2) Owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator. [40 CFR 60.7(f)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
56	The owner or operator of such facility shall conduct performance test(s) within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by this part, and at such other times as may be required by the Administrator under section 114 of the Act, except as specified in paragraphs (a)(1),(a)(2), (a)(3), and (a)(4) of 40 CFR 60.8. [40 CFR 60.8(a)]	None.	None.	The owner or operator of such facility shall furnish the Administrator a written report of the results of such performance test(s). Submit a report: As per the approved schedule. [40 CFR 60.8(a)]
57	The owner or operator shall conduct performance tests and data reduced in accordance with the test methods and procedures contained in each applicable subpart, unless otherwise specified and approved by the Administrator. (NSPS Subpart A) [40 CFR 60.8(b)]	None.	None.	None.
58	The owner or operator shall provide the Administrator at least 30 days prior notice of any performance test and shall provide adequate performance testing facilities as specified in 40 CFR Part 60.8(e). (NSPS Subpart A) [40 CFR 60.8(d)]	None.	None.	None.
59	At all times, including periods of startup, 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. [40 CFR 60.11(d)]	None.	None.	None.
60	Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. [40 CFR 60.8(f)]	None.	None.	None.



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
61	Compliance with NSPS standards specified in this permit, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in NSPS. [40 CFR 60.11(a)]	None.	None.	None.
62	No owner or operator 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.
63	All continuous monitoring systems shall be in continuous operation and shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period, except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d) of this section. [40 CFR 60.13(e)]	None.	None.	None.
64	Continuous monitoring systems or monitoring devices shall be installed so that representative measurements of emissions or process parameters are obtained. [40 CFR 60.13(f)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
65	Owners or operators of all continuous monitoring other than opacity shall reduce all data to 1-hour averages for time periods as defined in 40 CFR 60.2. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorder during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. For owners or operators complying with the requirements in 40 CFR 60.7(f)(1) or (2), averages must include any data recorded during periods of monitor breakdown or malfunction. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O <sub>2</sub> or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity). [40 CFR 60.13(h)]	None.	None.	None.
66	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.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
67	The owner or operator shall install and operate a flow measuring device to determine the mass of sludge charged to the incinerator [40 CFR 60.153(a)(1)]	Monitored by sludge feed/charge rate monitoring continuously, based on a 1 hour block average. The flow measuring device shall be certified by the manufacturer and shall have an accuracy of +/- 5% over its operating range. [40 CFR 60.153(a)(1)]	Recordkeeping by records of calculations based on 40 CFR 60.154(b) continuously. Records shall be maintained for a minimum of 2 years from the date of recording. [40 CFR 60.153(c)(3)]	Submit a report: Semi-annually on January 31 and July 31 of each year. The owner or operator shall report REO the rate of sludge charged to the incinerator over each 1-hour incinerator operating period for each calendar day that an increase in oxygen content of exhaust gas or scrubber pressure drop is reported pursuant to 40 CFR Part 60.155(a)(2) or (a)(1). [40 CFR 60.155(b)(4)]
68	Opacity <= 20 %. No owner or operator of any sewage sludge incinerator shall discharge or cause the discharge into the atmosphere of any gases which exhibit 20 percent opacity or greater, exclusive of condensed water vapor. [40 CFR 60.152(a)(2)]	Opacity: Monitored by stack emission testing once initially. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity. [40 CFR 60.154(b)(6)]	Opacity: Recordkeeping by stack test results upon occurrence of event. [40 CFR 60.8]	Submit a stack test report: Within 60 days of stack testing. The owner or operator shall submit the results of performance tests to the Administrator. [40 CFR 60.8]
69	Oxygen: The owner or operator shall install, calibrate, maintain, and operate a monitoring device that continuously measures and records the oxygen content of the incinerator exhaust gas. The oxygen monitoring device shall be certified by the manufacturer and shall have an accuracy of +/- 5% over its operating range and shall be calibrated according to method(s) prescribed by the manufacturer at least once each 24-hour operating period. [40 CFR 60.153(b)(2)]	Oxygen: Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [40 CFR 60.153(b)(2)]	Oxygen: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Records shall be maintained for a minimum of 2 years from the date of recording. [40 CFR 60.153(c)(2)]	Submit a report: Semi-annually on January 31 and July 31 of each year. The owner or operator shall submit to REO a record of the average oxygen content in the exhaust gas for each period of 1 hour or more that the oxygen content of the incinerator exhaust gas exceeds the average oxygen content measured during the most recent performance test by more than 3 percent. [40 CFR 60.155(a)(2)]
70	The owner or operator shall install, calibrate, maintain, and operate temperature measuring devices in the bed and outlet of the fluidized bed incinerator. Each temperature measuring device shall be certified by the manufacturer and shall have an accuracy of +/- 5% over its operating range. [40 CFR 60.153(b)(3)]	Monitored by temperature instrument continuously, based on a 1 hour block average. [40 CFR 60.153(b)(3)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Records shall be maintained for a minimum of 2 years from the date of recording. [40 CFR 60.153(c)(3)]	Submit a report: Semi-annually on January 31 and July 31 of each year. The owner or operator shall report REO the temperatures in the bed and the outlet averaged over a 1-hour period for each calendar day that an increase in oxygen content of exhaust gas or scrubber pressure drop is reported pursuant to 40 CFR Part 60.155(a)(2) or (a)(1). [40 CFR 60.155(b)(3)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
71	The owner or operator shall install, calibrate, maintain and operate a device for measuring the fuel flow to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of +/- 5 percent over its operating range. [40 CFR 60.153(b)(4)]	Monitored by fuel flow/firing rate instrument continuously, based on an 8 hour rolling average based on a 1 hour block average. [40 CFR 60.153(b)(4)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Records shall be maintained for a minimum of 2 years from the date of recording. [40 CFR 60.153(c)(3)]	Submit a report: Semi-annually on January 31 and July 31 of each year. The owner or operator shall report REO the incinerator fuel use averaged over each 8-hour incinerator operating period for each calendar day that an increase in oxygen content of exhaust gas or scrubber pressure drop is reported pursuant to 40 CFR Part 60.155(a)(2) or (a)(1). [40 CFR 60.155(b)(5)]
72	The owner or operator shall collect a sample of the sludge fed to the incinerator and analyze the sample for dry sludge content and volatile solids content. [40 CFR 60.153(b)(5)]	Monitored by sludge sampling once per calendar day during operation. Sludge samples shall be collected and analyzed using the methods specified at 40 CFR 60.154(b)(5), except that the determination of volatile solids, step (3)(b) of the method may not be deleted. [40 CFR 60.153(b)(5)]	Recordkeeping by certified lab analysis results upon occurrence of event. Records shall be maintained for a minimum of 2 years from the date of recording. [40 CFR 60.153(c)(3)]	Submit a report: Semi-annually on January 31 and July 31 of each year. The owner or operator shall report REO the moisture, volatile and solids content of the daily grab sample of sludge charged to the incinerator for each calendar day that an increase in oxygen content of exhaust gas or scrubber pressure drop is reported pursuant to 40 CFR Part 60.155(a)(2) or (a)(1). [40 CFR 60.155(b)(6)]
73	Pressure Drop Across the Scrubber: The owner or operator shall install, calibrate, maintain, and operate a monitoring device that continuously measures and records the pressure drop of the gas flow through the wet scrubbing device. Where a combination of wet scrubbing is used in series, the pressure drop of the gas flow through the combined system shall be continuously monitored. [40 CFR 60.153(b)(1)]	Pressure Drop Across the Scrubber: Monitored by pressure drop instrument continuously. The pressure drop monitoring device shall be certified by the manufacturer and shall have an accuracy of +/- 1 inch water gauge and shall be calibrated on an annual basis in accordance with the manufacturer's instructions. [40 CFR 60.153(b)(1)]	Pressure Drop Across the Scrubber: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Records shall be maintained for a minimum of 2 years from the date of recording. [40 CFR 60.153(c)(1)]	Submit a report: Semi-annually on January 31 and July 31 of each year. The owner or operator shall submit a report to the Administrator, in writing, a record of average pressure drop measurements for each period of 15 minutes duration or more during which the pressure drop of the scrubber was less than by a percentage, calculated according to the equation below, the average scrubber pressure drop measured during the most recent performance test. $P = -111E + 72.5$ where P = Percent reduction in pressure drop, and E = Average particulate matter emissions (kg/megagram). [40 CFR 60.155(a)(1)(i)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
74	No changes in the operation shall be made, which would potentially increase beryllium emissions above that determined during the most recent source test, until a new emission level has been estimated by calculation. [40 CFR 61.33(c)]	None.	None.	None.
75	No changes in the operation shall be made, which would potentially increase mercury emissions above that determined during the most recent source test or sludge test, until a new emission level has been estimated by calculation and the results reported to the Administrator. [40 CFR 61.53(d)(4)]	None.	None.	None.
76	<p>Lead Concentration in Sludge: The average daily concentration for lead in sewage sludge fed to a sewage sludge incinerator shall not exceed the concentration calculated using the following equation:</p> $C = [0.1 \times \text{NAAQS} \times 86,400] / [\text{DF} \times (1 - \text{CE}) \times \text{SF}]$ <p>Where:  C = Average daily concentration of lead in sewage sludge  NAAQS = National Ambient Air Quality Standard for lead in micrograms per cubic meter  DF = Dispersion factor in micrograms per cubic meter per gram per second  CE = Sewage sludge incinerator control efficiency for lead in hundredths  SF = Sewage sludge feed rate in metric tons per day (dry weight basis)  The dispersion factor DF and control efficiency CE shall be determined in accordance with 40CFR503.43(e). [40 CFR 503.43(c)]</p>	Lead Concentration in Sludge: Monitored by calculations once initially was already completed. If any significant changes in geographic or physical characteristics occurred at the incinerator site or in incinerator operating conditions, a new air dispersion modeling or performance testing shall be required to determine a new dispersion factor or a new control efficiency that will be used to calculate revised pollutant limits. [40 CFR 503.43]	Lead Concentration in Sludge: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall maintain all relevant records in accordance with 40CFR503.47. [40 CFR 503.47]	Submit a report: Other, the pollutant limit shall be submitted to the REO no later than 30 days after completion of the air dispersion modeling and performance test. [40 CFR 503.43(e)(4)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
77	<p>The average daily concentration for arsenic, cadmium, chromium, and nickel in sewage sludge fed to a sewage sludge incinerator shall not exceed the concentration calculated using the following equation:</p> $C = [RSC \times 86,400] / [DF \times (1-CE) \times SF]$ <p>Where:  C = Average daily concentration of lead in sewage sludge  RSC = Risk specific concentration for arsenic, cadmium, chromium, and nickel in micrograms per cubic meter from Table 1 and 2 of 40CFR503.43  DF = Dispersion factor in micrograms per cubic meter per gram per second  CE = Sewage sludge incinerator control efficiency for lead in hundredths  SF = Sewage sludge feed rate in metric tons per day (dry weight basis)  The dispersion factor DF and control efficiency CE shall be determined in accordance with 40CFR503.43(e). [40 CFR 503.43(d)]</p>	<p>Monitored by calculations once initially was already completed. If any significant changes in geographic or physical characteristics occurred at the incinerator site or in incinerator operating conditions, a new air dispersion modeling or performance testing shall be required to determine a new dispersion factor or a new control efficiency that will be used to calculate revised pollutant limits. [40 CFR 503.43]</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall maintain all relevant records in accordance with 40CFR503.47. [40 CFR 503.47]</p>	<p>Submit a report: Other, the pollutant limits shall be submitted to the REO no later than 30 days after completion of the air dispersion modeling and performance test. [40 CFR 503.43(e)(4)]</p>
78	<p>An instrument that continuously measures and records information used to determine the moisture content in the sewage sludge incinerator stack exit gas shall be installed, calibrated, operated, and maintained for the sewage sludge incinerators. [40 CFR 503.45(c)]</p>	<p>Monitored by continuous emission monitoring system continuously. [40 CFR 503.45(c)]</p>	<p>Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [40 CFR 503.47(h)]</p>	<p>None.</p>
79	<p>The operation of a sewage sludge incinerator shall not cause the operating combustion temperature of the sewage sludge incinerator to exceed the performance test combustion temperature by more than 20 percent. [40 CFR 503.45(e)]</p>	<p>Monitored by temperature instrument continuously. [40 CFR 503.45(d)]</p>	<p>Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [40 CFR 503.47(f)]</p>	<p>None.</p>
80	<p>The permittee shall develop the information in 40 CFR 503.47 (b) through 40 CFR 503.47 (n) and shall retain the information for five years. [40 CFR 503.47(a)]</p>	<p>None.</p>	<p>Other: Records shall be maintained for five years.[40 CFR 503.47(a)].</p>	<p>None.</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
81	Restarting the Sewage Sludge Incinerator (SSI) Unit after the Final Compliance Date.  If the permittee closes the SSI unit but restarts the unit after the final compliance date, the permittee shall complete the emission control retrofits and meet the emissions and operating limits on the date the SSI unit restarts operation. [40 CFR 62.15910(b)]	None.	None.	Submit a plan: As per the approved schedule. The permittee shall submit the final control plan no later than 60 days prior to the initial startup of Dorr Oliver Incinerator. Submit the final control plan to the EPA regional office and permitting authority or delegated authority that includes the four items described in paragraphs (a)(1) through (4) of 40 CFR 62.15900. [N.J.A.C. 7:27-22.16(o)]
82	The Permittee shall submit a final control plan that includes the four items described in paragraphs (a)(1) through (4) of 40 CFR 62.15900: (1) A description of the devices for air pollution control and process changes that you will use to comply with the emission limits and standards and other requirements of this subpart; (2) The type(s) of waste to be burned, if waste other than sewage sludge is burned in the unit; (3) The maximum design sewage sludge burning capacity; and (4) If applicable, the petition for site-specific operating limits under 40CFR62.15965. [40 CFR 62.15900]	None.	Other: Maintain an onsite a copy of the final control plan.[40 CFR 62.15900(b)].	Submit a plan: As per the approved schedule to the EPA regional office and permitting authority or delegated authority at least 60 days prior to the initial startup of Dorr Oliver Incinerator. [N.J.A.C. 7:27-22.16(o)]
83	For achieving final compliance, the permittee shall complete all process changes and retrofit construction of control devices, as specified in the final control plan, so that, if the affected SSI unit is brought online, all necessary process changes and air pollution control devices would operate as designed. [40 CFR 62.15905]	None.	Other: Maintain onsite copies of equipment specifications and maintenance requirements received from vendors for the incinerator, emission controls and monitoring equipment. All records must be available on-site in either paper copy or computer-readable format that can be printed upon request.[40 CFR 62.16025(i)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
84	<p>The permittee shall submit a notification of achievement of compliance. The notification must include the following three items:</p> <p>(a) Notification that the final control plan has been submitted and final compliance has been achieved;</p> <p>(b) Any items required to be submitted with the final control plan and final compliance; and</p> <p>(c) Signature of the owner or operator of the SSI unit. [40 CFR 62.15885]</p>	None.	Other: Maintain onsite copies of the final control plan and notification of achievement of compliance.[40 CFR 62.16025(b)].	<p>Submit notification: Within 60 days of stack testing of Dorr Oliver Incinerator or no later than 60 days following the initial performance test. The permittee shall submit the notification of achievement of compliance to the EPA regional office and permitting authority or delegated authority that includes the three items described in 40 CFR 62.15885. [40 CFR 62.16030(a)(2)]</p>



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
85	If the permittee uses an air pollution control device other than a wet scrubber, fabric filter, electrostatic precipitator, activated carbon injection, or afterburner to comply with the emission limits in 40 CFR 62.15955, the permittee shall meet the applicable operating limits and requirements in 40 CFR 60.4850, and establish applicable operating limits according to 40 CFR 62.15985; and [40 CFR 62.15965(a)]	Other: The initial performance test shall be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in Table 2 to 40CFR62 Subpart LLL and according to the testing, monitoring, and calibration requirements specified in 40 CFR 62.16015(a) and (b).[40 CFR 62.15980].	Other: The owner or operator shall maintain records of performance tests for a period of at least 5 years. All records must be available on-site in either paper copy or computer-readable format that can be printed upon request.[40 CFR 62.16025].	<p>Submit a plan: As per the approved schedule. Submit a petition to the Administrator for specific operating parameters, operating limits, and averaging periods to be established during the initial performance test and to be monitored continuously thereafter. The permittee is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Your petition must include the following five items:</p> <p>(i) Identification of the specific parameters you propose to monitor.</p> <p>(ii) A discussion of the relationship between these parameters and emissions of regulated pollutants, identifying how emissions of regulated pollutants change with changes in these parameters, and how limits on these parameters will serve to limit emissions of regulated pollutants.</p> <p>(iii) A discussion of how you will establish the upper and/or lower values for these parameters that will establish the operating limits on these parameters, including a discussion of the averaging periods associated with those parameters for determining compliance.</p> <p>(iv) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments.</p> <p>(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters. [40 CFR 62.15965(b)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
86	Continued: The permittee shall petition the Administrator for specific operating parameters, operating limits, and averaging periods to be established during the initial performance test and to be monitored continuously thereafter. [40 CFR 62.15965(b)]	None.	None.	Submit a plan: As per the approved schedule to the EPA Administrator and permitting authority or delegated authority . The permittee is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. The Permittee shall not conduct the initial performance test until after the petition has been approved by the Administrator, and the Permittee shall comply with the operating limits as written, pending approval by the Administrator. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves the Permittee of the responsibility to comply with any provision of 40 CFR62 Subpart LLL. [40 CFR 62.15965(b)(1)]
87	If the permittee fail to submit a final control plan and achieve final compliance, the permittee must submit a notification to the EPA regional office and permitting authority or delegated authority. The permittee must inform the permitting authority that the permittee did not achieve compliance, and you must continue to submit reports each subsequent calendar month until a final control plan is submitted and final compliance is met. An SSI unit that operates out of compliance after the final compliance date would be in violation of the federal plan and subject to enforcement action. [40 CFR 62.15895]	None.	None.	Submit notification: Every month. Submit a notification to the EPA regional office and permitting authority or delegated authority. The permittee must inform the Administrator that you did not achieve compliance, and you must continue to submit reports each subsequent calendar month until a final control plan is submitted and final compliance is met. [40 CFR 62.15895]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
88	The permittee cannot operate the SSI unit unless a fully trained and qualified SSI unit operator is accessible, either at the facility or can be at the facility within 1 hour. The trained and qualified SSI unit operator may operate the SSI unit directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified SSI unit operators are temporarily not accessible, the permittee shall follow the procedures in 40 CFR 62.15945. [40 CFR 62.15920(a)]	None.	Other: Maintain documentation of training. Operator training and qualification must be obtained through by completing the requirements included in paragraph (c) of 40 CFR 62.15920(c).[40 CFR 62.15920(b)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
89	<p>Training must be obtained by completing an incinerator operator training course that includes, at a minimum, the three elements described in paragraphs (c)(1) through (3) of 40 CFR 62.15920:</p> <p>(1) Training on the 10 subjects listed in the following section:</p> <p>(i) Environmental concerns, including types of emissions;</p> <p>(ii) Basic combustion principles, including products of combustion;</p> <p>(iii) Operation of the specific type of incinerator to be used by the operator, including proper startup, sewage sludge feeding and shutdown procedures;</p> <p>(iv) Combustion controls and monitoring;</p> <p>(v) Operation of air pollution control equipment and factors affecting performance (if applicable);</p> <p>(vi) Inspection and maintenance of the incinerator and air pollution control devices;</p> <p>(vii) Actions to prevent malfunctions or to prevent conditions that may lead to malfunctions;</p> <p>(viii) Bottom and fly ash characteristics and handling procedures;</p> <p>(ix) Applicable federal, state and local regulations, including Occupational Safety and Health Administration workplace standards; and</p> <p>(x) Pollution prevention.</p> <p>(2) An examination designed and administered by the instructor administering the subjects in paragraph (c)(1) of this section.</p> <p>(3) Written material covering the training course topics that may serve as reference material following completion of the course.</p> <p>[40 CFR 62.15920(c)]</p>	None.	<p>Other: Maintain documentation of training at the facility including the the documentation of the operator training procedures specified under 40 CFR 62.15920(c)(1) and make the documentation readily accessible to all SSI unit operators.[40 CFR 62.15950(a)].</p>	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
90	In order to complete qualification an operator must pass an examination designed and administered by the instructor administering the subjects in paragraph (c)(1) of 40 CFR 62.15920. [40 CFR 62.15920(c)(2)]	None.	Other: Maintain documentation of training. Written material covering the training course topics that may serve as reference material following completion of the course.[40 CFR 62.15920(c)(3)].	None.
91	Operator training must be completed by the later of the following three dates: 1.) The final compliance date, 2.) 6 months after the SSI startup or, 3.) 6 months after an employee assumes responsibility of operating or supervising operation of the SSI unit. [40 CFR 62.15925]	None.	Other: Maintain documentation of training.[40 CFR 62.15920(c)].	None.
92	Operator qualification is valid from the date on which the training course is completed and the operator successfully passes the examination required under 40 CFR 62.15920(c)(2). [40 CFR 62.15930(b)]	None.	Other: Maintain documentation of training.[40 CFR 62.15920(c)].	None.
93	Maintaining operator qualification requires an annual refresher course or review including coverage of the following topics: 1.) Update of regulations 2.) Proper incinerator operation procedures 3.) Inspection and maintenance 4.) Prevention of malfunctions or conditions leading to malfunction 5.) Discussion of operating problems encountered by attendees [40 CFR 62.15935]	None.	Other: Maintain documentation of annual training.[40 CFR 62.15920(c)].	None.
94	The permittee must renew a lapsed operator qualification before the operator begin operation of an SSI unit by one of the two methods specified in paragraphs (a) and (b) of 40 CFR 62.15940: (a) For a lapse of less than 3 years, you must complete a standard annual refresher course described in 40 CFR 62.15935; and (b) For a lapse of 3 years or more, you must repeat the initial qualification requirements in 40 CFR 62.15920. [40 CFR 62.15940]	None.	Other: Maintain documentation of training.[40 CFR 62.15920(c)].	None.

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95	When a qualified operator is not accessible for more than 8 hours, the SSI unit may be operated for less than 2 weeks by other plant personnel who are familiar with the operation of the SSI unit and who have completed a review of the information specified in 40 CFR 62.15950 within the past 12 months. However, you must record the period when a qualified operator was not accessible and include this deviation in the annual report as specified under 40 CFR 62.16030(c) [40 CFR 62.15945(a)]	None.	Other: Maintain records showing the periods when no qualified operators were accessible for more than 8 hours, but less than 2 weeks, as required in 40 CFR 62.15945(a).[40 CFR 62.16025(c)(3)].	Submit documentation of compliance: As per the approved schedule A Qualified Operator Deviation Report must be submitted if all qualified operators are not accessible to the SSI unit for less than 2 weeks. [40 CFR 62.16030(c)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
96	<p>When a qualified operator is not accessible for 2 weeks or more:</p> <p>(1) Notify the Administrator of this deviation in writing within 10 days. In the notice, state what caused this deviation, what you are doing to ensure that a qualified operator is accessible, and when you anticipate that a qualified operator will be accessible.</p> <p>(2) Submit a status report to the Administrator every 4 weeks outlining what you are doing to ensure that a qualified operator is accessible, stating when you anticipate that a qualified operator will be accessible, and requesting approval from the Administrator to continue operation of the SSI unit. You must submit the first status report 4 weeks after you notify the Administrator of the deviation as specified in 40 CFR 62.15945(b)(1).</p> <p>(i) If the Administrator notifies you that your request to continue operation of the SSI unit is disapproved, the SSI unit may continue operation for 30 days, and then must cease operation.</p> <p>(ii) Operation of the unit may resume if a qualified operator is accessible as required under 40 CFR 62.15920(a). You must notify the Administrator within 5 days of having resumed operations and of having a qualified operator accessible.</p> <p>[40 CFR 62.15945(b)]</p>	None.	Other: Maintain records showing the periods when no qualified operators were accessible for 2 weeks or more along with copies of reports submitted as required in 40 CFR 62.15945(b).[40 CFR 62.16025(c)(4)].	<p>Submit notification: As per the approved schedule to EPA regional office and permitting authority or delegated authority. If all qualified operators are not accessible for 2 weeks or more, you must take the following actions:</p> <p>(i) Submit a notification of the deviation within 10 days that includes the three items in paragraphs (e)(1)(i)(A) through (C) of 40 CFR 62.16030.</p> <p>(A) A statement of what caused the deviation.</p> <p>(B) A description of actions taken to ensure that a qualified operator is accessible.</p> <p>(C) The date when you anticipate that a qualified operator will be available.</p> <p>(ii) Submit a status report to the Administrator every 4 weeks that includes the three items in paragraphs (e)(1)(ii)(A) through (C) of 62.16030.</p> <p>(A) A description of actions taken to ensure that a qualified operator is accessible.</p> <p>(B) The date when you anticipate that a qualified operator will be accessible.</p> <p>(C) Request for approval from the Administrator to continue operation of the SSI unit. [40 CFR 62.16030(e)(1)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
97	The permittee must establish a program for reviewing the information listed in 40 CFR 62.15920 (c)(1) with each qualified incinerator operator and other plant personnel who may operate the unit according to the provisions of 40 CFR 62.15945(a), according to the following schedule: (1) The initial review of the information listed in 40 CFR 62.15920(c)(1) must be conducted within 6 months after the effective date of this subpart or prior to an employee's assumption of responsibilities for operation of the SSI unit, whichever date is later; (2) Subsequent annual reviews of the information listed in 40 CFR 62.15920(c)(1) must be conducted no later than 12 months following the previous review. [40 CFR 62.15950(b)]	None.	Other: Maintain documentation of training.[40 CFR 62.15920(c)].	None.
98	If your unit was shut down by the Administrator or permitting authority or delegated authority, under the provisions of 40 CFR 62.15945(b)(2)(i), due to a failure to provide an accessible qualified operator, you must notify the EPA regional office and permitting authority or delegated authority within five days of meeting 40 CFR 62.15945(b)(2)(ii) that you are resuming operation. [40 CFR 62.16030(e)(2)]	None.	None.	Submit notification: As per the approved schedule. Submit notification to the EPA regional office and permitting authority or delegated authority within five days of meeting 40 CFR 62.15945(b)(2)(ii) that you are resuming operation. [40 CFR 62.16030(e)(2)]



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
99	The permittee shall meet the emission limits and standards specified in Table 2 of 40 CFR Part 62 Subpart LLL. The emission limits and standards apply at all times the unit is operating and during periods of malfunction. The emission limits and standards apply to emissions from a bypass stack or vent while sewage sludge is in the combustion chamber. [40 CFR 62.15955]	<p>Monitored by stack emission testing once initially and annually thereafter. Demonstrate initial compliance using the performance test required in 40 CFR 60.8.</p> <p>The owner or operator must demonstrate that the SSI unit meets the emission limits and standards specified in Table 2 to 40 CFR 62 Subpart LLL for particulate matter, hydrogen chloride, carbon monoxide, dioxins/furans (total mass basis or toxic equivalency basis), mercury, nitrogen oxides, sulfur dioxide, cadmium, lead, and fugitive emissions from ash handling using the performance test. The performance test must be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in Table 2 to 40 CFR 62 Subpart LLL and according to the performance testing, monitoring, and calibration requirements specified in 40 CFR 62.16015(a)1 through (a)11. . [40 CFR 62.15980(a)]</p>	<p>Other: The permittee must maintain records of performance tests for a period of at least 5 years. All records must be available on site in either paper copy or computer-readable format that can be printed upon request.</p> <p>The permittee shall maintain the following records:</p> <p>(1) The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and standards and/or to establish operating limits, as applicable. (2) A copy of the complete performance test report, including calculations. (3) A record of the hourly dry sludge feed rate measured during performance test runs as specified in 40 CFR 62.16015(a)(2)(i). (4) Any necessary records to demonstrate that the performance test was conducted under conditions representative of normal operations, including a record of the moisture content measured as required in 40 CFR 62.16015(a)(2)(ii) for each grab sample taken of the sewage sludge burned during the performance test. [40 CFR 62.16025(e)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule to the Administrator and to the Department - Emissions Measurement Section (EMS). The permittee shall submit the following information no later than 60 days following the initial performance test.</p> <p>(1) Company name, physical address, and mailing address. (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. (3) Date of report. (4) The complete test report for the initial performance test results obtained by using the test methods specified in Table 2 to this subpart. (5) If an initial performance evaluation of a continuous monitoring system was conducted, the results of that initial performance evaluation. (6) The values for the site-specific operating limits established pursuant to 40 CFR 62.15960 and 62.15965 and the calculations and methods, as applicable, used to establish each operating limit. [40 CFR 62.16030(b)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
100	The permittee has the option to demonstrate compliance with the emission limits specified in Table 2 of 40 CFR Part 62 Subpart LLL using a continuous emissions monitoring system. [40 CFR 62.15980(b)]	Monitored by continuous emission monitoring system continuously. The permittee must use the continuous emissions monitoring system and follow the requirements specified in 40 CFR 62.16015(b). Measure the emissions according to 40 CFR 60.13 to calculate 1-hour arithmetic averages, corrected to 7-percent oxygen (or carbon dioxide). The permittee must demonstrate initial compliance using a 24-hour block average of these 1-hour arithmetic average emission concentrations, calculated using Equation 19-19 in section 12.4.1 of Method 19 of 40 CFR part 60, appendix A-7. [40 CFR 62.15980(b)(2)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The permittee must use the continuous emissions monitoring system and follow the requirements specified in 40 CFR 62.16015(b). [40 CFR 62.16000(b)]	<p>Submit notification: As per the approved schedule. Submit a notification to the EPA regional office and permitting authority or delegated authority and meet following the requirements:</p> <p>(1) You must notify the Administrator 1 month before starting use of the continuous emissions monitoring system.</p> <p>(2) You must notify the Administrator 1 month before stopping use of the continuous emissions monitoring system, in which case you must also conduct a performance test within prior to ceasing operation of the system.</p> <p>(3) You must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the emissions to the atmosphere.</p> <p>(4) During each relative accuracy test run of the continuous emissions monitoring system using the performance specifications in 40 CFR 62.16015 (b)(3)(ii), emission data for each regulated pollutant and oxygen must be collected concurrently by both the continuous emissions monitoring systems and the test methods specified in 40 CFR 62.16015(b)(4)(i) through (viii). Relative accuracy testing must be at representative operating conditions while the SSI unit is charging sewage sludge.</p> <p>(5) You may request that compliance with the emission limits be determined using carbon dioxide measurements corrected to an equivalent of 7-percent oxygen.</p> <p>(6) You must operate the continuous monitoring system and collect data with the continuous monitoring system as specified in 40CFR62.16015(b)(6)(i) through (v). [40 CFR 62.16015(b)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
101	The permittee must meet, as applicable, the operating limits and requirements specified in 40 CFR 62.15960 paragraphs (a) through (d) by the final compliance date. The operating parameters for which you will establish operating limits for a wet scrubber are listed in Table 4 to 40CFR62 Subpart LLL. The permittee must comply with the operating requirements in paragraph (f) and paragraph (g) of 40 CFR 62.15960 for meeting any new operating limits, re-established in 40 CFR 62.16005. The operating limits apply at all times that sewage sludge is in the combustion chamber [40 CFR 62.15960]	Other: The initial performance test must be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in Table 2 to 40CFR62 Subpart LLL and according to the performance testing, monitoring, and calibration requirements specified in 40 CFR 62.16015(a) and (b).[40 CFR 62.15980].	Other: The owner or operator must maintain records of performance tests for a period of at least 5 years. All records must be available on-site in either paper copy or computer-readable format that can be printed upon request. [40 CFR 62.16025].	None.
102	The permittee must establish and meet the site-specific operating limits specified in 40 CFR 62.15985(b) through 40 CFR 62.15985(h), or established in 40 CFR 62.15965, as applicable, during the initial performance tests required in 40 CFR 62.15980. The permittee shall meet the requirements in 40 CFR 62.16005(d) to confirm these operating limits or re-establish new operating limits using operating data recorded during any performance tests or performance evaluations required in 40 CFR 62.16000. [40 CFR 62.15985(a)]	Other: Conduct performance tests. The permittee must follow the data measurement and recording frequencies and data averaging times specified in Table 4 to this subpart or as established in 40 CFR 62.15965, and the permittee shall follow the testing, monitoring, and calibration requirements specified in 40 CFR 62.16015 and 62.16020 or established in 40 CFR 62.15965.[40 CFR 62.15985(a)].	Other: Maintain records of the values for the site-specific operating limits established pursuant to 40 CFR 62.15960 and 62.15965 and the calculations and methods, as applicable, used to establish each operating limit.[40 CFR 62.15960].	Submit a report: Within 60 days of stack testing. Submit the initial compliance report including the values for the site-specific operating limits established pursuant to 42 CFR 62.15960 and 62.15965 and the calculations and methods, as applicable, used to establish each operating limit. [40 CFR 62.16030(b)(6)]
103	The permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. [40 CFR 62.160005(d)(2)]	Other: The operating parameter limit shall be based on performance tests conducted per 40 CFR 62.15985 and is applicable at least until the date of the next performance test that demonstrates compliance with all applicable emission limits.[N.J.A.C. 7:27-22.16(o)].	Other: Maintain readily accessible records of the performance tests and reports.[N.J.A.C. 7:27-22.16(o)].	Submit the required air permit application(s): Within 60 days of stack testing The permittee shall submit a permit modification application to establish or re-establish site specific operating parameter limits within 60 days after initial or subsequent performance tests. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
104	The permittee must meet a site-specific operating limit for minimum operating temperature of the combustion chamber (or afterburner combustion chamber) that you establish in 40 CFR 62.15985. [40 CFR 62.15960(a)]	None.	None.	None.
105	The permittee must meet a site-specific operating limits that you establish in 40 CFR 62.15985 for each operating parameter associated with each air pollution control device (wet scrubber, electrostatic precipitator and afterburner). [40 CFR 62.15960(b)]	None.	None.	None.
106	The permittee must meet the operating requirements in the site-specific fugitive emission monitoring plan, submitted as specified in 40 CFR 62.15955(d) to ensure that the ash handling system will meet the emission standard for fugitive emissions from ash handling. [40 CFR 62.15960(d)]	Other: The Permittee shall confirm the operating limits according to 40 CFR 62.16005(d)(1) or re-establish operating limits according to 40 CFR 62.16005(d)(2). The operating limits must be established so as to assure ongoing compliance with the emission limits. These requirements also apply to the operating requirements in the fugitive emissions monitoring plan specified in 40 CFR 62.15960(d). (1) The Permittee's operating limits must be based on operating data recorded during any performance test required in 40 CFR 62.16000(a) or any performance evaluation required in 40 CFR 62.16000(b)(4). (2) The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. [40 CFR 62.16005(d)].	None.	Submit a plan: As per the approved schedule. Submit a monitoring plan, at least 60 days before the initial compliance test date, specifying the ash handling system operating procedures that the Permittee will follow to ensure that the fugitive emissions limit is met. 40 CFR 60.5200(d) &. [40 CFR 60.5200(g)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
107	<p>The permittee must monitor the feed rate and moisture content of the sewage sludge fed to the sewage sludge incinerator, as specified:</p> <p>(1) Continuously monitor the sewage sludge feed rate and calculate a daily average for all hours of operation during each 24-hour period. Keep a record of the daily average feed rate, as specified in 40 CFR 62.16025(f)(3)(ii).</p> <p>(2) Take at least one grab sample per day of the sewage sludge fed to the sewage sludge incinerator. If the permittee takes more than one grab sample in a day, calculate the daily average for the grab samples. Keep a record of the daily average moisture content, as specified in 40 CFR 60.5230(f)(3)(ii). [40 CFR 62.15960(f)]</p>	Monitored by sludge feed/charge rate monitoring continuously, based on a daily average. [40 CFR 62.15960(f)(1)]	Recordkeeping by manual logging of parameter or storing data in a computer data system daily. All daily average values recorded for the feed rate and moisture content of the sewage sludge fed to the sewage sludge incinerator, monitored and calculated as specified in 40 CFR 62.16025(f)(3)ii. [40 CFR 62.16025(f)(3)(ii)]	None.
108	<p>The emission limits and standards apply at all times and during periods of malfunction. The operating limits apply at all times that sewage sludge is in the combustion chamber (i.e., until the sewage sludge feed to the combustor has been cut off for a period of time not less than the sewage sludge incineration residence time). For determining compliance with the CO concentration limit using CO CEMS, the correction to 7 percent oxygen does not apply during periods of startup or shutdown. Use the measured CO concentration without correcting for oxygen concentration in averaging with other CO concentrations (corrected to 7 percent O<sub>2</sub>) to determine the 24-hour average value. [40 CFR 62.15970]</p>	None.	None.	None.

**New Jersey Department of Environmental Protection  
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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
109	The permittee shall conduct an air pollution control device inspection according to 40 CFR 62.16015 (c). If a new air pollution control device is installed after the final compliance date, inspection of the air pollution control device must be conducted within 60 days after installation of the control device. All necessary repairs must be completed by the Permittee within 10 operating days following the air pollution control device inspection unless the Permittee obtains written approval from the Administrator establishing a date whereby all necessary repairs of the SSI unit must be completed. [40 CFR 62.15990]	Other: Air pollution control device inspection must include: 1.) Inspection of air pollution control device for proper operation, 2.) General observation of equipment to assure it is well maintained and in good operating condition. 3.) Develop a site-specific monitoring plan according to the requirements of 40 CFR 62.15995. [40 CFR 62.16015(c)].	Other: Maintain records of the results of initial and annual air pollution control device inspections, including any required maintenance and any repairs not completed within 10 days of an inspection or the timeframe established by the Administrator.[40 CFR 62.16025(d)].	Submit a report: Annually. The Permittee must submit an annual compliance report. The Permittee must submit its first annual compliance report no later than 12 months following the submission of the initial compliance report. The Permittee must submit subsequent annual compliance reports no more than 12 months following the previous annual compliance report. [40 CFR 62.16030(c)]
110	The permittee shall prepare and submit to the Administrator for approval a site-specific monitoring plan for each continuous monitoring system (CMS) according to the requirements in 40 CFR 62.15995 section a through c. [40 CFR 62.15995]	None.	Other: Maintain records of monitoring plans required under 40 CFR 62.15995, and records of performance evaluations required under 40 CFR 62.16000(b)(5).[40 CFR 62.16025(k)].	Submit a plan: As per the approved schedule. Site-specific monitoring plans must be submitted to the administrator according to the requirements in 40 CFR 62.15995 section (a) and (b) for approval at least 60 days before initial performance evaluation of a continuous monitoring system. [40 CFR 62.15995(f)]
111	Conduct an initial performance evaluation of each continuous monitoring system (CMS) in accordance with the monitoring plan and to 40 CFR 60.13(c). [40 CFR 62.15995(c)]	None.	None.	Conduct a performance evaluation and calibration check: Once initially. Conduct performance evaluation for each CMS at frequency specified in monitoring plan at least 60 days of installation of the continuous monitoring system. [40 CFR 62.15995(c)]
112	The permittee shall submit a monitoring plan specifying the ash handling system operating procedures that will meet the fugitive emissions limit specified in Table 2 of 40CFR62 Subpart LLL  [40 CFR 62.15995(d)]	None.	None.	Submit a plan: As per the approved schedule. Submit the monitoring plan for your ash handling system at least 60 days before your initial compliance test date. [40 CFR 62.15995(g)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
113	Monitoring plans involving alternate monitoring requirements to demonstrate compliance may be submitted to the Administrator for approval, subject to the provisions of 40 CFR 62.15995(e)(1) through (6).  [40 CFR 62.15995(e)]	None.	None.	Submit a plan: As per the approved schedule. An alternate monitoring plan must be submitted for approval no later than notification of the initial performance test. [40 CFR 62.15995(e)(3)]
114	An updated monitoring plan must be submitted If there are any changes in monitoring procedures, or if there is a process change. [40 CFR 62.15995(h)]	None.	None.	None.
115	The Permittee shall demonstrate that the SSI unit meets the operating limits established according to 40 CFR 62.15985 and 40 CFR 62.16005(d) for each applicable operating parameter. [40 CFR 62.16005(a)(1)]	Monitored by parametric monitoring system continuously. The Permittee must continuously monitor the operating parameters using the continuous monitoring equipment and according to the procedures specified in 40 CFR 62.16020. To determine compliance, the Permittee shall use the data averaging period specified in Table 4 to 40CFR62 Subpart LLL. [40 CFR 62.16005(a)]	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
116	Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in 40 CFR 62.16005(a) constitutes a deviation from your operating limits established. [40 CFR 62.16005(b)]	Monitored by parametric monitoring system continuously based on the averaging time specified in Table 4 to 40CFR62 Subpart LLL. [40 CFR 62.16005(a)]	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Record any deviation that is above the maximum operating limit or below the minimum operating limit established under 40CFR62 Subpart LLL.</p> <p>For each deviation where the Permittee are using a continuous monitoring system to comply with an associated emission limit or operating limit, report the items described:</p> <ol style="list-style-type: none"> <li>1. Company name and address</li> <li>2. Statement by a responsible official</li> <li>3. The total operating time of each affected SSI</li> <li>4. The calendar dates and times the unit deviated from the emission limits, emission standard, or operating limits</li> <li>5. The averaged and recorded data for those dates</li> <li>6. Duration and cause of each deviation</li> <li>7. A copy of any performance test report that showed a deviation from the emission limits or standards</li> <li>8. A brief description of any malfunction, a description of actions taken during the malfunction to minimize emissions, and corrective action taken</li> </ol> <p>. [40 CFR 62.16030(d)]</p>	<p>Submit a report: As per the approved schedule Submit initial, annual, and deviation reports electronically or in paper format, postmarked on or before the submittal due dates.</p> <p>Within 60 days after the date of completing each performance test, as defined in 40 CFR 63.2, conducted to demonstrate compliance with this subpart, the Permittee shall submit relative accuracy test audit (i.e., reference method) data and performance test (i.e., compliance test) data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) (see <a href="http://www.epa.gov/ttn/chief/ert/ert_tool.htm">http://www.epa.gov/ttn/chief/ert/ert_tool.htm</a> or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.</p> <p>. [40 CFR 62.16030(h)]</p>



BOP210008

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

Emission Unit: U43 Dorr Oliver Fluidized Bed Incinerator

Operating Scenario: OS1 Dorr Oliver Fluidized Bed Incinerator - Emissions controlled by Scrubber (CD5601), SPC Module (CD5603)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Sludge Feed Rate <= 2,250 lb/hr on a dry basis. [N.J.A.C. 7:27-22.16(a)]	Maximum Sludge Feed Rate: Monitored by sludge feed/charge rate monitoring continuously, based on a 1 hour block average. Maximum sludge feed rate, in dry pounds per hour, shall be calculated based on wet sludge feed rate and average sludge cake solids content. [N.J.A.C. 7:27-22.16(o)]	Maximum Sludge Feed Rate: Recordkeeping by strip chart or data acquisition (DAS) system continuously. The permittee shall maintain the operating logs and record quantity of dry sewage sludge charged to incinerator daily. [N.J.A.C. 7:27-22.16(o)]	None.
2	Maximum Gross Heat Input <= 25 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(e)]	None.	Other: The permittee shall keep records showing maximum gross heat input rate. [N.J.A.C. 7:27-22.16(o)].	None.
3	CO <= 64 ppmvd @ 7% O <sub>2</sub> . [40 CFR 62.15955]	CO: Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	CO <= 64 ppmvd @ 7% O <sub>2</sub> . [40 CFR 62.15955]	CO: Monitored by continuous emission monitoring system continuously based on 24-hour block average of 1-hour arithmetic average emission concentrations. [40 CFR 62.16000(b)(2)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously Maintain records of all 1-hour average concentrations of carbon monoxide, and the calibration and maintenance log for the instrument used to measure the carbon monoxide concentration. 40CFR503.40(c)(3) and. [40 CFR 62.16025(f)(1)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
5	NO <sub>x</sub> (Total) <= 150 ppmvd @ 7% O <sub>2</sub> . [40 CFR 62.15955]	NO <sub>x</sub> (Total): Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [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	TSP <= 18 mg/dscm @ 7% O <sub>2</sub> . [40 CFR 62.15955]	TSP: Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event. Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
7	TSP <= 1.3 lb/ton dry sludge input. [40 CFR 60.152(a)(1)]	TSP: Monitored by stack emission testing once initially, based on the average of three 1-hour tests The owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.154, except as provided for in 40 CFR 60.8(b). [40 CFR 60.154]	TSP: Recordkeeping by stack test results once initially. [40 CFR 60.8]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
8	SO <sub>2</sub> <= 15 ppmvd @ 7% O <sub>2</sub> . [40 CFR 62.15955]	SO <sub>2</sub> : Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	SO <sub>2</sub> : Recordkeeping by stack test results upon occurrence of event Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [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	SO <sub>2</sub> ≤ 15 ppmvd @ 7% O <sub>2</sub> . [40 CFR 62.15955]	SO <sub>2</sub> : Monitored by continuous emission monitoring system continuously based on 24-hour block average of 1-hour arithmetic average emission concentrations. [40 CFR 62.16000(b)(2)]	SO <sub>2</sub> : Recordkeeping by data acquisition system (DAS) / electronic data storage every 15 minutes and calculate the hourly arithmetic average. Maintain records of all 1-hour average concentration. [40 CFR 62.16025(f)(1)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
10	Lead Emissions ≤ 0.0074 mg/dscm @ 7% O <sub>2</sub> . [40 CFR 62.15955]	Lead Emissions: Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	Lead Emissions: Recordkeeping by stack test results upon occurrence of event. Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [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	Dioxins/Furans (TEQ) <= 0.1 ng/dscm @ 7% O <sub>2</sub> or Dioxins/Furans (total mass basis) <= 1.2 ng/dscm. [40 CFR 62.15955]	Dioxins/Furans (TEQ): Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (TEQ): Recordkeeping by stack test results upon occurrence of event. Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
12	Cadmium Emissions <= 0.0016 mg/dscm @ 7% O <sub>2</sub> . [40 CFR 62.15955]	Cadmium Emissions: Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by stack test results upon occurrence of event. Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [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	Hydrogen chloride $\leq$ 0.51 ppmvd @ 7% O <sub>2</sub> . [40 CFR 62.15955]	Hydrogen chloride: Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	Hydrogen chloride: Recordkeeping by stack test results upon occurrence of event. Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
14	Mercury Emissions $\leq$ 0.037 mg/dscm @ 7% O <sub>2</sub> . [40 CFR 62.15955]	Mercury Emissions: Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by stack test results upon occurrence of event. Maintain records of performance tests conducted to determine compliance with the emission limits, standards, and/or to establish operating limits. [40 CFR 62.16025(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
15	VOC (Total) $\leq$ 0.3 lb/hr based on sludge content and control efficiency. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [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
16	NO <sub>x</sub> (Total) ≤ 2.81 lb/hr based on Subchapter 19.28(a) 2.5 lb/ton dry sludge input. [N.J.A.C. 7:27-22.16(a)]	NO <sub>x</sub> (Total): Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee can conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit, and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
17	NO <sub>x</sub> (Total) ≤ 2.5 lb/ton dry sludge input. The maximum allowable NO <sub>x</sub> emission rate for fluidized bed incinerators. [N.J.A.C. 7:27-19.28(a)]	NO <sub>x</sub> (Total): Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack test requirements in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
18	CO ≤ 2.36 lb/hr based on sludge content and maximum sludge feed rate. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [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	CO <= 100 ppmvd @ 7% O2 based on stack test results. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.19(d)]
20	SO2 <= 1.27 lb/hr based on Subpart LLL concentration limit and maximum exhaust gas flowrate. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	SO <sub>2</sub> ≤ 50 ppmvd @ 7% O <sub>2</sub> based on stack test results. [N.J.A.C. 7:27-22.16(a)]	SO <sub>2</sub> : Monitored by continuous emission monitoring system continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	SO <sub>2</sub> : Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): On or before every April 30, July 30, October 30, and January 30 for the preceding calendar quarter (the calendar quarters begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal starting with the quarter in which the Performance Specification Test was conducted, for review and approval. Quarterly EEMPR reports shall include all quarterly and annual QA data. This report shall be submitted whether or not an emission exceedance has occurred. See CEMS and QA/QC requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
22	TSP ≤ 0.54 lb/hr based on sludge content and control efficiency. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
23	PM-10 (Total) ≤ 0.54 lb/hr based on sludge content and control efficiency. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
24	PM-2.5 (Total) ≤ 0.54 lb/hr based on sludge content and control efficiency. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

**New Jersey Department of Environmental Protection  
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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
25	Lead Emissions $\leq$ 0.000235 lb/hr based on sludge metal content and maximum sludge feed rate. [N.J.A.C. 7:27-22.16(a)]	Lead Emissions: Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	Lead Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
26	Arsenic Emissions $\leq$ 0.00135 lb/hr based on sludge metal content and maximum sludge feed rate. [N.J.A.C. 7:27-22.16(a)]	Arsenic Emissions: Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
27	Benzene $\leq$ 0.0065 lb/hr based on sludge content and control efficiency. [N.J.A.C. 7:27-22.16(a)]	Benzene: Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Benzene: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
28	Benzo (A) Pyrene Emissions $\leq$ 0.000366 lb/hr based on sludge content and control efficiency. [N.J.A.C. 7:27-22.16(a)]	Benzo (A) Pyrene Emissions: Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Benzo (A) Pyrene Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
29	Beryllium Emissions $\leq$ 0.0009 lb/hr based on sludge metal content and maximum sludge feed rate. [N.J.A.C. 7:27-22.16(a)]	Beryllium Emissions: Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]

**New Jersey Department of Environmental Protection  
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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
30	Cadmium Emissions $\leq$ 0.0000507 lb/hr based on sludge metal content and maximum sludge feed rate. [N.J.A.C. 7:27-22.16(a)]	Cadmium Emissions: Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
31	Chromium Emissions $\leq$ 0.0113 lb/hr based on sludge metal content and maximum sludge feed rate. [N.J.A.C. 7:27-22.16(a)]	Chromium Emissions: Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Chromium Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
32	Chromium (Hexavalent) Emissions $\leq$ 0.000111 lb/hr based on Part 503 Subpart E 1.3% ratio of hexavalent chromium to total chromium. [N.J.A.C. 7:27-22.16(a)]	Chromium (Hexavalent) Emissions: Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Chromium (Hexavalent) Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
33	Hydrogen chloride $\leq$ 0.0245 lb/hr based on sludge content and maximum sludge feed rate. [N.J.A.C. 7:27-22.16(a)]	Hydrogen chloride: Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	Hydrogen chloride: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [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
34	Mercury Emissions $\leq 0.00117$ lb/hr based on sludge metal content and maximum sludge feed rate. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	Mercury Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
35	Nickel Emissions $\leq 0.0304$ lb/hr based on sludge metal content and maximum sludge feed rate. [N.J.A.C. 7:27-22.16(a)]	Nickel Emissions: Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]
36	TCDD Emissions (2,3,7,8-) $\leq 2.28E-9$ lb/hr based on sludge content and control efficiency. [N.J.A.C. 7:27-22.16(a)]	TCDD Emissions (2,3,7,8-): Monitored by stack emission testing once initially and annually, based on the average of three Department validated stack test runs. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least 2 consecutive years show that the emissions are at or below 75-percent of the Subpart LLL emission limit in accordance with 40 CFR 62.16000(a), and the sewage sludge incinerator operate at a minimum of 85 percent of the maximum permitted capacity for each stack test run. See OS Summary for details. [N.J.A.C. 7:27-22.16(o)]	TCDD Emissions (2,3,7,8-): Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirement in OS Summary for details. [N.J.A.C. 7:27-22.16(o)]

BOP210008

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

Emission Unit: U45 Sludge Concentration Tanks

Subject Item: CD46 Odor Control Tower #5

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Flowrate of the Scrubbing Solution Through the Scrubber $\leq$ 190 gal/min in stage 1 by the recirculation pump. [N.J.A.C. 7:27-22.16(a)]	Flowrate of the Scrubbing Solution Through the Scrubber: Monitored by amp meter each month during operation, based on an instantaneous determination The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. A portable amp meter may be used to monitor motor operating current. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. The pump current and voltage in stage 1, equivalent to the scrubber solution flow rate shall be determined from the manufacturers pump and motor operating curves or other literature published for the scrubber manufacturer. [N.J.A.C. 7:27-22.16(o)]	Flowrate of the Scrubbing Solution Through the Scrubber: 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.
2	Flowrate of the Scrubbing Solution Through the Scrubber $\leq$ 285 gal/min in stage 2 & 3 by the recirculation pump. [N.J.A.C. 7:27-22.16(a)]	Flowrate of the Scrubbing Solution Through the Scrubber: Monitored by amp meter each month during operation, based on an instantaneous determination The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. A portable amp meter may be used to monitor motor operating current. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. The pump current and voltage in stage 2 & 3, equivalent to the scrubber solution flow rate shall be determined from the manufacturers pump and motor operating curves or other literature published for the scrubber manufacturer. [N.J.A.C. 7:27-22.16(o)]	Flowrate of the Scrubbing Solution Through the Scrubber: 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.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	Pressure Drop Across the Scrubber <= 10 inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Scrubber: Monitored by pressure drop instrument each month during operation, based on an instantaneous determination. 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)]	Pressure Drop Across the Scrubber: 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(d)o]	None.
4	Sodium hydroxide shall be used in stages 1, 2 & 3 of the scrubber. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	pH of the Scrubbing Solution at the Inlet of the Scrubber >= 7.2 and pH of the Scrubbing Solution at the Inlet of the Scrubber <= 13 standard units. [N.J.A.C. 7:27-22.16(e)]	pH of the Scrubbing Solution at the Inlet of the Scrubber: Monitored by pH instrument each month during operation, based on an instantaneous determination. 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)]	pH of the Scrubbing Solution at the Inlet of the Scrubber: 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.

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**New Jersey Department of Environmental Protection  
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Emission Unit: U45 Sludge Concentration Tanks

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No Visible Emissions: Equipment shall not be used in a manner which will cause visible emissions, exclusive of visible condensed water vapor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Opacity <= 20 % exclusive of condensed water vapor, for a period of not longer than three (3) minutes in any consecutive 30-minute period. [N.J.A.C. 7:27- 6.2(d)]	None.	None.	None.
3	The emissions from the sludge concentrator tanks shall be routed to the multi-stage scrubber (CD46) at all times except during equipment maintenance. [N.J.A.C. 7:27-22.16(e)]	None.	Other: Record the date, time and duration of each maintenance event in a logbook or readily accessible computer file.[N.J.A.C. 7:27-22.16(o)].	None.
4	Hydrogen sulfide <= 0.061 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

**Emission Unit:** U45 Sludge Concentration Tanks

**Operating Scenario:** OS1 Sanitary Sewage Sludge Concentration Tank-1, OS2 Sanitary Sewage Sludge Concentration Tank-2, OS3 Sanitary Sewage Sludge Concentration Tank-3, OS4 Sanitary Sewage Sludge Concentration Tank-4

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Total Throughput <= 3,600 gal/min of wet sludge throughput combined for the sludge concentrator tanks. [N.J.A.C. 7:27-22.16(a)]	Total Throughput: Monitored by material feed/flow monitoring continuously. [N.J.A.C. 7:27-22.16(o)]	Total Throughput: Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation. [N.J.A.C. 7:27-22.16(o)]	None.
2	Hydrogen sulfide <= 0.5 ppmvd from the combined emissions of the sludge concentrator tanks at the CD46 scrubber stack. [N.J.A.C. 7:27-22.16(e)]	None.	Hydrogen sulfide: Recordkeeping by stack test results once initially. Maintain records of stack testing results. [N.J.A.C. 7:27-22.16(o)]	None.
3	Hydrogen sulfide <= 0.014 lb/hr from the combined emissions of the sludge concentrator tanks at the CD46 scrubber stack. [N.J.A.C. 7:27-22.16(a)]	None.	Hydrogen sulfide: Recordkeeping by stack test results once initially. Maintain records of stack testing results. [N.J.A.C. 7:27-22.16(o)]	None.



BOP210008

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

**Emission Unit:** U51 Belt Presses in Sludge Dewatering Room

**Subject Item:** CD51 Odor Control Tower #4

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Flowrate of Scrubbing Medium at Scrubber Inlet $\geq$ 100 gal/min. [N.J.A.C. 7:27-22.16(e)]	Flowrate of Scrubbing Medium at Scrubber Inlet: Monitored by scrubber flow rate instrument continuously. 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)]	Flowrate of Scrubbing Medium at Scrubber Inlet: Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Scrubber $\geq$ 0.5 and Pressure Drop Across the Scrubber $\leq$ 2.2 inches w.c.. [N.J.A.C. 7:27-22.16(a)]	Pressure Drop Across the Scrubber: Monitored by pressure drop instrument continuously. 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)]	Pressure Drop Across the Scrubber: Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation. [N.J.A.C. 7:27-22.16(o)]	None.
3	Oxidation Reduction Potential $\geq$ 350 millivolts. [N.J.A.C. 7:27-22.16(e)]	Oxidation Reduction Potential: Monitored by oxidation/reduction potential meter continuously. 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 voltage output. [N.J.A.C. 7:27-22.16(o)]	Oxidation Reduction Potential: 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.
4	Sodium hydroxide: or sodium hypochlorite shall be used as additives in the scrubbing medium on an as needed basis. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP210008

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

**Emission Unit:** U51 Belt Presses in Sludge Dewatering Room**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No Visible Emissions: Equipment shall not be used in a manner which will cause visible emissions, exclusive of visible condensed water vapor. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Opacity <= 20 % exclusive of condensed water vapor, for a period of not longer than three (3) minutes in any consecutive 30-minute period. [N.J.A.C. 7:27- 6.2(d)]	None.	None.	None.

BOP210008

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

**Emission Unit:** U51 Belt Presses in Sludge Dewatering Room

**Operating Scenario:** OS1 Belt Press 3 Sludge Dewatering Room

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Total Throughput <= 2,250 lb/hr of sludge throughput (on dry pounds per hour basis) for each belt press. [N.J.A.C. 7:27-22.16(a)]	Total Throughput: Monitored by material feed/flow monitoring continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	Total Throughput: Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation. [N.J.A.C. 7:27-22.16(o)]	None.

**BOP210008**

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

**Emission Unit:** U51 Belt Presses in Sludge Dewatering Room

**Operating Scenario:** OS2 Belt Press 4 Sludge Dewatering Room

The requirements for this item are identical to those for: U51 OS1

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

**Facility Name (AIMS):** Bayshore Regional Sewerage Authority

**Facility ID (AIMS):** 21753

**Street** 100 OAK ST  
**Address:** UNION BEACH, NJ 07735-2551

**Mailing** 100 OAK ST  
**Address:** UNION BEACH, NJ 07735-2551

**County:** Monmouth  
**Location** From Garden State Parkway exit 117 take NJ  
**Description:** Rte. 36 eastbound. Go left at Poole Ave., then  
right at Florence Ave., then left at 8th St. The  
facility is at end of 8th St.

<b>State Plane Coordinates:</b>	
<b>X-Coordinate:</b>	40,449,361
<b>Y-Coordinate:</b>	74,177,667
<b>Units:</b>	Dec. Deg.
<b>Datum:</b>	Unknown
<b>Source Org.:</b>	EPA
<b>Source Type:</b>	Other/Unknown

<b>Industry:</b>	
<b>Primary SIC:</b>	4952
<b>Secondary SIC:</b>	
<b>NAICS:</b>	221320

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

**Contact Type: Air Permit Information Contact**

**Organization:** Bayshore Regional Sewerage Authority

**Org. Type:** Public

**Name:** Peter J. Canal

**NJ EIN:**

**Title:** Executive Director

**Phone:** (732) 739-1095 x

**Mailing Address:** 100 Oak Street

**Fax:** (732) 739-2459 x

Union Beach, NJ 07735-2551

**Other:** ( ) - x

**Type:**

**Email:** Pcanal@bayshorersa.com

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**Contact Type: Consultant**

**Organization:** PS&S

**Org. Type:** LLC

**Name:** Brian McPeak

**NJ EIN:**

**Title:** Vice President

**Phone:** (732) 430-7206 x

**Mailing Address:** 1450 Highway 34

**Fax:** (609) 466-1231 x

PO Box 205

**Other:** ( ) - x

Wall, NJ 07727

**Type:**

**Email:** bmcpeak@psands.com

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**Contact Type: Fees/Billing Contact**

**Organization:** Bayshore Regional Sewerage Authority

**Org. Type:** Public

**Name:** Peter J. Canal

**NJ EIN:**

**Title:** Executive Director

**Phone:** (732) 739-1095 x

**Mailing Address:** 100 Oak Street

**Fax:** (732) 739-2459 x

Union Beach, NJ 07735-2551

**Other:** ( ) - x

**Type:**

**Email:** Pcanal@bayshorersa.com

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

**Contact Type: General Contact**

**Organization:** Bayshore Regional Sewerage Authority

**Org. Type:** Public

**Name:** Peter J. Canal

**NJ EIN:**

**Title:** Executive Director

**Phone:** (732) 739-1095 x

**Mailing** 100 Oak Street

**Fax:** (732) 739-2459 x

**Address:** Union Beach, NJ 07735-2551

**Other:** ( ) - x

**Type:**

**Email:** Pcanal@bayshorersa.com

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**Contact Type: Operator**

**Organization:** Bayshore Regional Sewerage Authority

**Org. Type:** Auth/Dist/Comm

**Name:** Bayshore Regional Sewerage Authority

**NJ EIN:**

**Title:**

**Phone:** (732) 739-1095 x

**Mailing** 100 Oak Street

**Fax:** ( ) - x

**Address:** Union Beach, NJ 07735-2551

**Other:** ( ) - x

**Type:**

**Email:**

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

**Organization:** Bayshore Regional Sewerage Authority

**Org. Type:** Auth/Dist/Comm

**Name:** Bayshore Regional Sewerage Authority

**NJ EIN:**

**Title:**

**Phone:** (732) 739-1095 x

**Mailing** 100 Oak Street

**Fax:** ( ) - x

**Address:** Union Beach, NJ 07735-2551

**Other:** ( ) - x

**Type:**

**Email:**

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

**Contact Type:** Responsible Official

**Organization:** Bayshore Regional Sewerage Authority

**Org. Type:** Public

**Name:** Peter J. Canal

**NJ EIN:**

**Title:** Executive Director

**Phone:** (732) 739-1095 x

**Mailing** 100 Oak Street

**Fax:** (732) 739-2459 x

**Address:** Union Beach, NJ 07735-2551

**Other:** ( ) - x

**Type:**

**Email:** Pcanal@bayshorersa.com



**New Jersey Department of Environmental Protection**  
**Insignificant Source Emissions**

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NO <sub>x</sub>	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS10	Natural gas fired heaters less than 1 MM BTU/hr heat input	Fuel Combustion Equipment (Other)	Plant	0.015	0.252	0.107	0.001	0.020	0.020	0.000	0.00022200	0.000
IS20	Wastewater treatment plant sources @ < 100 ppb any TXS, and <3,500 ppb of total VOC	Storage Vessel	Plant	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS30	Distillate oil tanks not exceeding 10,000 gal capacity	Storage Vessel	Plant	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS50	Bins not exceeding 2,000 cubic feet and which are used for the storage of solid particles (or pneumatic M.H. equip)	Other Equipment	SW of Sludge Dewatering/Incinerator Bldg.	0.000	0.000	0.000	0.000	0.010	0.010	0.000	0.00000000	0.000
IS60	Stationary liquid sodium hypochlorite, polymer, and sodium hydroxide storage tanks with a capacity not exceeding 10,000 gallons and no emissions	Storage Vessel	Plant	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000

**New Jersey Department of Environmental Protection**  
**Insignificant Source Emissions**

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NO <sub>x</sub>	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS70	Equipment in which the combined weight of all raw materials used does not exceed 50 pounds in any one hour	Manufacturing and Materials Handling Equipment	Maintenance/Abrasi Blast Cabinet	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS80	Storage Tank for SCR Urea reactant 1400 gal capacity	Storage Vessel	North of Wastewater Treatment plant sources	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
Total				0.043	0.252	0.107	0.001	0.030	0.030	0.000	0.00022200	

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

<b>Equip. NJID</b>	<b>Facility's Designation</b>	<b>Equipment Description</b>	<b>Equipment Type</b>	<b>Certificate Number</b>	<b>Install Date</b>	<b>Grand- Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>Equip. Set ID</b>
E1	EMG #1	Detroit Diesel Emergency Generator at main Pump Station	Emergency Generator	103210	7/1/1995	No		
E2	EMG #2	Detroit Diesel Emergency Generator at Blower Bldg. #2	Emergency Generator	103461	7/1/1995	No		
E3	EMG #3	Caterpillar Diesel Emergency Generator at the Inc. Bldg.	Emergency Generator	103460	7/1/1995	No		
E4	EG Storm #4	1500 KW NG Storm Generator 4, northeast	Stationary Reciprocating Engine	103210	1/2/2022	No		
E5	EG Storm #5	1500 KW NG Storm Generator 5, northeast	Stationary Reciprocating Engine	103461	1/2/2022	No		
E6	EG Storm #6	1500 KW NG Storm Generator 6, northeast	Stationary Reciprocating Engine	103460	1/2/2022	No		
E4201	D-O Incin	Dorr-Oliver Fluidized Bed Sludge Incinerator	Incinerator	PCP960001	12/31/1971	No		
E4501	SCT1	Concentration Tank-1	Storage Vessel	Ct 103774, LogNo 913364A		No		
E4502	SCT2	Concentration Tank-2	Storage Vessel	Ct 103774, LogNo 913364A		No		
E4503	SCT3	Concentration Tank-3	Storage Vessel	Ct 103774, LogNo 913364A		No		
E4504	SCT4	Concentration Tank-4	Storage Vessel	Ct 103774, LogNo 913364A		No		
E5101	Belt Press 3	Belt Press 3 in Sludge Dewatering Room	Manufacturing and Materials Handling Equipment	Ct 103213, LogNo 913008A		No		

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

<b>Equip. NJID</b>	<b>Facility's Designation</b>	<b>Equipment Description</b>	<b>Equipment Type</b>	<b>Certificate Number</b>	<b>Install Date</b>	<b>Grand- Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>Equip. Set ID</b>
E5102	Belt Press 4	Belt Press 4 in Sludge Dewatering Room	Manufacturing and Materials Handling Equipment	Ct 103213, LogNo 913008A		No		
E5501	Niro Incin	Niro Fluidized Bed Sludge Incinerator	Incinerator	Ct 103939, Log No 911235A	12/31/1996	No		

21753 BAYSHORE RGNL SEWER AUTH BOP210008 E1 (Emergency Generator)  
Print Date: 3/29/2023

Make:		
Manufacturer:	Detroit Diesel	
Model:		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	17.00	
Will the equipment be used in excess of 500 hours per year?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="radio"/> Yes <input checked="" type="radio"/> No	Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? <input type="radio"/> Yes <input checked="" type="radio"/> No
Comments:	Max fuel use is 121 gph of No. 2 fuel oil.	

21753 BAYSHORE RGNL SEWER AUTH BOP210008 E2 (Emergency Generator)  
Print Date: 3/29/2023

Make:			
Manufacturer:	Detroit Diesel		
Model:			
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	17.00		
Will the equipment be used in excess of 500 hours per year?	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="radio"/> Yes <input checked="" type="radio"/> No	Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Comments:	121 gph of No. 2 fuel oil		

21753 BAYSHORE RGNL SEWER AUTH BOP210008 E3 (Emergency Generator)  
Print Date: 3/29/2023

Make:

Manufacturer:

Model:

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

Will the equipment be used  
in excess of 500 hours per  
year?

☐ Yes  
☒ No

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

Comments:

**21753 BAYSHORE RGNL SEWER AUTH BOP210008 E4 (Stationary Reciprocating Engine)**  
**Print Date: 3/29/2023**

Make:	<input type="text" value="Caterpilliar"/>		
Manufacturer:	<input type="text" value="Caterpilliar"/>		
Model:	<input type="text" value="C3516C"/>		
Maximum Rated Gross Heat Input (MMBtu/hr):	<input type="text"/>	<input type="text" value="14.58"/>	
Class:	<input type="text" value="Lean Burn"/>		
Description:	<input type="text"/>		
Duty:	<input type="text" value="Standby Power"/>		
Description:	<input type="text"/>		
Minimum Load Range (%):	<input type="text"/>		
Maximum Load Range (%):	<input type="text"/>		
Stroke:	<input type="text" value="4-stroke"/>		
Power Output (BHP):	<input type="text"/>	<input type="text" value="2175"/>	
Electric Output(KW):	<input type="text"/>	<input type="text" value="1500"/>	
Compression Ratio:	<input type="text"/>	<input type="text" value="11.3"/>	
Ignition Type:	<input type="text" value="Spark"/>		
Description:	<input type="text"/>		
Engine Speed (RPM):	<input type="text"/>	<input type="text" value="1800"/>	
Engine Exhaust Temperature (°F):	<input type="text"/>	<input type="text" value="858"/>	
Air to Fuel Ratio at Peak Load:	<input type="text"/>		
Ratio Basis:	<input type="text"/>		
Lambda Factor (scfm/scfm):	<input type="text"/>	<input type="text" value="1.69"/>	
Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr):	<input type="text"/>	<input type="text" value="6914"/>	
Output Type:	<input type="text" value="Electric"/>		
Heat to Power Ratio:	<input type="text"/>		
Is the Engine Using a Turbocharger?	<input checked="" type="radio"/> Yes <input type="radio"/> No		
Is the Engine Using an Aftercooler?	<input checked="" type="radio"/> Yes <input type="radio"/> No		
Is the Engine Using (check all that apply):			
A Prestratified Charge (PSC)	<input type="checkbox"/>	A NOx Converter	<input type="checkbox"/>
Air to Fuel Adjustment (AF)	<input type="checkbox"/>	Ignition Timing Retard	<input type="checkbox"/>
Low Emission Combustion	<input checked="" type="checkbox"/>	Non-Selective Catalytic Retard (NSCR)	<input type="checkbox"/>
Other	<input checked="" type="checkbox"/>		
Description:	<input type="text" value="SCR/Oxidation System"/>		
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="radio"/> Yes <input checked="" type="radio"/> No		
	Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? <input checked="" type="radio"/> Yes <input type="radio"/> No		
Comments:			

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



**21753 BAYSHORE RGNL SEWER AUTH BOP210008 E5 (Stationary Reciprocating Engine)**  
**Print Date: 3/29/2023**

Make:	<input type="text" value="Caterpilliar"/>		
Manufacturer:	<input type="text" value="Caterpilliar"/>		
Model:	<input type="text" value="C3516C"/>		
Maximum Rated Gross Heat Input (MMBtu/hr):	<input type="text" value="14.58"/>		
Class:	<input type="text" value="Lean Burn"/>		
Description:	<input type="text"/>		
Duty:	<input type="text" value="Standby Power"/>		
Description:	<input type="text"/>		
Minimum Load Range (%):	<input type="text"/>		
Maximum Load Range (%):	<input type="text"/>		
Stroke:	<input type="text" value="4-stroke"/>		
Power Output (BHP):	<input type="text" value="2175"/>		
Electric Output(KW):	<input type="text" value="1500"/>		
Compression Ratio:	<input type="text" value="11.3"/>		
Ignition Type:	<input type="text" value="Spark"/>		
Description:	<input type="text"/>		
Engine Speed (RPM):	<input type="text" value="1800"/>		
Engine Exhaust Temperature (°F):	<input type="text" value="858"/>		
Air to Fuel Ratio at Peak Load:	<input type="text"/>		
Ratio Basis:	<input type="text"/>		
Lambda Factor (scfm/scfm):	<input type="text" value="1.69"/>		
Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr):	<input type="text" value="6914"/>		
Output Type:	<input type="text" value="Electric"/>		
Heat to Power Ratio:	<input type="text"/>		
Is the Engine Using a Turbocharger?	<input checked="" type="radio"/> Yes <input type="radio"/> No		
Is the Engine Using an Aftercooler?	<input checked="" type="radio"/> Yes <input type="radio"/> No		
Is the Engine Using (check all that apply):			
A Prestratified Charge (PSC)	<input type="checkbox"/>	A NOx Converter	<input type="checkbox"/>
Air to Fuel Adjustment (AF)	<input type="checkbox"/>	Ignition Timing Retard	<input type="checkbox"/>
Low Emission Combustion	<input checked="" type="checkbox"/>	Non-Selective Catalytic Retard (NSCR)	<input type="checkbox"/>
Other	<input checked="" type="checkbox"/>		
Description:	<input type="text" value="SCR/Oxidation System"/>		
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="radio"/> Yes <input checked="" type="radio"/> No		
	Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? <input checked="" type="radio"/> Yes <input type="radio"/> No		
Comments:	<input type="text"/>		

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

**21753 BAYSHORE RGNL SEWER AUTH BOP210008 E6 (Stationary Reciprocating Engine)**  
**Print Date: 3/29/2023**

Make:	<input type="text" value="Caterpilliar"/>		
Manufacturer:	<input type="text" value="Caterpilliar"/>		
Model:	<input type="text" value="C3516C"/>		
Maximum Rated Gross Heat Input (MMBtu/hr):	<input type="text" value="14.58"/>		
Class:	<input type="text" value="Lean Burn"/>		
Description:	<input type="text"/>		
Duty:	<input type="text" value="Standby Power"/>		
Description:	<input type="text"/>		
Minimum Load Range (%):	<input type="text"/>		
Maximum Load Range (%):	<input type="text"/>		
Stroke:	<input type="text" value="4-stroke"/>		
Power Output (BHP):	<input type="text" value="2175"/>		
Electric Output(KW):	<input type="text" value="1500"/>		
Compression Ratio:	<input type="text" value="11.3"/>		
Ignition Type:	<input type="text" value="Spark"/>		
Description:	<input type="text"/>		
Engine Speed (RPM):	<input type="text" value="1800"/>		
Engine Exhaust Temperature (°F):	<input type="text" value="858"/>		
Air to Fuel Ratio at Peak Load:	<input type="text"/>		
Ratio Basis:	<input type="text"/>		
Lambda Factor (scfm/scfm):	<input type="text" value="1.69"/>		
Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr):	<input type="text" value="6914"/>		
Output Type:	<input type="text" value="Electric"/>		
Heat to Power Ratio:	<input type="text"/>		
Is the Engine Using a Turbocharger?	<input checked="" type="radio"/> Yes <input type="radio"/> No		
Is the Engine Using an Aftercooler?	<input checked="" type="radio"/> Yes <input type="radio"/> No		
Is the Engine Using (check all that apply):			
A Prestratified Charge (PSC)	<input type="checkbox"/>	A NOx Converter	<input type="checkbox"/>
Air to Fuel Adjustment (AF)	<input type="checkbox"/>	Ignition Timing Retard	<input type="checkbox"/>
Low Emission Combustion	<input checked="" type="checkbox"/>	Non-Selective Catalytic Retard (NSCR)	<input type="checkbox"/>
Other	<input checked="" type="checkbox"/>		
Description:	<input type="text" value="SCR/Oxidation System"/>		
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="radio"/> Yes <input checked="" type="radio"/> No		
	Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? <input checked="" type="radio"/> Yes <input type="radio"/> No		
Comments:			

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

21753 BAYSHORE RGNL SEWER AUTH BOP210008 E4201 (Incinerator)  
Print Date: 3/29/2023

Make:	Fluosolids Disposal System
Manufacturer:	Dorr-Oliver, Inc.
Model:	15'-0" I.D. Reacotr
Unit Type:	Other
Description:	Warm Windbox Fluidized Bed Incinerator
Maximum Waste Processing Capacity:	27
Units:	dry tons/day
Physical State of Waste being Incinerated:	Sludge
Description:	
Primary Chamber Maximum Gross Heat Input from Fuel (MMbtu/hr, HHV):	0
Primary Chamber Maximum Primary Air (acfm):	0
Primary Chamber Maximum Gas Flow Rate (acfm):	0
Primary Chamber Volume (ft³):	0
Primary Chamber Minimum Design Operation Temperature (°F):	0
Primary Chamber Minimum Gas Residence Time (sec):	0
Secondary Chamber Maximum Gross Heat Input from Fuel (MMBtu/hr, HHV):	
Secondary Chamber Maximum Primary Air (acfm):	
Secondary Chamber Maximum Gas Flow Rate (acfm):	
Secondary Chamber Volume (ft³):	
Secondary Chamber Minimum Design Operation Temperature (°F):	
Secondary Chamber Minimum Gas Residence Time (sec):	
Secondary Chamber Maximum Outlet Air Flow Rate (acfm):	
Secondary Chamber Minimum Outlet Temperature (°F):	
Type of Plume Supression:	TBD
Do you have a bypass Stack?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**21753 BAYSHORE RGNL SEWER AUTH BOP210008 E4201 (Incinerator)**  
**Print Date: 3/29/2023**

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:

Values listed as "0" are to be determined. Flows, heat inputs, chamber volume, and/or residence time may change slightly as the design gets more refined.

## 21753 BAYSHORE RGNL SEWER AUTH BOP210008 E4501 (Storage Vessel)

Print Date: 3/29/2023

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

Both Solids and Liquids

Storage Vessel Type:

Tank

Design Capacity:

91

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Yes

Exposed to Sunlight?

Shell Color:

White

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

Length (ft):

Width (ft):

Diameter (ft):

40.00

Other Dimension

Description:

Value:

Units:

Fill Method:

Description (if other):

Maximum Design Fill Rate:

Units:

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

Roof

Roof Type:

Horizontal fixed roof tank

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

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

No

**21753 BAYSHORE RGNL SEWER AUTH BOP210008 E4501 (Storage Vessel)**

**Print Date: 3/29/2023**

Does the storage vessel  
have a Conservation Vent?

Yes ▼

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

No ▼

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

No ▼

Comments:

## 21753 BAYSHORE RGNL SEWER AUTH BOP210008 E4502 (Storage Vessel)

Print Date: 3/29/2023

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

Both Solids and Liquids

Storage Vessel Type:

Tank

Design Capacity:

91

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Yes

Exposed to Sunlight?

Shell Color:

White

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

Length (ft):

Width (ft):

Diameter (ft):

40.00

Other Dimension

Description:

Value:

Units:

Fill Method:

Description (if other):

Maximum Design Fill Rate:

Units:

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

Roof

Roof Type:

Horizontal fixed roof tank

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

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

No

**21753 BAYSHORE RGNL SEWER AUTH BOP210008 E4502 (Storage Vessel)**

**Print Date: 3/29/2023**

Does the storage vessel  
have a Conservation Vent?

Yes ▼

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

No ▼

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

No ▼

Comments:



21753 BAYSHORE RGNL SEWER AUTH BOP210008 E4503 (Storage Vessel)  
Print Date: 3/29/2023

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

Both Solids and Liquids

Storage Vessel Type:

Tank

Design Capacity:

91

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Yes

Exposed to Sunlight?

Shell Color:

White

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

Length (ft):

Width (ft):

Diameter (ft):

40.00

Other Dimension

Description:

Value:

Units:

Fill Method:

Description (if other):

Maximum Design Fill Rate:

Units:

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

Roof

Roof Type:

Horizontal fixed roof tank

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

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

No

**21753 BAYSHORE RGNL SEWER AUTH BOP210008 E4503 (Storage Vessel)**

**Print Date: 3/29/2023**

Does the storage vessel  
have a Conservation Vent?

Yes ▼

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

No ▼

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

No ▼

Comments:

## 21753 BAYSHORE RGNL SEWER AUTH BOP210008 E4504 (Storage Vessel)

Print Date: 3/29/2023

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

Both Solids and Liquids

Storage Vessel Type:

Tank

Design Capacity:

91

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Yes

Exposed to Sunlight?

Shell Color:

White

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

Length (ft):

Width (ft):

Diameter (ft):

40.00

Other Dimension

Description:

Value:

Units:

Fill Method:

Description (if other):

Maximum Design Fill Rate:

Units:

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

Roof

Roof Type:

Horizontal fixed roof tank

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

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

No

**21753 BAYSHORE RGNL SEWER AUTH BOP210008 E4504 (Storage Vessel)**

**Print Date: 3/29/2023**

Does the storage vessel  
have a Conservation Vent?

Yes ▼

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

No ▼

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

No ▼

Comments:

**21753 BAYSHORE RGNL SEWER AUTH BOP210008 E5101 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 3/29/2023**

Make:	Klamps Type 85
Manufacturer:	Ashbrook Simon-Hartley
Model:	Size 3 (2.0 Meter)
Type of Manufacturing and Materials Handling Equipment:	Belt Press 3
Capacity:	2.10E+03
Units:	other units
Description (if other):	Dry Pounds Per Hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	Capacity 4200 (0-140 gpm @1.5-3.0% TS)

**21753 BAYSHORE RGNL SEWER AUTH BOP210008 E5102 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 3/29/2023**

Make:	Klampress Type 85
Manufacturer:	Ashbrook Simon-Hartley
Model:	Size 3 (2.0 Meter)
Type of Manufacturing and Materials Handling Equipment:	Belt Press 3
Capacity:	2.10E+03
Units:	other units
Description (if other):	Dry Pounds Per Hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	Capacity 4200 (0-140 gpm @1.5-3.0% TS)

21753 BAYSHORE RGNL SEWER AUTH BOP210008 E5501 (Incinerator)  
Print Date: 3/29/2023

Make:	
Manufacturer:	Niro
Model:	
Unit Type:	Bubbling Fluidized Bed Con ▼
Description:	
Maximum Waste Processing Capacity:	2250
Units:	lb/hr ▼
Physical State of Waste being Incinerated:	Sludge ▼
Description:	
Primary Chamber Maximum Gross Heat Input from Fuel (MMBtu/hr, HHV):	25
Primary Chamber Maximum Primary Air (acfm):	12300
Primary Chamber Maximum Gas Flow Rate (acfm):	31600
Primary Chamber Volume (ft³):	3000
Primary Chamber Minimum Design Operation Temperature (°F):	1500
Primary Chamber Minimum Gas Residence Time (sec):	5.7
Secondary Chamber Maximum Gross Heat Input from Fuel (MMBtu/hr, HHV):	
Secondary Chamber Maximum Primary Air (acfm):	
Secondary Chamber Maximum Gas Flow Rate (acfm):	
Secondary Chamber Volume (ft³):	
Secondary Chamber Minimum Design Operation Temperature (°F):	
Secondary Chamber Minimum Gas Residence Time (sec):	
Secondary Chamber Maximum Outlet Air Flow Rate (acfm):	
Secondary Chamber Minimum Outlet Temperature (°F):	
Type of Plume Supression:	
Do you have a bypass Stack?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**21753 BAYSHORE RGNL SEWER AUTH BOP210008 E5501 (Incinerator)**  
**Print Date: 3/29/2023**

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

<input type="radio"/>	Yes
<input checked="" type="radio"/>	No

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

<input type="radio"/>	Yes
<input checked="" type="radio"/>	No

Comments:



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

<b>CD NJID</b>	<b>Facility's Designation</b>	<b>Description</b>	<b>CD Type</b>	<b>Install Date</b>	<b>Grand-Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>CD Set ID</b>
CD4	GEN 4 SCR	Gen #4 SCR/Oxidation System	Selective Catalytic Reduction	1/2/2022	No		
CD5	GEN 5 SCR	Gen #5 SCR/Oxidation System	Selective Catalytic Reduction	1/2/2022	No		
CD6	GEN 6 SCR	Gen #6 SCR/Oxidation System	Selective Catalytic Reduction	1/2/2022			
CD46	OC #5	Odor Control Tower #5	Scrubber (Multi-Stage)	6/1/2010	No		
CD51	OC #4	Odor Control Tower #4	Scrubber (Packed Tower)	1/1/1994	No	1/1/1994	
CD5501	Niro Scr	NIRO EnviroCare VenturiPak Scrubber	Scrubber (Multi-Stage)	9/1/1995	No	9/1/1995	
CD5502	WESP	Niro Star Wet Electrostatic Precipitator	Electrostatic Precipitator	10/1/2016	No		
CD5503	Hg Adsorber	CPPE Mercury GAC Adsorber for Niro	Adsorber	3/21/2016	No		
CD5601	D-O Scr	Dorr-Oliver VenturiPak scrubber	Scrubber (Multi-Stage)	12/31/2019	No		
CD5603	D-O Hg ctrl	MercuryPak Sorbent Polymer Composite (SPC) Adsorber	Adsorber	12/31/2019	No		

21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD4 (Selective Catalytic Reduction)  
Print Date: 2/2/2023

Make:	
Manufacturer:	Safety Power
Model:	SP-ZCS-36-TBD-HSG-0
Minimum Temperature at Catalyst Bed (°F):	572
Maximum Temperature at Catalyst Bed (°F):	977
Minimum Temperature at Reagent Injection Point (°F):	540
Maximum Temperature at Reagent Injection Point (°F):	950
Type of Reagent:	Urea
Description:	
Chemical Formula of Reagent:	CO(NH <sub>2</sub> ) <sub>2</sub>
Minimum Reagent Charge Rate (gpm):	
Maximum Reagent Charge Rate (gpm):	
Minimum Concentration of Reagent in Solution (% Volume):	32.5
Minimum NO <sub>x</sub> to Reagent Mole Ratio:	1
Maximum NO <sub>x</sub> to Reagent Mole Ratio:	1
Maximum Anticipated Ammonia Slip (ppm):	8
Type of Catalyst:	Urea
Volume of Catalyst (ft <sup>3</sup> ):	18
Form of Catalyst:	Aqueous (urea salts dissolve in water)
Anticipated Life of Catalyst:	8000
Units:	hours
Have you attached a catalyst replacement schedule?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Method of Determining Breakthrough:	Monitoring of urea consumption and periodic emissions monitoring of NO <sub>x</sub> inlet and NO <sub>x</sub> outlet.
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD4 (Selective Catalytic Reduction)**  
**Print Date: 2/2/2023**

Comments:

Aqueous urea injected into exhaust stream. Each generator has own SCR system connected to one urea injection tank. Urea consumption rate 0.4-0.6 gal/hr.

21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD5 (Selective Catalytic Reduction)  
Print Date: 2/2/2023

Make:	
Manufacturer:	Safety Power
Model:	SP-ZCS-36-TBD-HSG-0
Minimum Temperature at Catalyst Bed (°F):	572
Maximum Temperature at Catalyst Bed (°F):	977
Minimum Temperature at Reagent Injection Point (°F):	540
Maximum Temperature at Reagent Injection Point (°F):	950
Type of Reagent:	Urea
Description:	
Chemical Formula of Reagent:	CO(NH2)2
Minimum Reagent Charge Rate (gpm):	
Maximum Reagent Charge Rate (gpm):	
Minimum Concentration of Reagent in Solution (% Volume):	32.5
Minimum NOx to Reagent Mole Ratio:	1
Maximum NOx to Reagent Mole Ratio:	1
Maximum Anticipated Ammonia Slip (ppm):	8
Type of Catalyst:	Urea
Volume of Catalyst (ft³):	18
Form of Catalyst:	Aqueous (urea salts dissolve in water)
Anticipated Life of Catalyst:	8000
Units:	hours
Have you attached a catalyst replacement schedule?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Method of Determining Breakthrough:	Monitoring of urea consumption and periodic emissions monitoring of NOx inlet and NOx outlet.
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD5 (Selective Catalytic Reduction)**  
**Print Date: 2/2/2023**

Comments:

Aqueous urea injected into exhaust stream. Each generator has own SCR system connected to one urea injection tank. Urea consumption rate 0.4-0.6 gal/hr.

21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD6 (Selective Catalytic Reduction)  
Print Date: 2/2/2023

Make:	
Manufacturer:	Safety Power
Model:	SP-ZCS-36-TBD-HSG-0
Minimum Temperature at Catalyst Bed (°F):	572
Maximum Temperature at Catalyst Bed (°F):	977
Minimum Temperature at Reagent Injection Point (°F):	540
Maximum Temperature at Reagent Injection Point (°F):	950
Type of Reagent:	Urea
Description:	
Chemical Formula of Reagent:	CO(NH <sub>2</sub> ) <sub>2</sub>
Minimum Reagent Charge Rate (gpm):	
Maximum Reagent Charge Rate (gpm):	
Minimum Concentration of Reagent in Solution (% Volume):	32.5
Minimum NO <sub>x</sub> to Reagent Mole Ratio:	1
Maximum NO <sub>x</sub> to Reagent Mole Ratio:	1
Maximum Anticipated Ammonia Slip (ppm):	8
Type of Catalyst:	Urea
Volume of Catalyst (ft <sup>3</sup> ):	18
Form of Catalyst:	Aqueous (urea salts dissolve in water)
Anticipated Life of Catalyst:	8000
Units:	hours
Have you attached a catalyst replacement schedule?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Method of Determining Breakthrough:	Monitoring of urea consumption and periodic emissions monitoring of NO <sub>x</sub> inlet and NO <sub>x</sub> outlet.
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD6 (Selective Catalytic Reduction)**  
**Print Date: 2/2/2023**

Comments:

Aqueous urea injected into exhaust stream. Each generator has own SCR system connected to one urea injection tank. Urea consumption rate 0.4-0.6 gal/hr.

21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD46 (Scrubber (Multi-Stage))  
Print Date: 2/2/2023

Make:	LO/PRO or Approved Equal
Manufacturer:	Siemens or approved equal
Model:	LP-4500 or equal
Number of Stages:	3
Is the Scrubber Used for Particulate Control?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Is the Scrubber Used for Gas Control?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Is the Scrubber Equipped with a Mist Eliminator?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Minimum Pump Discharge Pressure (in. H2O):	
Maximum Pump Discharge Pressure (in. H2O):	
Method of Monitoring Pump Discharge Pressure:	gauge
Minimum Pump Current (amps):	
Maximum Pump Current (amps):	
Method of Monitoring Pump Current:	Portable Meter
Minimum Scrubber Medium Inlet Pressure (in. H2O):	2.00
Minimum Operating Liquid Flow Rate (gpm):	172.50
Maximum Operating Liquid Flow Rate (gpm):	258.75
Method of Monitoring Liquid Flow Rate:	Pump Curve and Pressure Gauge
Minimum Operating Gas Flow Rate (acfm):	8,000.00
Maximum Operating Gas Flow Rate (acfm):	10,000.00
Method of Monitoring Gas Flow Rate:	Fan Curve and Pressure Gauge
Minimum Operating Pressure Drop (in. H2O):	6.00
Maximum Operating Pressure Drop (in. H2O):	9.00
Method of Monitoring Pressure Drop:	Differential Pressure Gauge
Relative Direction of the Gas-Liquid Flow:	Other
Description:	3 Stage Scrubber-counter and co-current
Maximum Inlet Gas Temperature (°F):	4.0
Maximum Outlet Gas Temperature (°F):	130.0
Inlet Particle Grain Loading (gr/dscf):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	4
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	Inspection by olfactory means
Have you attached data from recent performance testing?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	<input checked="" type="radio"/> Yes <input type="radio"/> No



21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD46 (Scrubber (Multi-Stage))  
Print Date: 2/2/2023

Comments:

This scrubber has greater air handling capacity than the activated carbon adsorption system it replaced.

21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD51 (Scrubber (Packed Tower))  
Print Date: 2/2/2023

Make:	Westates Carbon
Manufacturer:	Wheelabrator Clean Air Systems
Model:	108-PBS-10
Is the Scrubber Used for Particulate Control?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Is the Scrubber Used for Gas Control?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Is the Scrubber Equipped with a Mist Eliminator?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Minimum Pump Discharge Pressure (in. H2O):	
Maximum Pump Discharge Pressure (in. H2O):	
Method of Monitoring Pump Discharge Pressure:	
Minimum Pump Current (amps):	2.80
Maximum Pump Current (amps):	6.60
Method of Monitoring Pump Current:	None
Minimum Scrubber Medium Inlet Pressure (in. H2O):	
Minimum Operating Liquid Flow Rate (gpm):	100.00
Maximum Operating Liquid Flow Rate (gpm):	120.00
Method of Monitoring Liquid Flow Rate:	Magnetic Flow Meter/flow Switch
Minimum Operating Gas Flow Rate (acfm):	
Maximum Operating Gas Flow Rate (acfm):	7,000.00
Method of Monitoring Gas Flow Rate:	None
Minimum Operating Pressure Drop (in. H2O):	1.10
Maximum Operating Pressure Drop (in. H2O):	2.20
Method of Monitoring Pressure Drop:	Differential Pressure Transmitter/Indicator
Relative Direction of the Gas-Liquid Flow:	Counter-Current
Description:	
Height of Packed Section (ft):	10
Type of Packing Material:	Ceilcote No. 2 Type K Tellerette (polypropylene)
Size of Packing Material (in):	3.25
Tower Diameter (ft):	5.00
Total Tower Height (ft):	20.00
Maximum Operating Temperature of the Inlet Gas (°F):	100.0
Maximum Operating Temperature of the Exhaust Gas(°F):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	2
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	<input checked="" type="radio"/> Yes <input type="radio"/> No

21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD51 (Scrubber (Packed Tower))  
Print Date: 2/2/2023

Have you attached any  
manufacturer's data or specifications  
in support of the feasibility and/or  
effectiveness of this control  
apparatus?

☐ Yes ☒ No

Comments:

Tower is outfitted with chemical metering equipment  
to supply sodium hydroxide for pH adjustment and  
sodium hypochlorite for ORP adjustment.

21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD5501 (Scrubber (Multi-Stage))  
Print Date: 2/2/2023

Make:	Venturi Pak
Manufacturer:	Envirocare International
Model:	Venturi Plus 3-stage (Quench, Trays & Separator)
Number of Stages:	4
Is the Scrubber Used for Particulate Control?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Is the Scrubber Used for Gas Control?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Is the Scrubber Equipped with a Mist Eliminator?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Minimum Pump Discharge Pressure (in. H2O):	
Maximum Pump Discharge Pressure (in. H2O):	
Method of Monitoring Pump Discharge Pressure:	Pressure gauge
Minimum Pump Current (amps):	
Maximum Pump Current (amps):	
Method of Monitoring Pump Current:	Portable meter
Minimum Scrubber Medium Inlet Pressure (in. H2O):	54.00
Minimum Operating Liquid Flow Rate (gpm):	504.00
Maximum Operating Liquid Flow Rate (gpm):	580.00
Method of Monitoring Liquid Flow Rate:	flowmeters
Minimum Operating Gas Flow Rate (acfm):	14,300.00
Maximum Operating Gas Flow Rate (acfm):	24,200.00
Method of Monitoring Gas Flow Rate:	None
Minimum Operating Pressure Drop (in. H2O):	33.00
Maximum Operating Pressure Drop (in. H2O):	40.00
Method of Monitoring Pressure Drop:	Differential pressure meter
Relative Direction of the Gas-Liquid Flow:	Other
Description:	Venturi - co-current; trays - counter-current
Maximum Inlet Gas Temperature (°F):	1,100.0
Maximum Outlet Gas Temperature (°F):	105.0
Inlet Particle Grain Loading (gr/dscf):	10.00
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:	Stack test
Have you attached data from recent performance testing?	
<input type="radio"/> Yes <input checked="" type="radio"/> No	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	
<input type="radio"/> Yes <input checked="" type="radio"/> No	
Have you attached a diagram showing the location and/or configuration of this control apparatus?	
<input type="radio"/> Yes <input checked="" type="radio"/> No	

**21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD5501 (Scrubber (Multi-Stage))**

**Print Date: 2/2/2023**

Comments:

Minimum Pump Discharge Pressure (inch H<sub>2</sub>O) =  
1400" Venturi Throat / 6920" Venturi Inlet. Maximum  
Pump Discharge Pressure (inch H<sub>2</sub>O) = 4900"  
Venturi Inlet / 8850" Venturi Inlet.

21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD5502 (Electrostatic Precipitator)  
Print Date: 2/2/2023

Make:	Wet Electrostatic Precipitator
Manufacturer:	Envirocare International
Model:	Star WESP
Unit Type:	TB
Description:	
Number of Stages:	2
Method of Operation:	Dry
Method of Cleaning:	Wash Off
Description:	
Capacity (acfm):	7,120.0
Maximum Gas Velocity (ft/sec):	4
Type of Rectifier:	Solid State
Maximum Inlet Gas Stream Moisture (%):	12.00
Maximum Inlet Gas Stream Temperature (°F):	110.0
Number of Plates:	31
Number of Fields:	
Aspect Ratio:	
Plate Surface Area (ft²):	811.2
Spacing Between Plates (in):	
Cross Sectional Area of Precipitator (ft²):	67.0
Treatment Time (sec.):	2
Maximum Corona Power (Volt):	70,000.00
Minimum Apparent Migration Velocity (ft/min):	302.00
Maximum Particle Resistivity (ohm-cm):	
Average Particle Size (Micrometers):	0.70
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:	Stack test

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:

WESP is an upflow tube type with (31) 10" x 10" Star tubes. The maximum corona power is 25 KVA. The

21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD5502 (Electrostatic Precipitator)

Print Date: 2/2/2023

[backwash flowrate = 60 gpm.](#)

21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD5503 (Adsorber)  
Print Date: 2/2/2023

Make:	Kombisorbon
Manufacturer:	CPPE
Model:	
Adsorber Type:	FN
Description:	
Maximum Gas Flow Rate to Adsorber (acfm):	8000
Maximum Temperature of Vapor Stream to Adsorber (°F):	185
Minimum Temperature of Vapor Stream to Adsorber (°F):	105
Minimum Moisture Content of Vapor Stream to Adsorber (%):	2.6
Type of Adsorbant:	Sulfur impregnated granular active carbon
Bed Height:	17
Bed Length:	4.1
Bed Width:	12
Units:	Feet
Other Bed Dimension:	
Value:	
Units:	
Minimum Pressure Drop Across Adsorbant (in. H2O):	2
Maximum Pressure Drop Across Adsorber (in. H2O):	15
Total Weight of Adsorbant (lbs):	29450
Total Weight of Adsorbant When Saturated (lbs):	32700
Maximum Adsorbant Capacity (lbs Adsorbate/lbs Adsorbant):	0.1
Minimum Adsorbant Capacity (lbs Adsorbate/lbs Adsorbant):	0.05
Set-up Type:	Series
Method of Determining Breakthrough (check all that apply):	
Continuous Emissions Monitor (CEM):	<input type="checkbox"/>
Replacement By Weight:	<input type="checkbox"/>
Periodic Testing:	<input checked="" type="checkbox"/>
Sampling Frequency:	Annually
Sampling Device:	EPA M29
Other:	<input type="checkbox"/>
Description:	
Minimum Concentration at Breakthrough (ppmvd):	
Handling Method of Saturated Adsorbant:	Disposed of off-site
Method of Regeneration:	



21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD5503 (Adsorber)  
Print Date: 2/2/2023

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:

None

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:

The maximum pressure drop includes the gas  
preconditioning system to the adsorber.  
FN = Fixed, Non-regenerative. Dual Chamber setup.

## 21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD5601 (Scrubber (Multi-Stage))

Print Date: 2/2/2023

Make:	<input type="text" value="VenturiPak"/>
Manufacturer:	<input type="text" value="EnviroCare International"/>
Model:	<input type="text" value="multi-stage scrubber"/>
Number of Stages:	<input type="text" value=""/>
Is the Scrubber Used for Particulate Control?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Is the Scrubber Used for Gas Control?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Is the Scrubber Equipped with a Mist Eliminator?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Minimum Pump Discharge Pressure (in. H2O):	<input type="text" value=""/>
Maximum Pump Discharge Pressure (in. H2O):	<input type="text" value=""/>
Method of Monitoring Pump Discharge Pressure:	<input type="text" value=""/>
Minimum Pump Current (amps):	<input type="text" value=""/>
Maximum Pump Current (amps):	<input type="text" value=""/>
Method of Monitoring Pump Current:	<input type="text" value=""/>
Minimum Scrubber Medium Inlet Pressure (in. H2O):	<input type="text" value=""/>
Minimum Operating Liquid Flow Rate (gpm):	<input type="text" value=""/>
Maximum Operating Liquid Flow Rate (gpm):	<input type="text" value=""/>
Method of Monitoring Liquid Flow Rate:	<input type="text" value=""/>
Minimum Operating Gas Flow Rate (acfm):	<input type="text" value=""/>
Maximum Operating Gas Flow Rate (acfm):	<input type="text" value=""/>
Method of Monitoring Gas Flow Rate:	<input type="text" value=""/>
Minimum Operating Pressure Drop (in. H2O):	<input type="text" value=""/>
Maximum Operating Pressure Drop (in. H2O):	<input type="text" value=""/>
Method of Monitoring Pressure Drop:	<input type="text" value=""/>
Relative Direction of the Gas-Liquid Flow:	<input type="text" value=""/>
Description:	<input type="text" value=""/>
Maximum Inlet Gas Temperature (°F):	<input type="text" value=""/>
Maximum Outlet Gas Temperature (°F):	<input type="text" value=""/>
Inlet Particle Grain Loading (gr/dscf):	<input type="text" value=""/>
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	<input type="text" value="1"/>
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	<input type="text" value="TBD"/>
Have you attached data from recent performance testing?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	<input type="radio"/> Yes <input checked="" type="radio"/> No

21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD5601 (Scrubber (Multi-Stage))

Print Date: 2/2/2023

Comments:

The VenturiPak scrubber by EnviroCare has been used sucessfully on the NIRO incinerator at BRSA. We plan to use a similar unit on the Dorr Oliver incinerator to meet emission limits.

21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD5603 (Adsorber)  
Print Date: 2/2/2023

Make:	Sorbent Polymer Composite (SPC) Material
Manufacturer:	Envirocare International
Model:	Sorbent Polymer Composite (SPC) Material
Adsorber Type:	FN
Description:	
Maximum Gas Flow Rate to Adsorber (acfm):	
Maximum Temperature of Vapor Stream to Adsorber (°F):	
Minimum Temperature of Vapor Stream to Adsorber (°F):	
Minimum Moisture Content of Vapor Stream to Adsorber (%):	
Type of Adsorbant:	Mercury modules will be used to adsorb mercury. With this system mercury is adsorbed onto sulfur impregnated activated carbon sheets.
Bed Height:	
Bed Length:	
Bed Width:	
Units:	
Other Bed Dimension:	
Value:	
Units:	
Minimum Pressure Drop Across Adsorbant (in. H2O):	
Maximum Pressure Drop Across Adsorber (in. H2O):	
Total Weight of Adsorbant (lbs):	
Total Weight of Adsorbant When Saturated (lbs):	
Maximum Adsorbant Capacity (lbs Adsorbant/lbs Adsorbant):	
Minimum Adsorbant Capacity (lbs Adsorbant/lbs Adsorbant):	
Set-up Type:	
Method of Determining Breakthrough (check all that apply):	
Continuous Emissions Monitor (CEM):	<input type="checkbox"/>
Replacement By Weight:	<input type="checkbox"/>
Periodic Testing:	<input type="checkbox"/>
Sampling Frequency:	
Sampling Device:	
Other:	<input type="checkbox"/>
Description:	
Minimum Concentration at Breakthrough (ppmvd):	
Handling Method of Saturated Adsorbant:	Disposed of off-site
Method of Regeneration:	

21753 BAYSHORE RGNL SEWER AUTH BOP210008 CD5603 (Adsorber)  
Print Date: 2/2/2023

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:

TBD

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:

Mercury will be captured by sulfur impregnated  
activated carbon modules.

**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	EMG #1 Stack	Exhaust Stack for EMG #1	Round	14	12	175		68.0	880.0		0.0	15,400.0	Up	PS 48
PT2	EMG #2 Stack	Exhaust Stack for EMG #2	Round	14	12	275		68.0	880.0		0.0	15,400.0	Up	PS 54
PT3	EMG #3 Stack	Exhaust Stack for EMG #3	Round	14	12	200		68.0	792.0		0.0	5,247.0	Up	PS 53
PT4	NEG Stack 4	Exhaust Stack Storm EG #4	Round	14	35	150	904.0	867.0	977.0	10,058.0	7,473.0	12,320.0	Horizontal	
PT5	NEG Stack 5	Exhaust Stack Storm EG #5	Round	14	35	150	904.0	867.0	977.0	10,058.0	7,473.0	12,320.0	Horizontal	
PT6	NEG Stack 6	Exhaust Stack Storm EG #6	Round	14	35	150	904.0	867.0	977.0	10,058.0	7,473.0	12,320.0	Horizontal	
PT46	20057	Wet Scubber	Rectangle	30	17	240		40.0	130.0	9,000.0	8,000.0	10,000.0	Up	
PT51	Odor Control	Odor Control - 12	Round	12	29	250		50.0	100.0			7,000.0	Up	
PT55	Niro Stack	NIRO INCINERATOR - TR-1	Round	24	86	250	200.0	60.0	260.0	6,500.0	5,000.0	7,500.0	Up	
PT142	D-O Stack	Dorr-Oliver Incinerator Exhaust Stack	Round	24	87	275	120.0	60.0	140.0	5,600.0	4,600.0	6,950.0	Up	

**BAYSHORE RGNL SEWER AUTH (21753)**  
**BOP210008**

Date: 3/29/2023

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

**U 1 EMG #1,2 & 3 Three Emergency Generators - Two 17.0 MMBTU/hr and One 10.5 MMBTU/hr Firing Diesel Fuel**

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	EMG #1	Emergency Generator #1 17.0 MMBTU/hr	Normal - Steady State	E1		PT1	2-02-001-02	0.0	100.0	A	0.0	15,400.0	68.0	800.0
OS2	EMG #2	Emergency Generator #2 17.0 MMBTU/hr	Normal - Steady State	E2		PT2	2-02-001-02	0.0	100.0	A	0.0	15,400.0	68.0	800.0
OS3	EMG #3	Emergency Generator #3 10.5 MMBTU/hr	Normal - Steady State	E3		PT3	2-02-001-02	0.0	100.0	A	0.0	5,247.0	68.0	792.0

**U 4 EG #4,#5, #6 Three 1500 kW NG Storm Generators #4, #5, #6 Storm Anticipation/Demand Response/Testing & Maintenance/Emergency**

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	EG4 Storm/De	EG #4 Storm Preparation and Demand Response	Normal - Steady State	E4	CD4 (P)	PT4	2-02-002-02	0.0	427.0		7,473.0	12,320.0	867.0	977.0
OS2	EG4 Test/Mai	EG #4 Normal Testing and Maintenance	Maintenance	E4	CD4 (P)	PT4	2-02-002-02	0.0	100.0		7,473.0	12,320.0	867.0	977.0
OS3	EG5 Storm/De	EG #5 Storm Preparation and Demand Response	Normal - Steady State	E5	CD5 (P)	PT5	2-02-002-02	0.0	427.0		7,473.0	12,320.0	867.0	977.0
OS4	EG5 Test/Mai	EG #5 Normal Testing and Maintenance	Maintenance	E5	CD5 (P)	PT5	2-02-002-02	0.0	100.0		7,473.0	12,320.0	867.0	977.0
OS5	EG6 Storm/De	EG #6 Storm Preparation and Demand Response	Normal - Steady State	E6	CD6 (P)	PT6	2-02-002-02	0.0	427.0		7,473.0	12,320.0	867.0	977.0

**BAYSHORE RGNL SEWER AUTH (21753)**  
**BOP210008**

Date: 3/29/2023

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

**U 4 EG #4,#5, #6 Three 1500 kW NG Storm Generators #4, #5, #6 Storm Anticipation/Demand Response/Testing & Maintenance/Emergency**

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.
OS6	EG6 Test/Mai	EG #6 Normal Testing and Maintenance	Maintenance	E6	CD6 (P)	PT6	2-02-002-02	0.0	100.0		7,473.0	12,320.0	867.0	977.0

**U 42 Niro Niro Fluidized Bed Incinerator**

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	Niro w CA	Niro Fluidized Bed Incinerator - Emissions controlled by Scrubber (CD5501), WESP (CD5502) & Mercury GAC Adsorber (CD5503)	Normal - Steady State	E5501	CD5501 (P) CD5502 (S) CD5503 (T)	PT55	5-01-005-16	0.0	8,760.0	A	5,000.0	7,500.0	60.0	260.0



**BAYSHORE RGNL SEWER AUTH (21753)**  
**BOP210008**

Date: 3/29/2023

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

**U 43 Dorr Oliver Dorr Oliver Fluidized Bed Incinerator**

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	D-O	Dorr Oliver Fluidized Bed Incinerator - Emissions controlled by Scrubber (CD5601), SPC Module (CD5603)	Normal - Steady State	E4201	CD5601 (P) CD5603 (S)	PT142	5-01-005-16	0.0	8,760.0		4,600.0	6,500.0	60.0	140.0

**U 45 Sludge Conc Sludge Concentration Tanks**

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	SCT1	Sanitary Sewage Sludge Concentration Tank-1	Normal - Steady State	E4501	CD46 (P)	PT46	5-01-007-99		8,760.0	A	0.0	2,500.0	40.0	130.0
OS2	SCT2	Sanitary Sewage Sludge Concentration Tank-2	Normal - Steady State	E4502	CD46 (P)	PT46	5-01-007-99		8,760.0	A	0.0	2,500.0	40.0	130.0
OS3	SCT3	Sanitary Sewage Sludge Concentration Tank-3	Normal - Steady State	E4503	CD46 (P)	PT46	5-01-007-99		8,760.0	A	0.0	2,500.0	40.0	130.0
OS4	SCT4	Sanitary Sewage Sludge Concentration Tank-4	Normal - Steady State	E4504	CD46 (P)	PT46	5-01-007-99		8,760.0	A	0.0	2,500.0	40.0	130.0

**BAYSHORE RGNL SEWER AUTH (21753)**  
**BOP210008**

Date: 3/29/2023

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

**U 51 Dewater Rm Belt Presses in Sludge Dewatering Room**

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	Belt Press 3	Belt Press 3 Sludge Dewatering Room	Normal - Steady State	E5101	CD51 (P)	PT51	5-01-007-91	0.0	8,760.0		0.0	7,000.0	40.0	100.0
OS2	Belt Press 4	Belt Press 4 Sludge Dewatering Room	Normal - Steady State	E5102	CD51 (P)	PT51	5-01-007-91	0.0	8,760.0		0.0	7,000.0	40.0	100.0