

# 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

SHAWN M. LATOURETTE Commissioner

#### Air Pollution Control Operating Permit Significant Modification

#### Permit Activity Number: BOP220001

#### Program Interest Number: 73258

Mailing Address	Plant Location
THOMAS J LAROCCO PE	CAPE MAY CNTY MUA SANITARY LANDFILL
CHIEF ENG	Rt 610 & Rt 550
CAPE MAY CNTY MUA	Woodbine
1523 RT 9	Cape May County
Cape May Court House, NJ 08210	

**Initial Operating Permit Approval Date:** 

**Operating Permit Approval Date:** 

**Operating Permit Expiration Date:** 

December 7, 2004 PROPOSED PERMIT

December 16, 2019 (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.

PHILIP D. MURPHY Governor

TAHESHA L. WAY Lt. Governor

#### **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: <u>https://dep.nj.gov/boss</u>. 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 <u>https://dep.nj.gov/boss</u>.

#### <u>HELPLINE</u>

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: <u>https://www.epa.gov/air-emissions-monitoring-knowledge-base/compliance-assurance-monitoring</u>. 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 <u>NJ04 - Administrative Hearing Request Checklist and Tracking Form</u> available at <u>https://dep.nj.gov/wp-content/uploads/boss/applications-and-forms/administrative-hearing-request-checklist-and-tracking-form.pdf</u>.

If you have any questions regarding this permit approval, please call Ted Chleboski at (609) 777-0129.

Approved by: Joel Leon

Enclosure

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

### Facility Name: CAPE MAY CNTY MUA SANITARY LANDFILL Program Interest Number: 73258 Permit Activity Number: BOP220001

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#### Section A

#### Facility Name: CAPE MAY CNTY MUA SANITARY LANDFILL Program Interest Number: 73258 Permit Activity Number: BOP220001

#### POLLUTANT EMISSIONS SUMMARY

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

F	Facility's Potential Emissions from all Significant Source Operations (tons per year)									
Source Categories	VOC (total)	NO <sub>x</sub>	СО	$SO_2$	TSP (total)	PM <sub>10</sub> (total)	PM <sub>2.5</sub> <sup>2</sup> (total)	Pb	HAPs* (total)	$\rm CO_2 e^3$
Emission Units Summary	16.0	10.2	34.0	6.15	11.1	6.68	0.39	NA	4.75	
Batch Process Summary	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Group Summary	6.50	24.2	140	60.7	12.6	8.2	NA	NA	NA	
Total Emissions	22.5	34.4	174	66.8	23.7	14.9	0.39	NA	4.75	89,365

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>	СО	$SO_2$	TSP (total)	PM <sub>10</sub> (total)	PM <sub>2.5</sub> <sup>2</sup> (total)	Pb	HAPs (total)
Insignificant Source Operations	0.231	1.94	0.644	2.69	0.561	0.278	NA	NA	NA
Non-Source Fugitive Emissions	NA	NA	NA	NA	NA	NA	NA	NA	NA

VOC: Volatile Organic CompoundsTNOx: Nitrogen OxidesOCO: Carbon MonoxidereSO2: Sulfur DioxidePN/A: Indicates the pollutant is not emitted

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

 $CO_2e$ : Carbon Dioxide equivalent

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

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

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

#### Section A

#### Facility Name: CAPE MAY CNTY MUA SANITARY LANDFILL Program Interest Number: 73258 Permit Activity Number: BOP220001

#### POLLUTANT EMISSIONS SUMMARY

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

НАР	TPY
Acrolein	0.42
Benzene	0.005
Formaldehyde	4.34
Hydrogen Chloride	0.25

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

Other Air Contaminant	TPY
Hydrogen Sulfide	34.7
Methane	4,580

<sup>&</sup>lt;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: CAPE MAY CNTY MUA SANITARY LANDFILL Program Interest Number: 73258 Permit Activity Number: BOP220001

#### **GENERAL PROVISIONS AND AUTHORITIES**

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

- 6. The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this operating permit; or to determine compliance with the operating permit. [N.J.A.C. 7:27-22.16(g)4]
- 7. The filing of an application for a modification of an operating permit, or of a notice of planned changes or anticipated non-compliance, does not stay any operating permit condition. [N.J.A.C. 7:27-22.16(g)5]
- 8. The operating permit does not convey any property rights of any sort, or any exclusive privilege. [N.J.A.C. 7:27-22.16(g)6]
- 9. Upon request, the permittee shall furnish to the Department copies of records required by the operating permit to be kept. [N.J.A.C. 7:27-22.16(g)7]
- 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(1)]
- 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 <u>https://dep.nj.gov/boss/applications-and-forms/</u> (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: <u>https://njdeponline.com/</u>. 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. 7:27-22.18(k) and N.J.A.C. 7:27-22.19]

#### Section C

### Facility Name: CAPE MAY CNTY MUA SANITARY LANDFILL Program Interest Number: 73258 Permit Activity Number: BOP220001

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

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

#### STATE-ONLY APPLICABLE REQUIREMENTS

The following applicable requirements are not federally enforceable:

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

#### Section D

### Facility Name: CAPE MAY CNTY MUA SANITARY LANDFILL Program Interest Number: 73258 Permit Activity Number: BOP220001

### FACILITY SPECIFIC REQUIREMENTS AND INVENTORIES

### FACILITY SPECIFIC REQUIREMENTS PAGE INDEX

### **Subject Item and Name**

### Page Number

1

#### Facility (FC):

FC

#### **Insignificant Sources (IS):**

IS NJID	IS Description	
IS1	MAINTENANCE BUILDING DIESEL FUEL TANK; 6000 gallons	7
IS2	MAINTENANCE BUILDING FURNACE; < 1 MMBtu/hr	8
IS3	MAINTENANCE BUILDING HEATING OIL (No. 2 oil) TANK; 1000 gallons	7
IS4	MAINTENANCE BUILDING GASOLINE TANK; 500 gallons	9
IS6	"Retec" Screening Plant (80 HP Engine) <= 1 MMBTU/hr Manuf'd 2000 SN	10
	216008 John Deere Model 4.5 L Powerteck	
IS7	"Power Screen" Screening Plant (100 HP Engine) <= 1 MMBTU/hr Manuf'd	12
	2004 SN 12101036 Deutz Model T04039T Diesel	
IS8	Radial Stacking Conveyor (powered by IS9 Generator)	14
IS9	Diesel Generator (19.2 KW) <= 1 MMBTU/hr Heat Input - Manuf'd 1995 SN	15
	WA4038-5 Kubota Model GV-3240-60-B	
IS10	Snap-On Tools parts cleaner, < 2 gal solvent, or < 5 wt% VOC	16
IS11	9 HP Tier4 Tub Grinder Auxilary Diesel Engine	20

#### Groups (GR):

GR NJID	<b>GR</b> Designation	GR Description	
GR1	U8 & U4 Comb	Emission Cap for Engines (U8) and Landfill Flares (U4)	22
GR2	U5 & U7	Emission Cap for Tubgrinders U5 & U7	23

#### Emission Units (U):

U NJID	<b>U</b> Designation	U Description	
U1	Leach. Tanks	Two Leachate Storage Tanks 700,000 Gallons each	24
U4	Landfill	Landfill Operations	25
U5	Grinder	Mobile wood grinder powered by 860 HP diesel	28
		engine	
U6	EG-1,2,&3	150 KW Electrical Generators (RICE-driven),	44
		controlled by H2S Scrubber, CD601	
U7	Tub Grinder	Mobile Tub Wood Grinder Powered by a 1050 HP	51
		Diesel Engine (E407)	
U8	EG-4,5,&6	Electrical Generators No. 4, 5, and 6	59

U11	Generator	(EG-003-2) Emerg. Gen., 150 kW	71
U12	Wood Grinder	Wood Tub Grinder Powered by a 1,000 HP Diesel	79
		Engine	

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

#### **Permit Being Modified**

Permit Class: BOP Number: 150001

**Description** This Permit Modification includes the following:

#### of Modifications:

Emission Unit U12 ) Add a new wood tub grinder operation as Emission Unit (U12). The tub grinder operation includes a grinder (E411), an 1,000 HP EPA Tier 4 diesel fired engine (E412), and a conveyor (E413). ) Add insignificant source auxiliary engine (IS11) as supplemental equipment to the U12 Tub grinder.

Emission Unit U11 ) Add Emission Unit U11: 1.55 MMBtu/hr Emergency Generator (E11) from BOP210001 (GOP-003). ) Increase the hours of operation for testing and maintenance to 100 hours/year.

) Update the FC Section.

The change in facility-wide annual emissions (tpy) are increases as follows: +0.243 tpy VOC, +4.55 tpy NOx, +4.6 tpy CO, +1.26 tpy TSP, +0.53 tpy PM-10, +0.39 tpy, PM-2.5, 0.0005 tpy Acrolein, +0.005 tpy Benzene, and +0.00664 tpy Formaldehyde . There are no other changes to facility wide emissions.

# 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.

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

# New Jersey Department of Environmental Protection

# Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	<b>Recordkeeping Requirement</b>	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]

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

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.

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

### New Jersey Department of Environmental Protection

### Facility Specific Requirements

Subject Item:

IS1 MAINTENANCE BUILDING DIESEL FUEL TANK; 6000 gallons, IS3 MAINTENANCE BUILDING HEATING OIL (No. 2 oil) TANK; 1000 gallons

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Sulfur Content in Fuel <= 500 ppmw (0.05% by weight). Effective July 1, 2014 through June 30, 2016. [N.J.A.C. 7:27- 9.2(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(0)]	None.
2	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [N.J.A.C. 7:27-9.2(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(0)]	None.
3	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27-9.2(a)]	None.	None.	None.

# New Jersey Department of Environmental Protection

Facility Specific Requirements

Subject Item: IS2 MAINTENANCE BUILDING FURNACE; < 1 MMBtu/hr

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity: No visible emissions, exclusive of condensed water vapor, except for a period of not longer than three (3) minutes in any consecutive 30-minute period. [N.J.A.C. 7:27- 3.2]	None.	None.	None.
2	Sulfur Content in Fuel <= 500 ppmw (0.05% by weight). Effective July 1, 2014 through June 30, 2016. [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(0)]	None.
3	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [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(0)]	None.
4	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27-9.2(b)]	None.	None.	None.
5	Fuel limited to No. 2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

# New Jersey Department of Environmental Protection

**Facility Specific Requirements** 

Subject Item: IS4 MAINTENANCE BUILDING GASOLINE TANK; 500 gallons

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No additional applicable requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

### New Jersey Department of Environmental Protection

### Facility Specific Requirements

Subject Item:

IS6 "Retec" Screening Plant (80 HP Engine) <= 1 MMBTU/hr Manuf'd 2000 SN 216008 John Deere Model 4.5 L Powerteck

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Smoke emissions from stationary internal combustion engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
2	Sulfur Content in Fuel <= 500 ppmw (0.05% by weight). Effective July 1, 2014 through June 30, 2016. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
3	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [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	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27-9.2(b)]	None.	None.	None.
5	Fuel limited to diesel or No. 2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Opacity: Exhaust opacity from compression-ignition nonroad engines for which this subpart is applicable must not exceed: (1) 20 percent during the acceleration mode; (2) 15 percent during the lugging mode; and (3) 50 percent during the peaks in either the acceleration or lugging modes. [40 CFR 89.113 (a)] & [N.J.A.C. 7:27-22.16(a)]	Other: Opacity levels are to be measured and calculated as set forth in 40 CFR part 86, subpart I.[N.J.A.C. 7:27-22.16(o)].	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	The owner or operator shall ensure that the manufacturer has affixed a permanent and legible label, located so as to be readily visible to the average person, identifying the nonroad engine showing a unique engine identification number. {40 CFR 89.110(a) & (d)] & [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

### New Jersey Department of Environmental Protection

### Facility Specific Requirements

Subject Item:

IS7 "Power Screen" Screening Plant (100 HP Engine) <= 1 MMBTU/hr Manuf'd 2004 SN 12101036 Deutz Model T04039T Diesel

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Smoke emissions from stationary internal combustion engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
2	Sulfur Content in Fuel <= 500 ppmw (0.05% by weight). Effective July 1, 2014 through June 30, 2016. [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(0)]	None.
3	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [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	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27-9.2(b)]	None.	None.	None.
5	Fuel limited to diesel or No. 2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Opacity: Exhaust opacity from compression-ignition nonroad engines for which this subpart is applicable must not exceed: (1) 20 percent during the acceleration mode; (2) 15 percent during the lugging mode; and (3) 50 percent during the peaks in either the acceleration or lugging modes. [40 CFR 89.113 (a)] & [N.J.A.C. 7:27-22.16(a)]	Other: Opacity levels are to be measured and calculated as set forth in 40 CFR part 86, subpart I.[N.J.A.C. 7:27-22.16(o)].	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	The owner or operator shall ensure that the manufacturer has affixed a permanent and legible label, located so as to be readily visible to the average person, identifying the nonroad engine showing a unique engine identification number. {40 CFR 89.110(a) & (d)] & [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Subject Item:IS8 Radial Stacking Conveyor (powered by IS9 Generator)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No additional applicable requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

# New Jersey Department of Environmental Protection

### Facility Specific Requirements

Subject Item:

IS9 Diesel Generator (19.2 KW) <= 1 MMBTU/hr Heat Input - Manuf'd 1995 SN WA4038-5 Kubota Model GV-3240-60-B

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Smoke emissions from stationary internal combustion engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
2	Sulfur Content in Fuel <= 500 ppmw (0.05% by weight). Effective July 1, 2014 through June 30, 2016. [N.J.A.C. 7:27- 9.2(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
3	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [N.J.A.C. 7:27-9.2(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
4	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27- 9.2(a)]	None.	None.	None.
5	Fuel limited to diesel or No. 2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Any diesel engine must be certified to meet currently in effect USEPA non-road emission tier standards. Emission certification procedures shall comply with 40 CFR 89.102(a)(2), or 40 CFR 1039, subpart C, whichever is applicable. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Subject Item: IS10 Snap-On Tools parts cleaner, < 2 gal solvent, or < 5 wt% VOC

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	This machine shall conform to the definition of a "Remote reservoir cold cleaning machine" meaning a cold cleaning machine in which liquid solvent is pumped into a sink-like work area where the cleaning of parts occurs, and from which the solvent is immediately drained back into an enclosed container or reservoir, so that no solvent is allowed to pool in the work area. [N.J.A.C. 7:27-16.1]	None.	None.	None.
2	The machine shall be equipped with a perforated drain with a diameter of not more than six inches which drains directly into the solvent storage reservoir. [N.J.A.C. 7:27-16.6(j)1iii]	None.	None.	None.
3	The solvent used in this machine shall have a vapor pressure of <0.5 mm Hg @ 68 F. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by invoices / bills of lading / certificate of analysis per change of material. [N.J.A.C. 7:27-22.16(0)]	None.
4	Each solvent cleaning machine shall meet requirements listed in N.J.A.C. 7:27-16.6(j) at a minimum. [N.J.A.C. 7:27-16.6(j)]	None.	None.	Submit a report: Upon occurrence of event. The Permittee shall report any non-compliance within three working days after the event in writing to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(o)]
5	Each cold and heated cleaning machine shall be equipped with the following: 1. A visible fill line; 2. A visible high level liquid mark. [N.J.A.C. 7:27-16.6(j)1i]	None.	None.	None.
6	The owner or operator of each cleaning machine shall have a permanent, conspicuous label placed in a prominent location on the machine listing applicable requirements below. [N.J.A.C. 7:27-16.6(j)1ii]	None.	None.	Submit a report: Upon occurrence of event. The Permittee shall report any non-compliance within three working days after the event in writing to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(o)]

# New Jersey Department of Environmental Protection

Facility	Specific	Requirements	
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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Each cleaning machine shall be fully enclosed, a tightly fitting working-mode cover that shall be kept closed at all times except when parts are placed into or being removed from the machine or when solvent is being added or removed. The cover shall: 1. Completely cover the machine's opening; 2. Be free of cracks, holes and other defects; and 3. If the machine is a batch or in-line vapor-cleaning machine it must be able to be readily opened or closed without disturbing the vapor zone. If the opening is > 10 square feet, the cover shall be opened and closed by a powered mechanism. [N.J.A.C. 7:27-16.6(j)1iii]	Monitored by visual determination each month during operation. Each month during operation the permittee shall conduct a visual inspection to determine if the cover is opening and closing properly, completely covers the machine openings when closed, and is free of cracks, holes, and other defects. [N.J.A.C. 7:27-22.16(o)]	None.	None.
8	The solvent level in the machine: 1. Shall not exceed the fill line when there are no parts in the machine for cleaning and 2. Shall not exceed the high level liquid mark during cleaning operations. [N.J.A.C. 7:27-16.6(j)2]	Other: The Permittee shall monitor solvent level whenever solvent is added or when parts are placed in the machine for cleaning.[N.J.A.C. 7:27-22.16(o)].	None.	None.
9	Flushing or spraying of parts with a solvent spray, using a spray head attached to a flexible hose or other flushing device, shall be performed within the following areas: 1. The freeboard area of the machine (cold or heated cleaning machines). 2. The vapor zone or within a section of the machine that is not exposed to ambient air (batch or in-line vapor cleaning machines). The solvent spray shall be a continuous fluid stream, not an atomized or shower spray, and shall be under a pressure that does not exceed 10 pounds per square inch gauge (Psig). [N.J.A.C. 7:27-16.6(j)2]	None.	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	Parts being cleaned shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be rotated while the part is draining. During the draining, tipping or rotating, the parts shall be positioned so that solvent drains directly back into the machine. [N.J.A.C. 7:27-16.6(j)2]	None.	None.	None.
11	Spills during solvent transfer and use of the machine shall be cleaned up immediately or the machine shall be shut down. Wipe rags or other sorbent material shall be immediately stored in covered containers with tightly fitting lids for disposal or recycling. [N.J.A.C. 7:27-16.6(j)2]	None.	None.	None.
12	Waste solvent, still bottoms and sump bottoms shall be collected and stored in closed containers with tightly fitting lids. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container. [N.J.A.C. 7:27-16.6(j)2]	None.	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	The solvent used in this cleaning machine shall have a vapor pressure less than 1 millimeter of mercury, measured at 20 degrees Centigrade (68 degrees Fahrenheit). [N.J.A.C. 7:27-16.6(j)3]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The permittee shall maintain, on-site, for not less than two years, after the date of purchase of solvent for use in the machine, the following information: (1) The name and address of the person selling the solvent. An invoice, bill of sale or a certificate that corresponds to a number of sales, if it has the seller's name and address on it, may be used to satisfy this requirement; (2) A list of VOC(s) and their concentration in the solvent; (3) Information about each VOC listed in (2) above. A Material Safety Data Sheet (MSDS) may be used to satisfy this requirement; (4) The solvents product number assigned by the manufacturer; and (5) The vapor pressure of the solvent measured in millimeters of mercury at 20 degrees Centigrade (68 degrees Fahrenheit). The Permittee shall provide this information to the Department upon request of the Department or its representative. . [N.J.A.C. 7:27-16.6(j)4]	None.
14	The machine shall be maintained as recommended by the manufacturer of the equipment. [N.J.A.C. 7:27-16.6]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The Permittee shall maintain the manufacturer's recommended maintenance instructions and a record of any maintenance performed on each machine. Records shall be maintained onsite in either a logbook or computer data system or readily accessible computer memory for a minimum of five (5) years. [N.J.A.C. 7:27-22.16(o)]	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Subject Item: IS11 9 HP Tier4 Tub Grinder Auxilary Diesel Engine

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Applicable Federal Requirements:	None.	None.	None.
	40 CFR 60 Subpart IIII [40 CFR Federal Rules Summary]			
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]	Opacity: Monitored by visual determination each month during operation. [N.J.A.C. 7:27-22.16(a)]	Opacity: 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.
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(0)]	None.
4	NOx + NMHC <= 5.60 g/HP-hr, CO <= 6.0 g/HP-hr, PM <= 0.03 g/HP-hr. [40 CFR 60.4204]	None.	Other: The permittee must keep manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power.[40 CFR 60.4211].	None.
5	The permitte shall use diesel fuel that contains the following per gallon standards: 15 ppm (0.0015 percent) maximum sulfur content and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. [40 CFR 60.4207(b)]	None.	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	The owner or operator that must comply with the emission standards specified in NSPS IIII must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. The owner or operator must also meet the requirements of 40 CFR parts 89, 94 and/or 1068 (General Compliance Provisions), as applicable. [40 CFR 60.4211(a)]	None.	Other: The owner or operator shall keep the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. [40 CFR 60.4211(a)].	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Subject Item: GR1 Emission Cap for Engines (U8) and Landfill Flares (U4)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	VOC (Total) <= 6.44 tons/yr from 2 flares (U4) and engines (U8). Maximum emission limit based on maximum permitted LFG usage. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations annually. Calculation of annual emissions shall be based on total gas generation, collection system efficiency and volume remaining after co-disposal or beneficial use. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. Record results of calculations. [N.J.A.C. 7:27-22.16(o)]	None.
2	NOx (Total) <= 19.3 tons/yr from 2 flares (U4) and engines (U8). Maximum emission limit based on maximum LFG usage. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	CO <= 139 tons/yr from 2 flares (U4) and engines (U8). Maximum emission limit based on maximum LFG usage. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	SO2 <= 60.3 tons/yr (the limit for untreated LFG to flares in U4). Maximum emission limit based on maximum LFG usage. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	TSP <= 9.32 tons/yr from 2 flares (U4) and engines (U8). Maximum emission limit based on maximum LFG usage. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations annually. Calculation of annual emissions shall be based on total gas generation, collection system efficiency and volume remaining after co-disposal or beneficial use. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. Record results of calculations. [N.J.A.C. 7:27-22.16(o)]	None.
6	PM-10 (Total) <= 6.6 tons/yr from 2 flares (U4) and engines (U8). Maximum emission limit based on maximum LFG usage. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations annually. Calculation of annual emissions shall be based on total gas generation, collection system efficiency and volume remaining after co-disposal or beneficial use. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
7	Other Gaseous Fuel Usage <= 1,000 SCFM daily average of Landfill Gas. At no time will the 2 flares, CD101 & CD102 (U4) and engines (U8) operate to burn more than a combined total daily average of 1000 scfm of landfill gas. [N.J.A.C. 7:27-22.16(a)]	Other Gaseous Fuel Usage: Monitored by fuel flow/firing rate instrument continuously, based on a daily average. [N.J.A.C. 7:27-22.16(o)]	Other Gaseous Fuel Usage: Recordkeeping by manual logging of parameter or storing data in a computer data system daily. [N.J.A.C. 7:27-22.16(o)]	None.

GR1 Emission Cap for Engines (U8) and Landfill Flares (U4)

# New Jersey Department of Environmental Protection Facility Specific Requirements

Subject Item: GR2 Emission Cap for Tubgrinders U5 & U7

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 4.91 tons/yr. Total combined emissions based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	CO <= 0.51 tons/yr. Total combined emissions based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
3	SO2 <= 0.39 tons/yr. Total combined emissions based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	TSP <= 3.29 tons/yr. Total combined emissions based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	PM-10 (Total) <= 1.61 tons/yr. Total combined emissions based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit: U1 Two Leachate Storage Tanks 700,000 Gallons each

**Operating Scenario: OS Summary** 

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	VOC (Total) <= 4.8 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	VOC (Total) <= 1.09 lb/hr. Maximum VOC emission rate. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	VOC (Total) <= 7.46 ppmvd. Maximum concentration of VOC in leachate. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by wastewater sampling each month during operation, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
4	All HAPs are below reporting thresholds specified in N.J.A.C. 7:27-22 Appendix, Table B. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Odor <= 5 D/T at nearest receptor. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
6	Tank contents limited to landfill leachate. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	Maximum total flow through both tanks combined. Total Material Transferred <= 40 MMgal/yr. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring continuously. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: 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(0)]	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit:	U4 Landfill Operations
<b>Operating Scenario:</b>	OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	STACK TESTING SUMMARY The permittee shall conduct a stack test as required in OS1 using an approved protocol to demonstrate compliance with emission limits for NOx, CO, methane, THC and NMOC emission limits and with minimum DRE as specified in the compliance plan for OS1. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]	Other: Monitoring as required under the applicable operating scenario(s). If the facility requires and uses CD101 for more than 5000 hours during any calendar year, the facility shall conduct stack tests to demonstrate DRE compliance within 90 days from the date the hour limit was exceeded.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Bureau of Technical Services (BTS) at Mail Code: 380-01A, 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 BTS. The ERT program can be downloaded at: http://www.epa.gov/ttnchie1/ert. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. A full stack test report must be submitted to BTS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and . [N.J.A.C. 7:27-22.18(h)]
2	Design Capacity <= 21.3 other units (million megagrams.) Total design capacity of the landfill. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

# New Jersey Department of Environmental Protection

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	The Permittee shall sample and analyze the collected landfill gas for Hazardous Air Pollutants (HAPs) and Methane and Hydrogen Sulfide (H2S). [N.J.A.C. 7:27-22.16(a)]	Monitored by gas sampling annually, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	Submit a report: As per the approved schedule (within 90 days after completion.) The report shall be submitted to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(o)]
4	VOC (Total) <= 1.1 tons/yr. Annual emission limit for 2 flares based on combined LFG combustion limit (See GR1) and not including VOCs emitted as uncollected fugitive emissions. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations annually. Annual emission limits shall be based on total gas generation, collection system efficiency and volume remaining after co-disposal or beneficial use. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. Record results of calculations. [N.J.A.C. 7:27-22.16(o)]	None.
5	VOC (Total) <= 11 tons/yr. Annual emission limit of VOCs in uncollected fugitive emissions from the Landfill. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Methane <= 4,583 tons/yr. Annual emission limit including uncollected fugitive emissions. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	NOx (Total) <= 8.8 tons/yr. Annual emission limit for 2 flares based on combined LFG combustion limit (See GR1). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	CO <= 75.1 tons/yr. Annual emission limit for 2 flares based on combined LFG combustion limit (See GR1). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	SO2 <= 60.3 tons/yr. Annual emission limit is based on maximum LFG flared per year (See GR1). [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations annually. Annual emission limits shall be based on total gas generation, collection system efficiency and volume remaining after co-disposal or beneficial use. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. Record results of calculations. [N.J.A.C. 7:27-22.16(o)]	None.
10	TSP <= 4.1 tons/yr. Annual emission limit for 2 flares based on combined LFG combustion limit (See GR1). [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations annually. Annual emission limits shall be based on total gas generation, collection system efficiency and volume remaining after co-disposal or beneficial use. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. Record results of calculations. [N.J.A.C. 7:27-22.16(o)]	None.

# New Jersey Department of Environmental Protection

Ref.#	Applicable Requirement	Monitoring Requirement	<b>Recordkeeping Requirement</b>	Submittal/Action Requirement
11	PM-10 (Total) <= 4.1 tons/yr. Annual emission limit for 2 flares based on combined LFG combustion limit (See GR1). [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations annually. Annual emission limits shall be based on total gas generation, collection system efficiency and volume remaining after co-disposal or beneficial use. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
12	HAPs: Any individual hazardous air pollutant emissions, not specifically listed in this permit, are below the reporting thresholds listed in N.J.A.C. 7:27-22. [N.J.A.C. 7:27-22.16(a)]	HAPs: Monitored by calculations annually. Annual emission limits shall be based on total gas generation, collection system efficiency and volume remaining after co-disposal or beneficial use. [N.J.A.C. 7:27-22.16(o)]	HAPs: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. Record results of calculations. [N.J.A.C. 7:27-22.16(o)]	None.
13	Hydrogen chloride <= 0.25 tons/yr . [N.J.A.C. 7:27-22.16(a)]	Hydrogen chloride: Monitored by calculations annually. Annual emission limits shall be based on total gas generation, collection system efficiency and volume remaining after co-disposal or beneficial use. [N.J.A.C. 7:27-22.16(o)]	Hydrogen chloride: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. Record results of calculations. [N.J.A.C. 7:27-22.16(o)]	None.
14	Hydrogen sulfide <= 34 tons/yr . [N.J.A.C. 7:27-22.16(a)]	Hydrogen sulfide: Monitored by calculations annually. Annual emission limits shall be based on total gas generation, collection system efficiency and volume remaining after co-disposal or beneficial use. [N.J.A.C. 7:27-22.16(o)]	Hydrogen sulfide: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. Record results of calculations. [N.J.A.C. 7:27-22.16(o)]	None.
15	Waste gases from the sulfur removal process shall be controlled by an enclosed flare or other combustion device and not released into the atmosphere directly. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Maintain records of occasions of waste gas flow to flare or other device. [N.J.A.C. 7:27-22.16(o)]	None.
16	See GR1 for emission cap for U4 & U8. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
17	If the facility becomes subject to federal regulations (see below), the owner or operator shall comply, as applicable, with the standards required in 40 CFR 60 Subpart A. [40 CFR 60]	Other: The owner or operator shall comply, as applicable, with the monitoring requirements as required in 40 CFR 60 Subpart A.[40 CFR 60].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall comply, as applicable, with the recordkeeping requirements as required in 40 CFR 60 Subpart A. [40 CFR 60]	Demonstrate compliance: Upon occurrence of event. The owner or operator shall comply, as applicable, with the submittal/action requirements as required in 40 CFR 60 Subpart A. The owner or operator shall submit all required reports to the EPA and NJDEP Regional Enforcement Office. [40 CFR 60]

# New Jersey Department of Environmental Protection

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	The owner or operator shall recalculate the NMOC emission rate annually using the procedures specified in 40 CFR 60.754(a)(1) until such a time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed. If the NMOC emission rate, upon recalculation required in 40 CFR 60.752(b), is equal to or greater than 50 megagrams per year, the owner or operator shall then comply with 40 CFR 60 (NSPS), subpart WWW requirements. If the landfill is permanently closed, a closure notification shall be submitted to the Administrator as provided for in 40 CFR 60.757(d). [40 CFR 60.752(b)]	Monitored by calculations annually. See Applicable Requirement. [40 CFR 60.752(b)(1)(ii)]	Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	Comply with the requirement: Annually. Submit an annual emission report to the EPA Administrator and Southern Regional Enforcement Office, except as provided for in 40 CFR 60.757(b)(1)(ii). [40 CFR 60.752(b)(1)(i)]
19	If the resulting NMOC mass emission rate is less than 50 megagrams per year, the owner or operator shall submit a periodic estimate of the emission rate report as provided in 40 CFR 60.757(b)(1) and retest the site-specific NMOC concentration every five (5) years from the date of permit issuance using the methods specified in this section. [40 CFR 60.754(a)(3)(iii)]	Monitored by calculations every 5 years. See Applicable Requirement. [40 CFR 60.754(a)(3)(iii)]	Recordkeeping by manual logging of parameter every 5 years. [N.J.A.C. 7:27-22.16(o)]	Comply with the requirement: Upon occurrence of event. Submit an emission report to the EPA Administrator and Southern Regional Enforcement Office, within 30 days from the occurrence of event, except as provided for in 40 CFR 60.757(b)(1)(ii). [40 CFR 60.752(b)(1)(i)]

# New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	This facility is not subject to 40 CFR 63, Subpart AAAA since the MSW landfill is exempted by one or more of the following: (1) landfill is not a major source of HAPs as defined in 40 CFR 63.2 of subpart A. (2) landfill is not collocated with a major source as defined in 40 CFR 63.2 of subpart A. (3) landfill is not an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m 3) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to 40 CFR 60.754(a) of the MSW landfills new source performance standards in 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State plan that applies to the landfill. In the event it does become subject to that regulation, the owner/operator must develop and implement a written startup, shutdown, and malfunction (SSM) plan according to the provisions in 40 CFR 63.6(e)(3). 40 CFR 63.1935, Subpart AAAA & [40 CFR 63.1960]	None.	None.	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit:U4 Landfill OperationsOperating Scenario:OS1 Original Enclosed Flare

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	SO2 <= 2,000 ppmv at standard conditions. Emission limit applies at all times, including startup and shutdown. [N.J.A.C. 7:27- 7.2(b)1]	None.	None.	None.
3	SO2 <= 22 lb/hr (in any 60-minute period), based on the calculation procedure at N.J.A.C. 7:27-7.2(r). Emission limit applies at all times, including startup and shutdown. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
4	SO2 <= 44 lb/hr at any instant, based on the calculation procedure at N.J.A.C. 7:27-7.2(r). Emission limit applies at all times, including startup and shutdown. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
5	Minimum VOC Destruction and Removal Efficiency >= 95 % DRE. The flare shall be designed and operated for 95% DRE. [N.J.A.C. 7:27-16.13(a)1]	Minimum VOC Destruction and Removal Efficiency: Monitored by stack emission testing upon occurrence of event, based on each of three Department validated stack test runs. If the facility requires and uses CD101 for more than 5000 hours during any calendar year, the facility shall conduct stack tests to demonstrate DRE compliance within 90 days from the date the hour limit was exceeded. See stack test details in the OS Summary. [N.J.A.C. 7:27-22.16(o)]	Minimum VOC Destruction and Removal Efficiency: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. See stack test details in the OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

# New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	<b>Recordkeeping Requirement</b>	Submittal/Action Requirement
6	The owner or operator of a flare subject to N.J.A.C. 7:27-16 shall inspect the flare before May 1 of each year to verify that the flare continues to be operated in accordance with the manufacturer's specifications for the operation of the flare. [N.J.A.C. 7:27-16.13(c)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system annually. The owner or operator of the flare shall record the following at the conclusion of each inspection: 1. The name of the person conducting the inspection; 2. The date on which the inspection was conducted; 3. An entry indicating which flare was inspected; 4. Any changes or adjustments made to the flare as a result of the inspection; and 5. A statement stating that the flare is currently being operated in compliance with the manufacturer's specifications. [N.J.A.C. 7:27-16.13(c)]	None.
7	VOC (Total) <= 0.25 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 each of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
8	NOx (Total) <= 2.05 lb/hr . [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See Stack Test detail in the OS Summary. [N.J.A.C. 7:27-22.16(0)]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-21.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
9	CO <= 4.97 lb/hr . [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See Stack Test detail in the OS Summary. [N.J.A.C. 7:27-22.16(0)]	CO: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
10	SO2 <= 13.7 lb/hr . [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by material balance each month during operation. Calculations based on LF gas analyses for H2S. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Record results of calculations. [N.J.A.C. 7:27-22.16(o)]	None.
11	TSP <= 0.96 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

# New Jersey Department of Environmental Protection

Ref.#	Applicable Requirement	Monitoring Requirement	<b>Recordkeeping Requirement</b>	Submittal/Action Requirement
12	PM-10 (Total) <= 0.96 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	Methane <= 52.2 lb/hr . [N.J.A.C. 7:27-22.16(a)]	Methane: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Methane: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
14	Benzene <= 0.0005 lb/hr . [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
15	Hydrogen chloride <= 0.19 lb/hr . [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
16	Hydrogen sulfide <= 0.384 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
17	Vinyl chloride <= 0.00014 lb/hr . [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
18	THC Concentration <= 50 ppmvd @ 7% O2 Total Hydrocarbons (THC) expressed as equivalent methane (CH4) or <= 5% of the maximum THC entering the flare each averaged over any consecutive 60 minute period. The maximum allowable emissions shall be the greater of the emission rates or concentrations. For O2 concentrations in the flue gas greater than 14%, the maximum allowable concentration of THC is 25 ppmvd uncorrected for O2. [N.J.A.C. 7:27-22.16(e)]	THC Concentration: Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. Results shall include DRE as well as THC concentration. See Stack Test detail in the OS Summary. [N.J.A.C. 7:27-22.16(o)]	THC Concentration: Recordkeeping by stack test results upon occurrence of event. See Stack Test detail in the OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See Stack Test detail in the OS Summary. [N.J.A.C. 7:27-22.16(o)]
19	CO <= 100 ppm @ 7% O2 , or 50 ppmvd uncorrected. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
20	Maximum Gross Heat Input <= 20.5 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Retain record of Fuel Burner Rated Capacity.[N.J.A.C. 7:27-22.16(o)].	None.
21	Maximum H2S in Fuel <= 2,400 Parts per Million. [N.J.A.C. 7:27-22.16(a)]	H2S in Fuel: Monitored by fuel sampling (e.g. gas) each month during operation, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	H2S in Fuel: 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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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	H2S in Fuel <= 1,900 Parts per Million on a 12-month rolling average basis. [N.J.A.C. 7:27-22.16(a)]	H2S in Fuel: Monitored by fuel sampling (e.g. gas) each month during operation, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(o)]	H2S in Fuel: 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.
23	Other Gaseous Fuel Usage <= 395.3 MMft^3/yr , maximum amount of LFG combusted in the enclosed flare, CD101. [N.J.A.C. 7:27-22.16(a)]	Other Gaseous Fuel Usage: Monitored by gas flow rate instrument continuously. LFG flow to the flare shall be monitored by a non-resettable gas flow meter. [N.J.A.C. 7:27-22.16(o)]	Other Gaseous Fuel Usage: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
24	The flare shall have a smokeless design. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
25	The permittee shall monitor the flare pilot burners by a thermocouple or any equivalent device to ensure the presence of a pilot flame. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
26	The permittee shall install, operate and maintain an automatic system (or equivalent) on the flare to relight the flare pilots to maintain flare combustion. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
27	Minimum Operating Temperature at the Exit of the Combustion Section >= 1,500 degrees F while in operation. [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 an instantaneous determination. [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.
28	Minimum Residence Time >= 0.5 seconds. [N.J.A.C. 7:27-22.16(e)]	Minimum Residence Time: Monitored by documentation of construction once initially. [N.J.A.C. 7:27-22.16(o)]	Minimum Residence Time: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

**Emission Unit:** U4 Landfill Operations

Operating Scenario: OS2 Candlestick Flare - Used for emergency only

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	This flare (CD102) shall be considered a backup emergency flare to be utilized only if the existing flare (CD101) is unable to process all the excess LF gas being generated. [N.J.A.C. 7:27-22.16(a)]	Monitored by gas flow rate instrument upon occurrence of event (startup). [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 facility shall record all times of operation, including but not limited to, inital startup and shutdown. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Upon occurrence of event. The facility shall notify the Southern Regional Enforcement Office of the date of startup within 30 days after the event. [N.J.A.C. 7:27-22.16(o)]
2	Particulate Emissions <= 8.67 lb/hr. Maximum emission rate based on Maximum Gross Heat Input. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Opacity <= 20 %, exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
4	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	SO2 <= 2,000 ppmv at standard conditions. Emission limit applies at all times, including startup and shutdown. [N.J.A.C. 7:27- 7.2(b)1]	None.	None.	None.
6	SO2 <= 22 lb/hr (in any 60-minute period), based on the calculation procedure at N.J.A.C. 7:27-7.2(r). Emission limit applies at all times, including startup and shutdown. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
7	SO2 <= 44 lb/hr at any instant, based on the calculation procedure at N.J.A.C. 7:27-7.2(r). Emission limit applies at all times, including startup and shutdown. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
8	The flare shall be designed for and operated at Minimum VOC Destruction and Removal Efficiency >= 95 % DRE. [N.J.A.C. 7:27-16.13(a)1]	None.	None.	None.

U4 Landfill Operations

# New Jersey Department of Environmental Protection

# Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	The owner or operator of a flare subject to N.J.A.C. 7:27-16 shall inspect the flare before May 1 of each year to verify that the flare continues to be operated in accordance with the manufacturer's specifications for the operation of the flare. [N.J.A.C. 7:27-16.13(c)]	Monitored by visual determination upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	<ul> <li>Recordkeeping by manual logging of parameter or storing data in a computer data system annually. The owner or operator of the flare shall record the following at the conclusion of each inspection: <ol> <li>The name of the person conducting the inspection;</li> <li>The date on which the inspection was conducted;</li> <li>An entry indicating which flare was inspected;</li> <li>Any changes or adjustments made to the flare as a result of the inspection; and</li> <li>A statement stating that the flare is currently being operated in compliance with the manufacturer's specifications. [N.J.A.C. 7:27-16.13(c)]</li> </ol> </li> </ul>	None.
10	VOC (Total) <= 0.33 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	NOx (Total) <= 1.2 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	CO <= 22.8 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	SO2 <= 19.2 lb/hr. Emission rate based on the limit of H2S in fuel (See applicable requirement for 12-month rollong average below). [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by fuel sampling (e.g. gas) each month during operation, based on an instantaneous determination. Calculations based on H2S concentration in LF gas determined using Draeger tubes. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Record results of calculations. [N.J.A.C. 7:27-22.16(o)]	None.
14	TSP <= 1.25 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	PM-10 (Total) <= 1.25 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	Methane <= 69.5 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
17	Benzene <= 0.0005 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
18	Hydrogen chloride <= 0.25 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

OS2

# New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	Hydrogen sulfide <= 0.512 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
20	Vinyl chloride <= 0.00014 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
21	Maximum Gross Heat Input <= 36.6 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Retain record of Fuel Burner Rated Capacity.[N.J.A.C. 7:27-22.16(o)].	None.
22	Maximum concentration of H2S in Fuel <= 2,400 Parts per Million. [N.J.A.C. 7:27-22.16(a)]	H2S in Fuel: Monitored by fuel sampling (e.g. gas) each month during operation, based on an instantaneous determination using Draeger tubes to determine concentration. [N.J.A.C. 7:27-22.16(o)]	H2S in Fuel: 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.
23	H2S in Fuel <= 1,900 ppmvd on a 12-month rolling average basis. [N.J.A.C. 7:27-22.16(a)]	H2S in Fuel: Monitored by fuel sampling (e.g. gas) each month during operation, based on a consecutive 12 month period (rolling 1 month basis). Draeger tubes shall be utilized to determine concentration. [N.J.A.C. 7:27-22.16(o)]	H2S in Fuel: 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.
24	Other Gaseous Fuel Usage <= 395.3 MMft^3/yr , maximum amount of LFG combusted in the candle flare, CD102. [N.J.A.C. 7:27-22.16(a)]	Other Gaseous Fuel Usage: Monitored by gas flow rate instrument continuously. LFG flow to the flare shall be monitored by a non-resettable gas flow meter. [N.J.A.C. 7:27-22.16(o)]	Other Gaseous Fuel Usage: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
25	The flare shall have a smokeless design. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
26	The permittee shall monitor the flare pilot burners by a thermocouple or any equivalent device to ensure the presence of a pilot flame. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
27	The permittee shall install, operate and maintain an automatic system (or equivalent) on the flare to relight the flare pilots to maintain flare combustion. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit: U4 Landfill Operations

Operating Scenario: OS4 Fugitive Emissions from Landfill

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Fugitive emissions of Methane <= 864 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	VOC (Total) <= 3.7 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	H2S <= 7.65 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Sulfur compounds, reduced <= 7.65 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit: U5 Mobile wood grinder powered by 860 HP diesel engine

**Operating Scenario: OS Summary** 

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	VOC (Total) <= 0.04 tons/yr based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	NOx (Total) <= 4.91 tons/yr based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
3	CO <= 0.51 tons/yr based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	SO2 <= 0.39 tons/yr based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	TSP <= 3.29 tons/yr based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
6	PM-10 (Total) <= 1.61 tons/yr based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	Fuel Oil Usage <= 28,530 gal/yr (combined.with U7.) See GR2 for emission limit cap for U5 & U7. [N.J.A.C. 7:27-22.16(a)]	Fuel Oil Usage: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(e)]	Fuel Oil Usage: Recordkeeping by manual logging of parameter or storing data in a computer data system per delivery. Retain records in file. [N.J.A.C. 7:27-22.16(e)]	None.
8	Hours of Operation <= 1,920 hours during any consecutive 12 month period (combined.with U7.) See GR2 for emission limit cap for U5 & U7. [N.J.A.C. 7:27-22.16(e)]	Hours of Operation: Monitored by hour/time monitor continuously. The engine shall be equipped with a nonresettable 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 each month during operation. Hours of operation during any consecutive 12 month period shall be calculated by the sum of the hours of operation during any one month added to the sum of the hours of operation during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit: U5 Mobile wood grinder powered by 860 HP diesel engine

**Operating Scenario: OS1 Wood grinder** 

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity: There shall be no visible emissions, exclusive of visible water vapor, except for a period no longer than three minutes in any consecutive thirty minute period. [N.J.A.C. 7:27-22.16(e)]		None.	None.
2	TSP <= 3.06 lb/hr . [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
3	PM-10 (Total) <= 1.46 lb/hr . [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit: U5 Mobile wood grinder powered by 860 HP diesel engine

Operating Scenario: OS2 860 HP Diesel Engine

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Smoke emissions from internal combustion engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
2	Particulate emission limit from the combustion of fuel based on rated heat input of source. Particulate Emissions <= 3.84 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Sulfur Content in Fuel <= 500 ppmw (0.05% by weight). Effective July 1, 2014 through June 30, 2016. [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(0)]	None.
4	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [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.
5	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27-9.2(b)]	None.	None.	None.
6	Fuel limited to diesel or No. 2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Maximum Gross Heat Input <= 6.4 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(e)]	None.	Other: Retain record of Engine Rated Capacity.[N.J.A.C. 7:27-22.16(0)].	None.
8	VOC (Total) <= 0.121 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 15.9 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	CO <= 1.64 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U5 Mobile wood grinder powered by 860 HP diesel engine

# New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	SO2 <= 1.25 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	TSP <= 0.254 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	PM-10 (Total) <= 0.254 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit: U5 Mobile wood grinder powered by 860 HP diesel engine

**Operating Scenario: OS3 Feeding Hopper** 

Ref.#	Applicable Requirement	Monitoring Requirement	<b>Recordkeeping Requirement</b>	Submittal/Action Requirement
1	Opacity: There shall be no visible emissions, exclusive of visible water vapor, except for a period no longer than three minutes in any consecutive thirty minute period. [N.J.A.C. 7:27-22.16(e)]		None.	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit: U5 Mobile wood grinder powered by 860 HP diesel engine

Operating Scenario: OS4 Discharge Belt Conveyor

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity: There shall be no visible emissions, exclusive of visible water vapor, except for a period no longer than three minutes in any consecutive thirty minute period. [N.J.A.C. 7:27-22.16(e)]		None.	None.
2	TSP <= 0.285 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
3	PM-10 (Total) <= 0.136 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

# New Jersey Department of Environmental Protection

Facility Specific Requirements

Emission Unit: U6 150 KW Electrical Generators (RICE-driven), controlled by H2S Scrubber, CD601

**Operating Scenario: OS Summary** 

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The permittee shall conduct stack tests at least 18 months prior to the expiration of the renewed operating permit using an approved protocol to demonstrate compliance with the NOx and CO emission limits as specified in the compliance plan for OS1, 2 or 3. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]	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)].	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Bureau of Technical Services (BTS) at Mail Code: 380-01A, 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 BTS. The ERT program can be downloaded at: http://www.epa.gov/ttnchie1/ert. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. A full stack test report must be submitted to BTS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and [N.J.A.C. 7:27-22.18(h)]
2	Each engine shall be inspected and maintained in accordance with the manufacturer's recommended inspection and maintenance frequency. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep a maintenance plan and records of conducted maintenance.[N.J.A.C. 7:27-22.16(o)].	None.

U6 150 KW Electrical Generators (RICE-driven), controlled by H2S Scrubbe

# New Jersey Department of Environmental Protection

# Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	The owner or operator shall adjust the stationary reciprocating engine in accordance with the procedure set forth at N.J.A.C. 7:27-19.16 and according to manufacturer's recommended procedures and maintenance schedules. [N.J.A.C. 7:27-16.10(e)], [N.J.A.C. 7:27-19.8(f)] & [N.J.A.C. 7:27-19.16(g)]	Other: Adjustment of combustion process according to manufacturer's recommended procedures and maintenance schedules.[N.J.A.C. 7:27-16.10(e)].	<ul> <li>Recordkeeping by manual logging of parameter or storing data in a computer data system upon performing combustion adjustment. Such record shall contain the following information for each adjustment:</li> <li>1) The date of the adjustment and the times at which it began and ended;</li> <li>2) The name, title, and affiliation of the person who performed the procedure and adustment;</li> <li>3) The type of procedure and maintenance performed;</li> <li>4) The concentrations of NOx, CO, and O2, measured before and after the adustment was made; and</li> <li>5) the amount of fuel use over 12 months prior to adjustment.</li> <li>[N.J.A.C. 7:27-19.16(h)] and. [N.J.A.C. 7:27-16.10(e)]</li> </ul>	None.
4	Hydrogen sulfide <= 680 ppmv in landfill gas after pretreatment. [N.J.A.C. 7:27-22.16(a)]	LFG concentration of Hydrogen sulfide: Monitored by fuel sampling (e.g. gas) each month during operation. [N.J.A.C. 7:27-22.16(o)]	Hydrogen sulfide: 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.
5	Sulfur Content in Fuel <= 640 ppmv in landfill gas after pretreatment. [N.J.A.C. 7:27-22.16(a)]	LFG concentration of Sulfur Content in Fuel: Monitored by fuel sampling (e.g. gas) each month during operation. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: 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.
6	NOx (Total) <= 5.91 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 29.6 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	SO2 <= 6.15 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	TSP <= 9.82 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	PM-10 (Total) <= 6.15 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U6 150 KW Electrical Generators (RICE-driven), controlled by H2S Scrubbe

# New Jersey Department of Environmental Protection

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	Hours of Operation <= 23,650 hours (for all 3 engines combined) during any consecutive 12 month period. [N.J.A.C. 7:27-22.16(a)]	Hours of Operation: Monitored by hour/time monitor continuously. The engine shall be equipped with a nonresettable 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 each month during operation. Hours of operation during any consecutive 12 month period shall be calculated by the sum of the hours of operation during any one month added to the sum of the hours of operation during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.

# New Jersey Department of Environmental Protection

#### **Facility Specific Requirements**

Emission Unit: U6 150 KW Electrical Generators (RICE-driven), controlled by H2S Scrubber, CD601

Operating Scenario: OS1 Waukesha Engine Model F11GSID, engine #1, OS2 Waukesha Engine Model F11GSID, engine #2

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Smoke emissions from stationary internal combustion engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
2	Particulate emission limit from the combustion of fuel based on rated heat input of source. Particulate Emissions <= 1.14 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	SO2 <= 5 lb/hr , in any 60-minute period. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
4	SO2 <= 10 lb/hr , at any instant. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
5	CO <= 500 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.10(b)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the 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. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
6	NOx (Total) <= 1.5 grams/brake horsepower-hour. [N.J.A.C. 7:27-19.8(e)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the 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. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
7	Nitrogen oxides (NOx) <= 262 ppmv. [N.J.A.C. 7:27-22.16(a)]	Nitrogen oxides (NOx): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Nitrogen oxides (NOx): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

# New Jersey Department of Environmental Protection

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	NOx (Total) <= 0.79 lb/hr . [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the 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. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
9	CO <= 2.5 lb/hr . [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the 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. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(0)]
10	SO2 <= 0.52 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	TSP <= 0.83 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	PM-10 (Total) <= 0.52 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	Maximum Gross Heat Input <= 1.9 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Retain record of Engine Rated Capacity.[N.J.A.C. 7:27-22.16(0)].	None.
14	The engine shall fire only landfill gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

# New Jersey Department of Environmental Protection

Facility Specific Requirements

Emission Unit: U6 150 KW Electrical Generators (RICE-driven), controlled by H2S Scrubber, CD601

Operating Scenario: OS3 Waukesha Engine Model F11GSID, engine #3

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Smoke emissions from stationary internal combustion engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
2	Particulate emission limit from the combustion of fuel based on rated heat input of source. Particulate Emissions <= 1.14 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	SO2 <= 5 lb/hr , in any 60-minute period. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
4	SO2 <= 10 lb/hr , at any instant. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
5	CO <= 500 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.10(b)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See applicable requirements OS Summary. [N.J.A.C. 7:27-22.16(0)]	CO: Recordkeeping by stack test results upon occurrence of event. See applicable requirements OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See applicable requirements OS Summary. [N.J.A.C. 7:27-22.16(o)]
6	NOx (Total) <= 0.9 grams/brake horsepower-hour. [N.J.A.C. 7:27-19.8(e)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See applicable requirements OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. See applicable requirements OS Summary. [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See applicable requirements OS Summary. [N.J.A.C. 7:27-22.16(o)]
7	Nitrogen oxides (NOx) <= 157 ppmv . [N.J.A.C. 7:27-22.16(a)]	Nitrogen oxides (NOx): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See applicable requirements OS Summary. [N.J.A.C. 7:27-22.16(o)]	Nitrogen oxides (NOx): Recordkeeping by stack test results upon occurrence of event. See applicable requirements OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See applicable requirements OS Summary. [N.J.A.C. 7:27-22.16(o)]

# New Jersey Department of Environmental Protection

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	NOx (Total) <= 0.5 lb/hr . [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See applicable requirements OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. See applicable requirements OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See applicable requirements OS Summary. [N.J.A.C. 7:27-22.16(o)]
9	CO <= 2.5 lb/hr . [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See applicable requirements OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See applicable requirements OS Summary. [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See applicable requirements OS Summary. [N.J.A.C. 7:27-22.16(o)]
10	SO2 <= 0.52 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	TSP <= 0.83 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	PM-10 (Total) <= 0.52 lb/hr . [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	Maximum Gross Heat Input <= 1.9 MMBTU/hr (HHV) . [N.J.A.C. 7:27-22.16(a)]	None.	Other: Retain record of Engine Rated Capacity.[N.J.A.C. 7:27-22.16(o)].	None.
14	The engine shall fire only landfill gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

Emission Unit: U7 Mobile Tub Wood Grinder Powered by a 1050 HP Diesel Engine (E407)

**Operating Scenario: OS Summary** 

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 1.1 tons/yr based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	CO <= 0.065 tons/yr based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	SO2 <= 0.15 tons/yr based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	TSP <= 1.2 tons/yr based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 0.552 tons/yr based on maximum fuel use and annual operating hours. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Fuel Oil Usage <= 28,530 gal/yr (combined.with U5.) See GR2 for emission limit cap for U5 & U7. [N.J.A.C. 7:27-22.16(a)]	Fuel Oil Usage: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(e)]	Fuel Oil Usage: Recordkeeping by manual logging of parameter or storing data in a computer data system per delivery. Retain records in file. [N.J.A.C. 7:27-22.16(e)]	None.
7	Hours of Operation <= 1,920 hours during any consecutive 12 month period (combined with U5.) See GR2 for emission limit cap for U5 & U7. [N.J.A.C. 7:27-22.16(e)]	Hours of Operation: Monitored by hour/time monitor continuously. The engine shall be equipped with a nonresettable 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 each month during operation. Hours of operation during any consecutive 12 month period shall be calculated by the sum of the hours of operation during any one month added to the sum of the hours of operation during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit: U7 Mobile Tub Wood Grinder Powered by a 1050 HP Diesel Engine (E407)

Operating Scenario: OS1 Tub Wood Grinder

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity: There shall be no visible emissions, exclusive of visible water vapor, except for a period no longer than three minutes in any consecutive thirty minute period. [N.J.A.C. 7:27-22.16(a)]		None.	None.
2	TSP <= 3.06 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	PM-10 (Total) <= 1.46 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

Emission Unit: U7 Mobile Tub Wood Grinder Powered by a 1050 HP Diesel Engine (E407)

Operating Scenario: OS2 1050 HP Diesel Engine

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Visible emissions from stationary internal combustion engines shall be no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	Other: Periodic visual inspections.[N.J.A.C. 7:27- 3.5].	None.	None.
2	Particulate emission limit from the combustion of fuel based on rated heat input of source. Particulate Emissions <= 4.31 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Visible emissions from stationary internal combustion engines shall be no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Sulfur Content in Fuel <= 500 ppmw (0.05% by weight). Effective July 1, 2014 through June 30, 2016. [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(0)]	None.
5	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [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(0)]	None.
6	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27-9.2(b)]	None.	None.	None.
7	Fuel limited to diesel or No. 2 fuel oil. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	VOC (Total) <= 0.019 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U7 Mobile Tub Wood Grinder Powered by a 1050 HP Diesel Engine (E407)

# New Jersey Department of Environmental Protection

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	NOx (Total) <= 10.4 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by periodic emission monitoring quarterly: once per quarter; quarters shall begin on January 1, April 1, July 1, and October 1 of each year. The permittee may request approval from the Department for a decreased monitoring frequency based on a review of the results of the initial monitoring. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The permittee may request approval from the Department for a decreased recordkeeping frequency consistent with any approved alternative monitoring frequency. [N.J.A.C. 7:27-22.16(o)]	None.
10	CO <= 0.59 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	SO2 <= 0.45 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	TSP <= 0.6 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	PM-10 (Total) <= 0.019 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	Maximum Gross Heat Input <= 7.18 MMBTU/hr (HHV) . [N.J.A.C. 7:27-22.16(a)]	None.	Other: Retain record of Engine Rated Capacity.[N.J.A.C. 7:27-22.16(o)].	None.
15	This compression-ignition nonroad engine is subject to federal regulations at 40 CFR 89. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	The owner or operator shall ensure that the manufacturer has affixed a permanent and legible label, located so as to be readily visible to the average person, identifying the nonroad engine showing a unique engine identification number. {40 CFR 89.110(a) & (d)] & [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	The label must contain the following	None.	None.	None.
	information:			
	(1) The heading "Important Engine			
	Information";			
	(2) The full corporate name and trademark			
	of the manufacturer; though the label may			
	identify another company and use its			
	trademark instead of the manufacturer's if			
	the provisions of 40 CFR 89.1009 are met.			
	(3) EPA standardized engine family			
	designation;			
	(4) Engine displacement;			
	(5) Advertised power;			
	(6) Engine tuneup specifications and			
	adjustments. These should indicate the			
	proper transmission position during tuneup,			
	and accessories (for example, air			
	conditioner), if any, that should be in			
	operation;			
	(7) Fuel requirements;			
	(8) Date of manufacture (month and year).			
	The manufacturer may, in lieu of including			
	the date of manufacture on the engine label,			
	maintain a record of the engine manufacture			
	dates. The manufacturer shall provide the			
	date of manufacture records to the			
	Administrator upon request;			
	(9) Family emission limits (FELs) if			
	applicable;			
	(10) The statement: "This engine conforms			
	to [model year] U.S. EPA regulations large			
	nonroad compression- ignition engines."			
	[40 CFR 89.110] & [N.J.A.C.			
	7:27-22.16(a)]			

# New Jersey Department of Environmental Protection

## Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	<b>Recordkeeping Requirement</b>	Submittal/Action Requirement
18	Exhaust emissions from this nonroad engine shall not exceed the exhaust emission standards contained in Table 1, 40 CFR 89 Subpart B for kW>560, tier 2. These are: NMOC + NOx <= 6.4 gms/KW-hr CO <= 3.5 gms/KW-hr PM <= 0.20 gms/KW-hr [40 CFR 89.102, 40 CFR 89.112(a)] & [N.J.A.C. 7:27-22.16(a)]	Monitored by documentation of construction once initially. Retain for the life of the equipment. [N.J.A.C. 7:27-22.16(a)]	Other: Retain manufacturer's certification for the life of the engine.[N.J.A.C. 7:27-22.16(o)].	None.

U7 Mobile Tub Wood Grinder Powered by a 1050 HP Diesel Engine (E407)

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

Emission Unit: U7 Mobile Tub Wood Grinder Powered by a 1050 HP Diesel Engine (E407)

**Operating Scenario: OS3 Feeding Hopper** 

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity: There shall be no visible emissions, exclusive of visible water vapor, except for a period no longer than three minutes in any consecutive thirty minute period. [N.J.A.C. 7:27-22.16(e)]		None.	None.

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

Emission Unit: U7 Mobile Tub Wood Grinder Powered by a 1050 HP Diesel Engine (E407)

Operating Scenario: OS4 Discharge Belt Conveyor

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity: There shall be no visible emissions, exclusive of visible water vapor, except for a period no longer than three minutes in any consecutive thirty minute period. [N.J.A.C. 7:27-22.16(a)]		None.	None.
2	Maximum allowable emission rate. TSP <= 0.285 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	PM-10 (Total) <= 0.136 lb/hr Maximum allowable emission rate. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

# New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit: U8 Electrical Generators No. 4, 5, and 6

**Operating Scenario: OS Summary** 

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The permittee shall conduct stack tests at least 18 months prior to the expiration of the renewed operating permit using an approved protocol to demonstrate compliance with the NOx, CO, SO2, VOC, PM-10 and TSP emission limits as specified in the compliance plan for OS1, 2 or 3. The test shall be conducted at full-load while burning landfill gas. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]	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)].	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Bureau of Technical Services (BTS) at Mail Code: 380-01A, 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 BTS. The ERT program can be downloaded at: http://www.epa.gov/ttnchie1/ert. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. A full stack test report must be submitted to BTS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and [N.J.A.C. 7:27-22.18(h)]

# New Jersey Department of Environmental Protection

# Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	The owner or operator shall adjust the stationary reciprocating engine in accordance with the procedure set forth at N.J.A.C. 7:27-19.16 and according to manufacturer's recommended procedures and maintenance schedules. [N.J.A.C. 7:27-16.10(e)], [N.J.A.C. 7:27-19.8(f)] & [N.J.A.C. 7:27-19.16(g)]	Other: The adjustment of the combustion process should be carried out according to the manufacturer's recommended procedures and maintenance schedule pursuant to N.J.A.C. 7:27-19.8 and 19.16(g). [N.J.A.C. 7:27-16.10(e)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Such record shall contain the following information for each adjustment: 1) The date of the adjustment and the times at which it began and ended; 2) The name, title and affiliation for the person who performed the procedure and adjustment; 3) The type of procedure and maintenance performed; 4) The concentrations of NOx, CO and O2 measured before and after the adjustment was made; and 5) The amount of fuel-use over 12 months prior to adjustment. [N.J.A.C. 7:27-19.16(h)] &. [N.J.A.C. 7:27-16.10(e)]	None.
3	Each Engine shall be inspected and maintained in accordance with the manufacturers recommended inspection procedures and maintenance frequency. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	VOC (Total) <= 5.9 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	NOx (Total) <= 17.4 tons/yr. The owner or operator shall maintain and operate a siloxane removal system (scrubber) to treat the LFG before use as fuel to the engines in order to maximize efficient operation of these engines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	CO <= 101 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	SO2 <= 5.53 tons/yr. Annual emission limit based on normal H2S concentration of 250 ppmvd at 15% O2. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	TSP <= 7.27 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U8 Electrical Generators No. 4, 5, and 6

OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	<b>Recordkeeping Requirement</b>	Submittal/Action Requirement
9	PM-10 (Total) <= 4.56 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	H2S <= 0.74 tons/yr. Annual emission limit based on normal concentration of H2S of 250 ppmvd @ 15% O2 for two of three (3) engines operating at any time. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	H2S in Fuel <= 1,000 ppmvd @ 15% O2. Maximum (instaneous) concentration of Hydrogen Sulfide in landfill gas after pretreatment shall be below the engine design maximum. [N.J.A.C. 7:27-22.16(a)]	H2S in Fuel: Monitored by fuel sampling (e.g. gas) each month during operation, based on an instantaneous determination. If the Landfill gas (LFG) after treatment has more than 100 ppm H2S, the LFG fuel to the combustion equipment should be tested in the same manner as refinery gas, i.e., the LFG should be sampled and tested each week for sulfur or H2S. [N.J.A.C. 7:27-22.16(o)]	H2S in Fuel: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
12	Acrolein <= 0.42 tons/yr based on two of three (3) engines operating at any time. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	Formaldehyde <= 4.33 tons/yr based on two of three (3) engines operating at any time. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	All other HAP emissions shall be below the reporting threshold. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	Hours of Operation <= 17,520 hours (for all 3 engines combined) during any calendar year. [N.J.A.C. 7:27-22.16(a)]	Hours of Operation: Monitored by hour/time monitor continuously. The engine shall be equipped with a nonresettable 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 each month during operation. Hours of operation during any calendar year shall be calculated by the sum of the hours of operation during January added to the sum of the hours of operation during each of the 11 months following. [N.J.A.C. 7:27-22.16(o)]	None.
16	See GR1 for emission cap for U4 & U8. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	<b>Recordkeeping Requirement</b>	Submittal/Action Requirement	
17	Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to Subpart JJJJ for their stationary SI ICE. [40 CFR 60.4233(e)]	None.	None.	None.	
18	If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section. (1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section. (2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in 40 CFR 60.4233(d) or (e) and according to the requirements specified in 40 CFR 60.4244, as applicable, and according to paragraph (b)(2)(ii) below. (ii) For a stationary SI internal combustion engine greater than 500 HP, keep a maintenance plan and records of conducted maintenance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, conduct an initial performance test and conduct subsequent performance te	Monitored by stack emission testing once initially, based on the average of three 1-hour tests and periodically thereafter (see below), if using a non-certified engine. Conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40 CFR 60.4243(b)(2)(ii)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Keep a maintenance plan and records of conducted maintenance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 60.4243(b)]	Submit a stack test report: As per the approved schedule. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed. [40 CFR 60.4245(d)]	

U8 Electrical Generators No. 4, 5, and 6

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of this section, as appropriate. (iii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you 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. In addition, you must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40 CFR 60.4243(a)(2)(iii)]	Monitored by stack emission testing once initially, based on the average of three 1-hour tests and periodically thereafter (see below). If the certified stationary SI internal combustion engine and control device are not maintained according to the manufacturer's emission-related written instructions, conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40 CFR 60.4243(a)(2)]	Recordkeeping by stack test results upon occurrence of event. Also, keep a maintenance plan and records of conducted maintenance. [40 CFR 60.4243]	Submit a stack test report: As per the approved schedule. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed. [40 CFR 60.4245(d)]

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

Ref.#	Applicable Requirement	Monitoring Requirement	<b>Recordkeeping Requirement</b>	Submittal/Action Requirement
20	<ul> <li>Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) below:</li> <li>(1) All notifications submitted to comply with this subpart and all documentation supporting any notification.</li> <li>(2) Maintenance conducted on the engine.</li> <li>(3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.</li> <li>(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards. [40 CFR 60.4245(a)]</li> </ul>	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Maintain records in accordance with applicable requirement. [40 CFR 60.4245(a)]	None.
21	Owners and operators of stationary SI ICE greater than or equal to 500 HP 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). The notification must include the information in paragraphs (c)(1) through (5) below. (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)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Keep records as specified in the applicable requirement. [40 CFR 60.4245(a)]	Submit notification: Once initially as required in 40 CFR 60.7(a)(1). [40 CFR 60.4245(c)]

U8 Electrical Generators No. 4, 5, and 6

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	HAPs (Total): Affected source subject to MACT provisions at 40 CFR 63 Subpart ZZZZ. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand. (iii) A stationary RICE located at an area source of HAP emissions is new if you commenced onstruction of the stationary RICE on or after June 12, 2006. [40 CFR 63.6590(a)(2)]	None.	None.	None.
23	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that is a new or reconstructed stationary RICE located at an area source must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR Part 63. [40 CFR 63.6590(c)]	None.	None.	None.

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

Emission Unit: U8 Electrical Generators No. 4, 5, and 6

Operating Scenario: OS1 Jenbacher Engine Model JMS-320, Engine #4, OS2 Jenbacher Engine Model JMS-320, Engine #5, OS3 Jenbacher Engine Model JMS-320, Engine #6

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Smoke emissions from stationary internal combustion engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
2	Particulate Emissions <= 5.88 lb/hr for the engine heat input of 9.8 MMBtu/hr (less than 10.0). [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	SO2 <= 5 lb/hr, in any 60-minute period. The quantity of SO2 which is discharged through any stack or chimney into the outdoor atmosphere in any 60-minute period shall not exceed the allowable emission as set forth in N.J.A.C. 7:27-7.2 subsection (r) and at any instant the maximum rate of emission expressed in pounds per hour shall not exceed twice the allowable emission. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
4	SO2 <= 10 lb/hr , at any instant. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
5	CO <= 500 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.10(b)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-16.10(g)] &. [N.J.A.C. 7:27-16.23(a)2]	CO: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack test requirements in OS Summary. [N.J.A.C. 7:27-22.16(0)]
6	CO <= 500 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.10(b)]	CO: Monitored by parametric monitoring system each month during operation. Refer to Technical Manual 1005 posted on the Department's website that contains guidelines for periodic monitoring procedures. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The permittee may request approval from the Department for a decreased recordkeeping frequency consistent with any approved alternative monitoring frequency. [N.J.A.C. 7:27-22.16(o)]	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	NOx (Total) <= 0.9 grams/brake horsepower-hour. [N.J.A.C. 7:27-19.8(e)2]	None.	None.	None.
8	VOC (Total) <= 0.673 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	VOC (Total) <= 1 grams/brake horsepower-hour in accordance with Table 1 to Subpart JJJJ of Part 60. For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included (Note d). [40 CFR 60.4233(e)]	VOC (Total): Monitored by stack emission testing at the approved frequency, based on the average of three 1-hour tests or by manufacturer's certification. Since unit was not certified, conduct an initial performance test and subsequent performance tests every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40 CFR 60.4243(b)(2)(ii)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event or by manufacturer's certification. Since unit was not certified, testing is performed every 8,760 hours or 3-years, whichever come first In either circumstance, keep a maintenance plan and records of conducted maintenance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 60.4243(b)(2)(ii)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule since unit was not certified. Refer to stack testing requirements specified in this permit. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed. [40 CFR 60.4345] &. [N.J.A.C. 7:27-22.16(o)]
10	NOx (Total) <= 1.98 lb/hr. Maximum allowable emission rate based on SOTA analysis. Applicable NOx emission limit above will not be considered to have been met unless the concurrent CO testing demonstrates compliance with the CO limit in N.J.A.C. 7:27-16.10, or the permit limit for CO, whichever is more stringent, is also met. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the 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. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

# New Jersey Department of Environmental Protection

Facility Specific Requirements	
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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	NOx (Total) <= 0.6 grams/brake horsepower-hour from SOTA analysis. If no continuous emissions monitoring system has been or is required to be installed on the equipment or source operation, compliance with the limit shall be based upon the average of three one-hour tests, each performed over a consecutive 60-minute period specified by the Department, and performed in compliance with N.J.A.C. 7:27-19.17. Any NOx testing conducted pursuant to this section shall be conducted concurrently with CO testing. Applicable NOx emission limit above will not be considered to have been met unless the concurrent CO testing demonstrates compliance with the CO limit in N.J.A.C. 7:27-16.10, or the permit limit for CO, whichever is more stringent. [N.J.A.C. 7:27-19.8(e)(2)] &. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs , or in accordance with federal requirements, conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first. See the 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. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	NOx (Total) <= 0.6 grams/brake horsepower-hour. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by periodic emission monitoring each month during operation, based on a 1 hour block average. Refer to Technical Manual 1005 posted on the Department's website that contains guidelines for periodic monitoring procedures . The permittee may request approval from the Department for a decreased monitoring frequency based on a review of the results of the initial monitoring. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The permittee may request approval from the Department for a decreased recordkeeping frequency consistent with any approved alternative monitoring frequency. [N.J.A.C. 7:27-22.16(o)]	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	NOx (Total) <= 2 grams/brake horsepower-hour in accordamce with Table 1 to Subpart JJJJ of Part 60. [40 CFR 60.4233(e)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three 1-hour tests or by manufacturer's certification. Since unit was not certified, conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40 CFR 60.4243(b)(2)(ii)]	NOx (Total): Recordkeeping by stack test results upon occurrence of event or by manufacturer's certification. Since unit was not certified, testing is performed every 8,760 hours or 3-years, whichever come first In either circumstance, keep a maintenance plan and records of conducted maintenance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 60.4243(b)(2)(ii)]	Stack Test - Submit protocol, conduct test and submit results: Within 60 days of sampling since unit was not certified. Refer to Stack testing requirements specified in this permit. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed. [40 CFR 60.4345] &. [N.J.A.C. 7:27-22.16(o)]
14	CO <= 11.6 lb/hr based on gms/BHP-hr limit below. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See the 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. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)]
15	CO <= 3.5 grams/brake horsepower-hour from SOTA analysis. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by periodic emission monitoring each month during operation, based on a 1 hour block average. Refer to Technical Manual 1005 posted on the Department's website that contains guidelines for periodic monitoring procedures . The permittee may request approval from the Department for a decreased monitoring frequency based on a review of the results of the initial monitoring. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The permittee may request approval from the Department for a decreased recordkeeping frequency consistent with any approved alternative monitoring frequency. [N.J.A.C. 7:27-22.16(o)]	None.
16	CO <= 5 grams/brake horsepower-hour in accordamce with Table 1 to Subpart JJJJ of Part 60. [40 CFR 60.4233(e)]	CO: Monitored by stack emission testing at the approved frequency, based on the average of three 1-hour tests or by manufacturer's certification. Since unit was not certified, conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. See the stack testing requirements in OS Summary. [40 CFR 60.4243(b)(2)(ii)]	CO: Recordkeeping by stack test results upon occurrence of event or by manufacturer's certification. Since unit was not certified, testing is performed every 8,760 hours or 3-years, whichever come first. See the stack testing requirements in OS Summary. In either circumstance, keep a maintenance plan and records of conducted maintenance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 60.4243(b)(2)(ii)]	Stack Test - Submit protocol, conduct test and submit results: Within 60 days of sampling since unit was not certified. See the stack testing requirements in OS Summary. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed. [40 CFR 60.4345] &. [N.J.A.C. 7:27-22.16(o)]

Ref.#	Applicable Requirement	Monitoring Requirement	<b>Recordkeeping Requirement</b>	Submittal/Action Requirement	
17	SO2 <= 2.52 lb/hr based on pre-treament by iron sponge, reducing H2S to 1000 ppmvd (max). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.	
18	TSP <= 0.83 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.	
19	PM-10 (Total) <= 0.52 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.	
20	H2S <= 0.336 lb/hr. Maximum emission rate in exhaust based on max. concentration in fuel of 1000 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	H2S: Monitored by gas sampling each month during operation and calculation of emission rate. [N.J.A.C. 7:27-22.16(o)]	H2S: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	None.	
21	Acrolein <= 0.0481 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.	
22	Formaldehyde <= 0.494 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.	
23	All other HAP emissions shall be below the reporting threshold. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.	
24	Maximum Gross Heat Input <= 9.8 MMBTU/hr (HHV) (each engine.). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Retain record of Engine Rated Capacity.[N.J.A.C. 7:27-22.16(0)].	None.	

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

Emission Unit: U11 (EG-003-2) Emerg. Gen., 150 kW

**Operating Scenario: OS Summary** 

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Requirements: 40 CFR 60 Subpart A 40 CFR 60 Subpart IIII	None.	None.	None.
	[40 CFR Federal Rules Summary]			
2	VOC (Total) <= 0.0031 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	NOx (Total) <= 0.00664 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	CO <= 0.0578 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	The owner or operator shall keep records of engine manufacturer data for the life of the equipment showing the rated Maximum Gross Heat Input, Maximum Rated Power Output, Model Year and Displacement. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Generator fuel limited to No. 2 fuel oil, diesel fuel or kerosene. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
<b>Ref.#</b>	The emergency generator shall be located at the facility and produce electrical power exclusively for use at the facility. This 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,	Monitoring Requirement None.	Recordkeeping RequirementRecordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall maintain on site and record the following information: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	Submittal/Action Requirement None.
	<ol> <li>When there is power outage or the primary source of mechanical or thermal energy fails because of an emergency, or when the power disruption resulted from construction, repair, or maintenance activity (CRM) at the facility. Operation of the emergency generator under construction, repair, or maintenance activity is limited to 30 days in any calendar year; or</li> <li>When there is a voltage reduction issued by PJM and posted on the PJM internet website (www.pjm.com) under the "emergency procedures" menu. [N.J.A.C. 7:27-19.1]</li> </ol>		<ul> <li>up and shut down time;</li> <li>iii. The total operating time for testing or maintenance based on the generator's hour meter; and</li> <li>iv. The name of the operator;</li> <li>2. For each time the emergency generator is operating due to emergency:</li> <li>Document if the emergency use was due to internal or external loss of primary source of energy, or due to a fire or flood. If internal loss at the facility, document the emergency and/or CRM that occurred, the damages to the primary source of energy and the amount of time needed for repairs.</li> </ul>	
			<ul> <li>3. If a voltage reduction is the reason for the use of the emergency generator, a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction.</li> <li>The owner or operator of an emergency generator shall maintain the above records for a period no less than 5 years after the record was made and shall make the records readily available to the Department or the EPA upon request. [N.J.A.C. 7:27-22.16(o)] and. [N.J.A.C. 7:27-19.11]</li> </ul>	

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

# New Jersey Department of Environmental Protection

# Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	Hours of Operation <= 100 hr/yr for maintenance and testing. [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 each month during operation. The permittee shall record the total operating time from the generator's hour meter. The permittee shall maintain the records required for a period of no less than five years after the record was made and shall make the records readily available to the Department or the EPA upon request. [N.J.A.C. 7:27-19.11]	None.
10	All requests, reports, applications, submittals, and other communications to the Administrator pursuant to Part 60 shall be submitted in duplicate to the Regional Office of US Environmental Protection Agency. Submit information to: Director, Division of Enforcement & Compliance Assistance, US EPA, Region 2, 290 Broadway, New York, NY 10007-1866 (NSPS Subpart A). [40 CFR 60.4(a)]	None.	None.	Submit a report: As per the approved schedule to EPA Region 2 as required by 40 CFR 60. [40 CFR 60.4(a)]
11	Copies of all information submitted to EPA pursuant to 40 CFR Part 60, must also be submitted to the appropriate Regional Enforcement Office of NJDEP (NSPS Subpart A). [40 CFR 60.4(b)]	None.	None.	Submit a report: As per the approved schedule to the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60. [40 CFR 60.4(b)]
12	No owner or operator subject to NSPS standards in Part 60, shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere (NSPS Subpart A). [40 CFR 60.12]	None.	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	The owner or operator shall notify the Administrator of the proposed replacement of components (NSPS Subpart A). [40 CFR 60.15]	None.	None.	Submit notification: At a common schedule agreed upon by the operator and the Administrator. The notification shall include information listed under 40 CFR Part 60.15(d). The notification shall be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced. [40 CFR 60.15(d)]
14	Changes in time periods for submittal of information and postmark deadlines set forth in this subpart, may be made only upon approval by the Administrator and shall follow procedures outlined in 40 CFR Part 60.19 (NSPS Subpart A). [40 CFR 60.19]	None.	None.	None.
15	Owners and operators of stationary CI internal combustion engines must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 60.4205 over the entire life of the engine. [40 CFR 60.4206]	None.	Other: The owner or operator shall keep the manufacturer's emission-related written instructions over the entire life of the engine. [40 CFR 60.4206].	None.
16	The permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) that contains the following per gallon standards: 15 ppm (0.0015 percent) maximum sulfur content and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. [40 CFR 60.4207(b)]	Monitored by review of fuel delivery records once per bulk fuel shipment. For each diesel delivery received, the owner or operator shall review written documentation of the delivery to ensure the maximum allowable fuel oil sulfur content and either a minimum cetane index or a maximum aromatic content is not being exceeded. Such written documentation can include, but is not limited to: bill of lading, delivery invoice, certificate of analysis. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by invoices / bills of lading / certificate of analysis once per bulk fuel shipment. The owner or operator shall keep records of fuel showing oil sulfur content and either a minimum cetane index or a maximum aromatic content for each delivery received. All records must be maintained for a minimum of 2 years following the date of such records per 40 CFR 60.7(f). [N.J.A.C. 7:27-22.16(o)]	None.

# New Jersey Department of Environmental Protection

# Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	The owner or operator must operate and maintain the stationary CI internal combustion engine and control device, except as permitted under 40 CFR 60.4211(g), according to the manufacturer's emission-related written instructions. In addition, owners and operators may only change emission-related settings that are permitted by the manufacturer. The owner or operator must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as applicable (NSPS Subpart IIII). [40 CFR 60.4211(a)]	None.	Other: The owner or operator shall keep the manufacturer's emission-related written instructions. [40 CFR 60.4211].	None.
18	Emergency generators may be operated for the purpose of maintenance checks and readiness testing limited to 100 hours per year for maintenance and testing, provided that those tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. (NSPS Subpart IIII). [40 CFR 60.4211(f)]	Monitored by hour/time monitor continuously . [40 CFR 60.4209(a)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator must record the time of operation of the emergency engine and the reason the engine was in operation during that time. The emergency engine must comply with the labeling requirements in 40 CFR 60.4210(f). [40 CFR 60.4214(b)]	None.
19	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. No further requirements apply for such engines under 40 CFR 63. (MACT ZZZZ) [40 CFR 63.6590(c)]	Other: Comply with all applicable provisions at NSPS IIII. [40 CFR 63].	Other: Comply with all applicable provisions at NSPS IIII. [40 CFR 63].	None.
20	NMHC + NOx <= 4 g/kW-hr, CO <= 3.5 g/kW-hr, PM <= 0.2 g/kW-hr, weighted average emissions as defined in 40 CFR 89.404. (NSPS Subpart IIII). [40 CFR 60.4205(b)]	None.	Other: The permittee must keep manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power.[40 CFR 60.4211].	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	The owner or operator of a 2007 model year and later stationary CI internal combustion engine complying with the emission standards specified in 40 CFR 60.4205(b), must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b), for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications (NSPS Subpart IIII). [40 CFR 60.4211(c)]	None.	Other: The owner or operator must keep documentation from the manufacturer, for the life of the equipment, that the engine is certified to meet the emission standards as applicable, for the same model year and maximum engine power. If the engine and control device is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or emission-related settings are changed in a way that is not permitted by the manufacturer, the owner or operator must demonstrate compliance as prescribed at 40 CFR 60.4211(g)(1), (2) or (3) depending on the maximum engine power. [40 CFR 60.4211(c)].	None.

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

Emission Unit: U11 (EG-003-2) Emerg. Gen., 150 kW

Operating Scenario: OS1 1.55 MMBTU/hr (HHV) Emerg. Gen. (150 kW) Diesel fuel,

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 <= 0.93 lb/hr . [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Sulfur Content in Fuel <= 0.00015 % by weight. [N.J.A.C. 7:27- 9.2(b)]	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. [None]	None.
4	VOC (Total) <= 0.06 lb/hr based on Manufacturer Specifications. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	NOx (Total) <= 0.13 lb/hr based on Manufacturer Specifications. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	CO <= 1.16 lb/hr based on Manufacturer Specifications. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	TSP <= 0.05 lb/hr based on Manufacturer Specifications. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

Emission Unit: U12 Wood Tub Grinder Powered by a 1,000 HP Diesel Engine

**Operating Scenario: OS Summary** 

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	VOC (Total) <= 0.23 tons/yr based on annual engine operating hours. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	NOx (Total) <= 4.31 tons/yr based on annual engine operating hours. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	CO <= 4.31 tons/yr based on annual engine operating hours. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	TSP <= 1.26 tons/yr based on annual wood processing rate and annual engine operating hours. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 0.53 tons/yr based on annual wood processing rate and annual engine operating hours. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 0.39 tons/yr based on annual wood processing rate and annual engine operating hours. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Acrolein <= 0.0005 tons/yr based on AP 42, Table 3.3-2. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	Benzene <= 0.005 tons/yr based on AP 42, Table 3.3-2. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	Formaldehyde <= 0.0064 tons/yr based on AP 42, Table 3.3-2. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

Emission Unit: U12 Wood Tub Grinder Powered by a 1,000 HP Diesel Engine

Operating Scenario: OS1 Tub Wood Grinder

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %, exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
2	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination each month during operation. Conduct visual inspections during daylight hours to identify if the stack has visible emissions, other than condensed water vapor. Select an observation position enabling clear view of emission point(s), minimum 15 feet away without sunlight shining directly into the eyes. Observe for a minimum duration of 30 minutes. Clock observation with two stopwatches starting the 1st watch at the commencement of the 30-minute observation period and starting and stopping the 2nd watch every time visible emissions are first seen and when they cease, and record the observation. [N.J.A.C. 7:27-22.16(o)]	<ul> <li>Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record and retain the following:</li> <li>(1) Date and time of inspection;</li> <li>(2) Emission Point number;</li> <li>(3) Operational status of equipment:</li> <li>(4) Observed results and conclusions:</li> <li>(5) Description of corrective action taken if needed;</li> <li>(6) Date and time opacity problem was solved, if applicable;</li> <li>(7) N.J.A.C. 7:27B-2 results if conducted; and</li> <li>((8) Name of person(s) conducting inspection. [N.J.A.C. 7:27-22.16(o)]</li> </ul>	Other (provide description): Upon occurrence of event. If visible emissions are observed for more than 3 minutes in the 30-consecutive minutes: (1) Verify the equipment and/or control device causing visible emissions is operating according to manufacturer's specifications. If it is not operating properly, take corrective action immediately to eliminate the excess emissions. (2) If the visible emisssions problem is not corrected within 24 hours, a certified opacity reader shall perform an opacity observation, in accordance with N.J.A.C. 7:27B-2. Conduct opacity observations, in accordance with N.J.A.C. 7:27B-2, each day until the opacity problem is successfully corrected. [N.J.A.C. 7:27-22.16(o)]
3	TSP <= 3.6 lb/hr based on AP-42, Table 10.3 -1 and waste processing rate. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-10 (Total) <= 1.44 lb/hr based on AP-42, Table 10.3 -1 and waste processing rate. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 1.02 lb/hr based on AP-42, Table 10.3 -1 and waste processing rate. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Total Throughput <= 100,000 tons/yr of wood grinded. [N.J.A.C. 7:27-22.16(a)]	None.	Total Throughput: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The permittee shall maintain records of total throughput of wood grinded during each calendar month and during each consecutive 12-month period. [N.J.A.C. 7:27-22.16(o)]	None.

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

Emission Unit: U12 Wood Tub Grinder Powered by a 1,000 HP Diesel Engine

**Operating Scenario: OS2 1,000 HP Diesel Engine** 

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Applicable Federal Requirements: 40 CFR 60 Subpart A 40 CFR 60 Subpart IIII 40 CFR Part 63 Subpart ZZZZ [40 CFR Federal Rules Summary]	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 emission, 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)]	Monitored by visual determination each month during operation. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
4	TSP <= 1.72 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
5	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(0)]	None.
6	VOC (Total) <= 0.31 lb/hr based EPA Tier 4 Nonroad Compression-Ignition Engines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	NOx (Total) <= 5.75 lb/hr based on EPA Tier 4 Nonroad Compression-Ignition Engines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	CO <= 5.75 lb/hr based on EPA Tier 4 Nonroad Compression-Ignition Engines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	TSP <= 0.07 lb/hr based on EPA Tier 4 Nonroad Compression-Ignition Engines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	PM-10 (Total) <= 0.07 lb/hr based on EPA Tier 4 Nonroad Compression-Ignition Engines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U12 Wood Tub Grinder Powered by a 1,000 HP Diesel Engine

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	PM-2.5 (Total) <= 0.07 lb/hr based on EPA Tier 4 Nonroad Compression-Ignition Engines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	Acrolein <= 0.00066 lb/hr based on AP 42, Table 3.3-2. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	Benzene <= 0.00669 lb/hr based on AP 42, Table 3.3-2. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	Formaldehyde <= 0.00846 lb/hr based on AP 42, Table 3.3-2. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	Hours of Operation <= 1,500 hr/yr. [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 each month during operation. The permittee shall maintain records of hours of operation during each calendar month and during each consecutive 12-month period. [N.J.A.C. 7:27-22.16(o)]	None.
16	NMHC <= 0.14 g/HP-hr, NOx <= 2.6 g/HP-hr, CO <= 2.6 g/HP-hr, PM <= 0.03 g/HP-hr. [40 CFR 60.4204(b)]	None.	Other: The permittee must keep manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power.[40 CFR 60.4211].	None.
17	Owners and operators of stationary CI internal combustion engines must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 over the entire life of the engine. [40 CFR 60.4206]	None.	Other: The owner or operator shall keep the manufacturer's emission-related written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. If the manufacturer's emission-related written instructions are not followed, the owner or operator must keep the results of the performance test(s) demonstrating compliance with the applicable emission limits. [40 CFR 60.4206].	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	The permittee shall use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 1090.305 subject to the following per gallon standards: 15 ppm (0.0015 percent) maximum sulfur content and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. [40 CFR 60.4207(b)]	Monitored by review of fuel delivery records once per bulk fuel shipment. For each diesel fuel delivery received, the owner or operator shall review written documentation of the delivery to ensure the maximum allowable fuel oil sulfur content and either a minimum cetane index or a maximum aromatic content is not being exceeded. Such written documentation can include, but is not limited to: bill of lading, delivery invoice, or certificate of analysis. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by invoices / bills of lading / certificate of analysis once per bulk fuel shipment. The owner or operator shall keep records of fuel used showing oil sulfur content and either a minimum cetane index or a maximum aromatic content for each delivery received. All records must be maintained for a minimum of 2 years following the date of such records per 40 CFR 60.7(f). [N.J.A.C. 7:27-22.16(o)]	None.
19	Owners and operators of a stationary CI internal combustion engine equipped with a diesel particulate filter must install a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b)]	Monitored by pressure measurement device continuously. The backpressure monitor must alert the operator when the diesel particulate filter requires service. The service monitor should be mounted in a location that is clearly visible to the operator during operation. [40 CFR 60.4209(b)]	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 any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. [40 CFR 60.4214(c)]	None.
20	The permittee shall operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. The owner or operator must also meet the requirements of 40 CFR parts 89, 94 and/or 1068 (General Compliance Provisions), as applicable. [40 CFR 60.4211(a)]	None.	Other: The owner or operator shall keep the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. [40 CFR 60.4211(a)].	None.
21	The 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, No further requirements apply for this engine under 40 CFR 63. [40 CFR 63.6590(c)]	Other: Comply with all applicable provisions at NSPS IIII. [40 CFR 63].	Other: Comply with all applicable provisions at NSPS IIII. [40 CFR 63].	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	All requests, reports, applications, submittals, and other communications to the Administrator pursuant to Part 60 shall be submitted in duplicate to the Regional Office of US Environmental Protection Agency. Submit information to: Director, Division of Enforcement & Compliance Assistance, US EPA, Region 2, 290 Broadway, New York, NY 10007-1866. [40 CFR 60.4(a)]	None.	None.	Submit a report: As per the approved schedule to EPA Region 2 as required by 40 CFR 60. [40 CFR 60.4(a)]
23	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)]
24	The owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, of the date of construction or reconstruction of an affected facility as defined under 40 CFR Part 60 Subpart A. Notification shall be postmarked no later than 30 days after such date. [40 CFR 60.7(a)(1)]	None.	None.	Submit notification: Upon occurrence of event to EPA Region 2 and the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60.7 [40 CFR 60.7(a)(1)]
25	The owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, of the actual date of initial startup of an affected facility postmarked within 15 days after such date. [40 CFR 60.7(a)(3)]	None.	None.	Submit notification: Upon occurrence of event to EPA Region 2 and the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60.7 [40 CFR 60.7(a)(3)]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
26	The owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). The notification shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of facility before and after the change and the expected completion date of the change. Notification shall be postmarked within 60 days or as soon as practicable before any change is commenced. The Administrator may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]	None.	None.	Submit notification: Upon occurrence of event to EPA Region 2 and the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60.7 [40 CFR 60.7(a)(4)]
27	The owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility, any malfunction of air pollution control equipment or any periods during which continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The records should be kept in a permanent form suitable for inspections. [40 CFR 60.7(b)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Semi-annually beginning on the 30th day of the 6th month following initial performance tests. The report shall contain the information required in 40 CFR 60.7(b) and be postmarked by the 30th day following the end of each six-month period. The report shall be submitted to the EPA Region 2 Administrator and the appropriate Regional Enforcement Office of NJDEP and be in the format specified at 40 CFR Part 60.7(c) and 40 CFR Part 60.7(d). [40 CFR 60.7(c)]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
28	The owner or operator shall maintain a file, suitable for inspection, of all monitoring measurements as indicated in Recordkeeping Requirement column. [40 CFR 60.7(f)]	None.	Other: The file shall include all measurements (including continuous monitoring system, monitoring device, and performance testing measurements), all continuous monitoring system performance evaluations, all continuous monitoring system or monitoring device calibration checks, all adjustments/maintenance performed on these systems or devices, and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the dates of the record, except as prescribed in 40 CFR 60.7(f)(1) through (3). Sources subject to 40 CFR 70, are required to retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application, per 40 CFR 70.6(a)(3)(ii)(B). [40 CFR 60.7(f)].	None.
29	At all times, including periods of start-up, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operation and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]	None.	None.	None.

# New Jersey Department of Environmental Protection

# Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	<b>Recordkeeping Requirement</b>	Submittal/Action Requirement
30	No owner or operator subject to NSPS standards in Part 60, shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]	None.	None.	None.
31	Changes in time periods for submittal of information and postmark deadlines set forth in this subpart, may be made only upon approval by the Administrator and shall follow procedures outlined in 40 CFR Part 60.19. [40 CFR 60.19]	None.	None.	None.

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

Emission Unit: U12 Wood Tub Grinder Powered by a 1,000 HP Diesel Engine

Operating Scenario: OS3 Discharge Conveyor Belt

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %, exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
2	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination each month during operation. Conduct visual inspections during daylight hours to identify if the stack has visible emissions, other than condensed water vapor. Select an observation position enabling clear view of emission point(s), minimum 15 feet away without sunlight shining directly into the eyes. Observe for a minimum duration of 30 minutes. Clock observation with two stopwatches starting the 1st watch at the commencement of the 30-minute observation period and starting and stopping the 2nd watch every time visible emissions are first seen and when they cease, and record the observation. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record and retain the following: (1) Date and time of inspection; (2) Emission Point number; (3) Operational status of equipment: (4) Observed results and conclusions: (5) Description of corrective action taken if needed; (6) Date and time opacity problem was solved, if applicable; (7) N.J.A.C. 7:27B-2 results if conducted; and ((8) Name of person(s) conducting inspection. [N.J.A.C. 7:27-22.16(o)]	Other (provide description): Upon occurrence of event. If visible emissions are observed for more than 3 minutes in the 30-consecutive minutes: (1) Verify the equipment and/or control device causing visible emissions is operating according to manufacturer's specifications. If it is not operating properly, take corrective action immediately to eliminate the excess emissions. (2) If the visible emisssions problem is not corrected within 24 hours, a certified opacity reader shall perform an opacity observation, in accordance with N.J.A.C. 7:27B-2. Conduct opacity observations, in accordance with N.J.A.C. 7:27B-2, each day until the opacity problem is successfully corrected. [N.J.A.C. 7:27-22.16(o)]
3	Total Throughput <= 100,000 tons/yr of wood conveyed. [N.J.A.C. 7:27-22.16(a)]	None.	Total Throughput: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation The permittee shall maintain records of total throughput of wood conveyed during each calendar month and during each consecutive 12-month period. [N.J.A.C. 7:27-22.16(o)]	None.

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

Facility Name (AIMS):	Cape May Cnty MUA Sanitary Landfill
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Street CMCMUA SANITARY LANDFILL

Address: 2050 RT 610 WOODBINE, NJ 08270

Mailing CMCMUA SANITARY LANDFILL Address: 2050 RT 610 WOODBINE, NJ 08270 State Plane Coordinates: \_\_\_\_\_\_ X-Coordinate: 147,500

Facility ID (AIMS): 73258

Y-Coordinate: 1,966,000
Units: Long/Lat
Datum: NAD27
Source Org.: Other/Unknown
Source Type: Hard Copy Map

County:	Cape May	Industry:	
Location Description	Cape May County Landfill in Woodbine Borough-Upper Township, New Jersey northwest of the intersection of Routes 550	Primary SIC: Secondary SIC:	4953
	and 610	NAICS:	562212

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

Contact Type: Air Permit Information Contact			
Organization: CMCMUA		Org. Type: Auth/Dist/Comm	
Name: Russell L. Smith, P.E.		<b>NJ EIN:</b> 00222060471	
Title: Senior Reguatory Engineer			
<b>Phone:</b> (609) 465-9026 x	Mailing	CMCMUA	
<b>Fax:</b> (609) 465-9025 x	Address:	1523 Route 9 North Cape May Court House, NJ 08210	
<b>Other:</b> ( ) - x		Cape May Court House, NJ 06210	
Туре:			
Email: smithRL@CMCMUA.com			
Contact Type: BOP - Operating Permits			
Organization: CMCMUA		Org. Type: Auth/Dist/Comm	
Name: Russell L. Smith, P.E.		<b>NJ EIN:</b> 00222060471	
Title: Senior Reguatory Engineer			
<b>Phone:</b> (609) 465-9026 x	Mailing	CMCMUA	
<b>Fax:</b> (609) 465-9025 x	Address:	1523 Route 9 North Cape May Court House, NJ 08210	
<b>Other:</b> ( ) - x		Cape May Court House, NJ 06210	
Туре:			
Email: smithRL@CMCMUA.com			
Contact Type: Emission Statements			
Organization: CMCMUA		Org. Type: Auth/Dist/Comm	
Name: Russell L. Smith, P.E.		<b>NJ EIN:</b> 00222060471	
Title: Senior Reguatory Engineer			
<b>Phone:</b> (609) 465-9026 x	Mailing	CMCMUA	
<b>Fax:</b> (609) 465-9025 x	Address:	1523 Route 9 North Cape May Court House, NJ 08210	
<b>Other:</b> ( ) - x		Cape may could floube, ins 00210	
Туре:			
Email: smithRL@CMCMUA.com			

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

Contact Type: Fees/Billing Contact			
Organization: CMCMUA	Org. Type: Auth/Dist/Comm		
Name: Katherine A. Robert		<b>NJ EIN:</b> 00222060471	
Title: Buisness Services Supervisor			
<b>Phone:</b> (609) 465-9026 x	Mailing	CMCMUA	
<b>Fax:</b> (609) 465-9025 x	Address:	1523 Route 9 North Cape May Court House, NJ 08210	
<b>Other:</b> ( ) - x		Cape May Court House, 145 00210	
Туре:			
Email: RobertKA@CMCMUA.com			
Contact Type: General Contact			
Organization: CMCMUA		Org. Type: Auth/Dist/Comm	
Name: John Conturo		<b>NJ EIN:</b> 00222060471	
Title: Solid Waste Program Manager			
<b>Phone:</b> (609) 465-9026 x	Mailing	CMCMUA 1523 Route 9 North Cape May Court House, NJ 08210	
<b>Fax:</b> (609) 465-9025 x	Address:		
<b>Other:</b> ( ) - x			
Туре:			
Email: Conturojr@CMCMUA.com			
Contact Type: On-Site Manager			
Organization: Cape May County MUA		Org. Type: Auth/Dist/Comm	
Name: Louis Angelino		<b>NJ EIN:</b> 00222060471	
Title: Solid waste Site Supervisor			
<b>Phone:</b> (609) 861-5701 x	Mailing	1523 Route 9 North	
<b>Fax:</b> (609) 861-5965 x	Address:	Cape May Court House, NJ 08210	
<b>Other:</b> ( ) - x			
Туре:			
Email: Angelinolj@cmcmua.com			

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

Contact Type: Operator			
Organization: CMCMUA		Org. Type: Auth/Dist/Comm	
Name: John R. Conturo		<b>NJ EIN:</b> 00222060471	
Title: Solid Waste Manager			
<b>Phone:</b> (609) 465-9026 x	Mailing	CMCMUA	
<b>Fax:</b> (609) 465-9025 x	Address:	1523 Route 9 North Cape May Court House, NJ 08210	
<b>Other:</b> ( ) - x		Cape May Court House, Ny 08210	
Туре:			
Email: ConturoJR@CMCMUA.com			
Contact Type: Owner (Current Primary)			
Organization: CMCMUA		Org. Type: Auth/Dist/Comm	
Name: Joseph V. Rizzuto		<b>NJ EIN:</b> 00222060471	
Title: Executive Director			
<b>Phone:</b> (609) 465-9026 x	Mailing	CMCMUA 1523 Route 9 North Cape May Court House, NJ 08210	
<b>Fax:</b> (609) 465-9025 x	Address:		
<b>Other:</b> ( ) - x			
Туре:			
Email: RizzutoJV@CMCMUA.com			
Contact Type: Responsible Official			
Organization: CMCMUA		Org. Type: Auth/Dist/Comm	
Name: Thomas J. LaRocco, P.E.		<b>NJ EIN:</b> 00222060471	
Title: Chief Engineer			
<b>Phone:</b> (609) 465-9026 x	Mailing	CMCMUA	
<b>Fax:</b> (609) 465-9025 x	Address:	1523 Route 9 North Cape May Court House, NJ 08210	
<b>Other:</b> ( ) - x		Cupe may could floube, 119 00210	
Туре:			
Email: LaRoccoTJ@CMCMUA.com			

### New Jersey Department of Environmental Protection Non-Source Fugitive Emissions

FG NJID	Description of Activity Causing Emission	Location Description	Reasonable Estimate of Emissions (tpy)									
			VOC (Total)	NOx	СО	SO	TSP (Total)	PM-10	Pb	HAPS (Total)	Other (Total)	
FG1	SITE DUST	THROUGHOUT SITE	0.000	0.000	0.000	0.000	82.720	16.120	0.000	0.00000000	0.000	

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)									
				VOC (Total)	NOx	СО	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)	
IS1	MAINTENANCE BUILDING DIESEL FUEL TANK; 6000 gallons	Storage Vessel	ABOVE GROUND IN MAINTENANCE YARD	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000	
IS2	MAINTENANCE BUILDING FURNACE; < 1 MMBtu/hr	Boiler	INSIDE OF MAINTENANCE BUILDING	0.050	1.230	0.310	2.660	0.120	0.106	0.000	0.00000000	0.000	
IS3	MAINTENANCE BUILDING HEATING OIL (No. 2 oil) TANK; 1000 gallons	Storage Vessel	ABOVE GROUND ADJ. TO MAINT. BLDNG.	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000	
IS4	MAINTENANCE BUILDING GASOLINE TANK; 500 gallons	Storage Vessel	ABOVE GROUND IN MAINTENANCE YARD	0.130	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000	
IS6	"Retec" Screening Plant (80 HP Engine) <= 1 MMBTU/hr Manuf'd 2000 SN 216008 John Deere Model 4.5 L Powerteck	Manufacturing and Materials Handling Equipment	Class B & C Recycling Facility	0.011	0.140	0.031	0.010	0.151	0.053	0.000	0.00000000	0.000	

## New Jersey Department of Environmental Protection Insignificant Source Emissions

IS	Source/Group	Equipment Type	Location		Estimate of Emissions (tpy)							
NJID	Description		Description	VOC (Total)	NOx	СО	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS7	"Power Screen" Screening Plant (100 HP Engine) <= 1 MMBTU/hr Manuf'd 2004 SN 12101036 Deutz Model T04039T Diesel	Manufacturing and Materials Handling Equipment	Class B & C Recycling Facility	0.026	0.330	0.070	0.022	0.233	0.097	0.000	0.00000000	0.000
IS8	Radial Stacking Conveyor (powered by IS9 Generator)	Manufacturing and Materials Handling Equipment	Class B & C Recycling Facility	0.000	0.000	0.000	0.000	0.056	0.021	0.000	0.00000000	0.000
IS9	Diesel Generator (19.2 KW) <= 1 MMBTU/hr Heat Input - Manuf'd 1995 SN WA4038-5 Kubota Model GV-3240-60-B	Fuel Combustion Equipment (Other)	Class B & C Recycling Facility	0.001	0.013	0.003	0.001	0.001	0.001	0.000	0.00000000	0.000
IS10	Snap-On Tools parts cleaner, < 2 gal solvent, or < 5 wt% VOC	Cleaning Machine (Open Top: Cold)										
IS11	9 HP Tier4 Tub Grinder Auxilary Diesel Engine	Stationary Reciprocating Engine	Wood processing area	0.010	0.230	0.230	0.000	0.000	0.000	0.000	0.00000000	0.000
		Total	·	0.231	1.943	0.644	2.693	0.561	0.278	0.000	0.00000000	0.000

## New Jersey Department of Environmental Protection Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand- Fathered	Last Mod. (Since 1968)	Equip. Set ID
E11	EG-1	1.55 MMBTU/hr (HHV) Emerg. Gen. (150 kW)	Emergency Generator		8/6/2021		8/6/2021	
E100	Gas System	Landfill Gas Recovery Facility	Landfill	127703	5/15/1984	No	8/1/2007	
E101	L. Tank #1	Leachate Storage Tank West	Storage Vessel	PCP040001	3/31/1991	No	3/31/1991	
E301	L. Tank #2	Leachate Storage Tank East	Storage Vessel	PCP040001	3/31/1991	No	3/31/1991	
E402	Grinder	Wood grinder model HC 5400	Manufacturing and Materials Handling Equipment	PCP040002	7/8/2003	No	7/8/2003	
E403	Engine	860 HP diesel engine model 3412E	Stationary Reciprocating Engine	PCP040002	7/8/2003	No	7/8/2003	
E404	Feed Hopper	Truck unloading into the Feeding Hopper	Manufacturing and Materials Handling Equipment	PCP040002		No	7/8/2003	
E405	Conveyor	Discharge belt conveyor	Manufacturing and Materials Handling Equipment	PCP040002	7/8/2003	No	7/8/2003	
E406	Grinder	Tub Wood Grinder Model HWC-1462L	Manufacturing and Materials Handling Equipment	BOP090002	9/1/2009	No		
E407	Engine	1,050 HP Diesel Caterpillar Engine Model C27	Stationary Reciprocating Engine	BOP090002	9/1/2009	No		
E408	Feed Hopper	Truck Unloading into Feeding Hopper	Manufacturing and Materials Handling Equipment	BOP090002	9/1/2009	No		

## New Jersey Department of Environmental Protection Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand- Fathered	Last Mod. (Since 1968)	Equip. Set ID
E409	Conveyor	Discharge Belt Conveyor	Manufacturing and Materials Handling Equipment	BOP090002	9/1/2009	No		
E410	H2S Rem Sys	H2S Removal System	Manufacturing and Materials Handling Equipment	BOP080002	11/1/2009	No		
E411	Wood Grinder	Tub Wood Grinder	Manufacturing and Materials Handling Equipment		1/1/2023	No		
E412	Engine	1,000 HP Diesel Catepillar Engine Model C32	Stationary Reciprocating Engine		1/1/2023	No		
E413	Conveyor	Discharge Converyor Belt	Manufacturing and Materials Handling Equipment		1/1/2023	No		
E601	EG-1	Electrical Generator No. 1 (150 KW)	Stationary Reciprocating Engine	BOP060001	12/1/2006	No		
E602	EG-2	Electrical Generator No. 2 (150 KW)	Stationary Reciprocating Engine	BOP060001	12/1/2006	No		
E603	EG-3	Electrical Generator No. 3 (150 KW)	Stationary Reciprocating Engine	BOP070001	8/1/2007	No		
E801	EG-4	Electrical Generator No. 4	Stationary Reciprocating Engine	BOP130001	9/1/2013	No	9/1/2013	
E802	EG-5	Electrical Generator No. 5	Stationary Reciprocating Engine	BOP130001	9/1/2013	No	9/1/2013	
E803	EG-6	Electrical Generator No. 6	Stationary Reciprocating Engine	BOP130001	9/1/2013	No	9/1/2013	

Date: 10/4/2023

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E11 (Emergency Generator) Print Date: 7/13/2023

Make:	Cummins				
Manufacturer:	Cummins (2021)				
Model:	C150D2RE (2021) Model Year				
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1.55				
Will the equipment be used in excess of 500 hours per year?	Ves No				
Have you attached a diagram showing the location and/or the configuration of this equipment?	<ul> <li>Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?</li> <li>No</li> </ul>				
Comments:	150 kW 201 HP Displacement per cylinder: 6.69 L				

73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E100 (Landfill) Print Date: 7/13/2023
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Pollutant		Concentration	Units
Amines	▼		•
CO2	▼	36	weight %
Chlorides	▼		
H2S	▼	2400	ppmvd 💌
Mercaptans	▼		•
Mercury	▼		•
Methane	▼	52	weight %
Non-Methane Hydrocarbons	▼	367	ppmvd 🗸
Ammonia	▼	1.9	ppmvd 💌
Nitrogen	▼	12	weight %
VOC (Total)	▼	367	ppmvd 🗨

#### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E100 (Landfill) Print Date: 7/13/2023

Solid Waste Facility Permit Number:

Year Opened: Solid Waste Facility Permit Issuance Date:

Expected Year of Closure: Actual Year of Closure:

Total Design Area (acres): Total Design Capacity

(million megagrams): Active Area (acres):

Capped Area (acres):

Is the Landfill Lined? Was the site used for the disposal of Hazardous Waste?

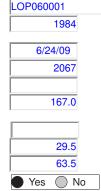
Was there ever co-disposal of Industrial Waste or reason to believe that the Waste Stream into the Landfill contained large Waste or volatile compounds from commercial sources?

Maximum Estimated Landfill Gas Generation Rate during the life of the Landfill (ft<sup>3</sup>/yr):

Model used to estimate Landfill Gas Production:

Is there a Landfill Gas Pre-Treatment System?

Method of Landfill Gas Pre-Treatment:





🔵 Yes 🌑 No

#### 848318400

LandGEM



Design Capacity of Landfill Gas Collection System (acfm):

Overall Collection Efficiency(%): Landfill Gas Mover/Blower size (hp):

Number of Extraction Wells:

Extraction Well Diameter (ft): Extraction Well Depth (ft):

Extraction Well Overlap (%):

Extraction Well Operating Vacuum (in. H20):

Have you attached Actual Landfill Gas Analysis? Have you attached a layout (plan view) of the wells and header piping?

Have you attached a waste

1,500.0
75.0
125.0
76
0.7
40.0
15.0
ļ
🔿 Yes 🔵 No



### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E100 (Landfill) Print Date: 7/13/2023

deposition history (provide tons deposited for each operating year)?

Comments:

🔵 Yes 🌘 No

Total Design Capacity of Landfill is 21,300,000 Megagrams (RADIUS will only allow a number between 0 to 9999 to be entered).

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E101 (Storage Vessel) Print Date: 7/13/2023

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

contain by design?	Liquids Only	
Storage Vessel Type:	Reservoir	
Design Capacity:	700,000	
Units:	gallons	
Ground Location:	Above Ground	
Is the Shell of the Equipment		
Exposed to Sunlight? Shell Color:	Yes  Conter  Ves	
Description (if other):	Blue	
Shell Condition:	<b>•</b>	
Paint Condition:	Good	
Shell Construction:	Welded	
Is the Shell Insulated?	No	
Type of Insulation:		
Insulation Thickess (in):		
Thermal Conductivity of Insulation [(BTU)(in)(hr)(ft2)(deg F)]:		
Shape of Storage Vessel:	Cylindrical	
Shell Height (From Ground to Roof Bottom) (ft):	16.00	
Length (ft):		
Width (ft):		
Diameter (ft):	90.00	
Other Dimension Description:		
Value:		
Units:		
Fill Method:	Top Pipe	
Description (if other):		
Maximum Design Fill Rate:	94.00	
Units:	gal/min	•
Does the storage vessel have a roof or an open top?	Open Top	
Roof Type:		
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?		
Nana tha atawaa waaal		

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E101 (Storage Vessel) Print Date: 7/13/2023

Does the storage vessel have a Conservation Vent?

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

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

Comments:

?	<b>_</b>
am or the	
ment?	No
anuf.'s d the	
d the	
	No
	None

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E301 (Storage Vessel) Print Date: 7/13/2023

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

contain by design?	Liquids Only
Storage Vessel Type:	Tank
Design Capacity:	700,000
Units:	gallons
Ground Location:	Above Ground
Is the Shell of the Equipment	
Exposed to Sunlight? Shell Color:	Yes  Other
Description (if other):	Blue
Shell Condition:	Light Rust
Paint Condition:	Good
Shell Construction:	Welded
Is the Shell Insulated?	No
Type of Insulation:	
Insulation Thickess (in):	
Thermal Conductivity of Insulation [(BTU)(in)(hr)(ft2)(deg F)]:	
Shape of Storage Vessel:	Cylindrical
Shell Height (From Ground to Roof Bottom) (ft):	16.00
Length (ft):	
Width (ft):	
Diameter (ft):	90.00
Other Dimension	P
Description:	
Value:	
Units:	
Fill Method:	Top Pipe
Description (if other):	
Maximum Design Fill Rate:	94.00
Units:	gal/min
Does the storage vessel have	
a roof or an open top?	Open Top
Roof Type:	
Roof Height (From Roof Bottom	
to Roof Top) (ft): Roof Construction:	
Primary Seal Type:	
Secondary Seal Type:	<b>•</b>
Total Number of Seals:	
Roof Support:	<b>•</b>
Does the storage vessel have a Vapor Return Loop?	No
Deer the starses wassel	

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E301 (Storage Vessel) Print Date: 7/13/2023

Does the storage vessel have a Conservation Vent?

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

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

Comments:

?		
ram or the ment?	No	
anuf.'s id the		
	No	
	None	

# 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E402 (Manufacturing and Materials Handling Equipment) Print Date: 7/13/2023

Make:	Mobile Wood Grinder
Manufacturer:	Peterson Pacific Corp.
Model:	HC 5400, w/ 860HP Diesel Engine
Type of Manufacturing and Materials	P
Handling Equipment:	Green waste and/or wood pallets
Capacity:	1.58E+02
Units:	other units
Description (if other):	cubic feet per minute
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?	Yes
Comments:	As per manufacturer specifications, green waste processing capacity is 350 cubic yards

-

een waste processing capacity is 350 cubic yards per hour,which is 157.5 cubic feet per minute. Hammermill driven by caterpillar engine E403.

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E403 (Stationary Reciprocating Engine) Print Date: 7/13/2023

Make:	860 HP Diesel Engine
Manufacturer:	Caterpillar
Model:	3412E
Maximum Rated Gross Heat Input (MMBtu/hr):	6.4
Class:	Rich Burn
Description:	
Duty:	Other
Description:	Variable load (intermittent grinding)
Minimum Load Range (%):	
Maximum Load Range (%):	
Stroke:	4-stroke
Power Output (BHP):	860
Electric Output(KW):	
Compression Ratio:	14.6
Ignition Type:	
Description:	
Engine Speed (RPM):	
Engine Exhaust Temperature (°F):	400
Air to Fuel Ratio at Peak Load:	
Ratio Basis:	
Lambda Factor (scfm/scfm):	
Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr):	
Output Type:	
Heat to Power Ratio:	
Is the Engine Using a Turbocharger?	Yes No
Is the Engine Using an Aftercooler?	
Is the Engine Using (check all that	apply):
A Prestratified Charge (PSC)	A NOx Converter
Air to Fuel Adjustment (AF)	Ignition Timing Retard
Low Emission Combustion	Non-Selective Catalytic Retard (NSCR)
Other	
Description:	
Have you attached a diagram showing the location and/or the configuration of this equipment?	<ul> <li>Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?</li> <li>Yes</li> <li>No</li> </ul>

Comments:

# 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E404 (Manufacturing and Materials Handling Equipment) Print Date: 7/13/2023

Make:	Steel Feed Hopper
Manufacturer:	Peterson Pacific Corp.
Model:	HC 5400
Type of Manufacturing and Materials Handling Equipment:	Feeding green waste or wood pallets
Capacity:	1.58E+02
Units:	other units
Description (if other):	cubic feet per minute
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?	Yes
Comments:	As per manufacturer spcifications, green
Comments.	waste processing capacity is 350 cubic yards per hour.

# 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E405 (Manufacturing and Materials Handling Equipment) Print Date: 7/13/2023

Make:	Belt Conveyor
Manufacturer:	Peterson Pacific Corporation
Model:	HC 5400
Type of Manufacturing and Materials	
Handling Equipment:	Green waste or wood pallets
Capacity:	1.58E+02
Units:	other units
Description (if other):	cubic feet per minute
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?	Yes
Comments:	Discharge conveyor hydraulicly operated.

# 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E406 (Manufacturing and Materials Handling Equipment) Print Date: 7/13/2023

Make:	Hogzilla Mobile Wood Grinder
Manufacturer:	CW Mill Equipment Company
Model:	Model HWC-1462L
Type of Manufacturing and Materials Handling Equipment:	Green waste and/or wood pallets
Capacity:	1.50E+02
Units:	other units
Description (if other):	tons 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?	Yes
Comments:	Hammermill driven by caterpillar engine E407

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E407 (Stationary Reciprocating Engine) Print Date: 7/13/2023

Make:	1050 HP Diesel Engine
Manufacturer:	Caterpillar
Model:	C27 DITA
Maximum Rated Gross Heat	
Input (MMBtu/hr):	7.18
Class:	Rich Burn
Description:	
Duty:	Other
Description:	Variable load (intermittent grinding)
Minimum Load Range (%):	
Maximum Load Range (%):	
Stroke:	4-stroke
Power Output (BHP):	1050
Electric Output(KW):	p
Compression Ratio:	16.5
Ignition Type:	Compression
Description:	
Engine Speed (RPM):	2100
Engine Exhaust Temperature (°F):	400
Air to Fuel Ratio at Peak Load:	p 
Ratio Basis:	<b>v</b>
Lambda Factor (scfm/scfm):	
Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr):	6840
Output Type:	
Heat to Power Ratio:	
Is the Engine Using a	J
Turbocharger?	Ves No
Is the Engine Using an Aftercooler?	Yes No
Is the Engine Using (check all that	apply):
A Prestratified Charge (PSC)	A NOx Converter
Air to Fuel Adjustment (AF)	Ignition Timing Retard
Low Emission Combustion	Non-Selective Catalytic Retard (NSCR)
Other	
Description:	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?
Comments:	2.7 MMBTU/hr power output. Meets Tier 4/Stage IIIB emission standards.

# 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E408 (Manufacturing and Materials Handling Equipment) Print Date: 7/13/2023

Finit Date. 1/13/2023		
Make:	Steel Feed Hopper	
Manufacturer:	CW Mill Equipment Company	
Model:	Hogzilla Model HWC-1462L, 1050 HP Diesel E	
Type of Manufacturing and Materials Handling Equipment:	Green waste or wood pallets	
Capacity:	1.50E+02	
Units:	other units	
Description (if other):	tons 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?	Yes 🗸	
Comments:	As per manufaturer specifications, green waste processing capacity is 480 cubic yards per hour.	

# 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E409 (Manufacturing and Materials Handling Equipment) Print Date: 7/13/2023

Make:	Belt Conveyor	
Manufacturer:	CW Mill Equipment Company	
Model:	Hogzilla Model HWC-1462L, 1050 HP Diesel E	
Type of Manufacturing and Materials Handling Equipment:	Green waste or wood pallets	
Capacity:	1.50E+02	
Units:	other units	
Description (if other):	tons 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?	Yes 👻	
Comments:	Discharge conveyor hydraulicly operated.	

# 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E411 (Manufacturing and Materials Handling Equipment) Print Date: 7/13/2023

Make:	Hogzilla Track Mounted Tub Grinder
Manufacturer:	CW MIIIs Equipment Company
Model:	HTC-1464T
Type of Manufacturing and Materials	P
Handling Equipment:	Tub Grinder
Capacity:	1.50E+02
Units:	other units
Description (if other):	tons per year
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?	Yes
Comments:	

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E412 (Stationary Reciprocating Engine) Print Date: 7/13/2023

Make:	1,000 HP Diesel Engine
Manufacturer:	Caterpillar
Model:	C32
Maximum Rated Gross Heat	
Input (MMBtu/hr):	7.17
Class:	
Description:	
Duty:	
Description:	
Minimum Load Range (%):	
Maximum Load Range (%):	
Stroke:	
Power Output (BHP):	1000
Electric Output(KW):	746
Compression Ratio:	15
Ignition Type:	Compression
Description:	
Engine Speed (RPM):	1800
Engine Exhaust	
Temperature (°F): Air to Fuel Ratio at Peak Load:	
Ratio Basis:	
Lambda Factor (scfm/scfm):	
Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr):	
Output Type:	▼
Heat to Power Ratio:	
Is the Engine Using a Turbocharger?	Ves No
Is the Engine Using an Aftercooler?	Ves No
Is the Engine Using (check all that	it apply):
A Prestratified Charge (PSC)	A NOx Converter
Air to Fuel Adjustment (AF)	Ignition Timing Retard
Low Emission Combustion	Non-Selective Catalytic Retard (NSCR)
Other	
Description:	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? No
Comments:	<ol> <li>Model Year: 2022 Caterpillar C-32; 2.675 liters per cylinder: source facility email 1/9/23.</li> <li>Maxiimum Rated Gross Heat Input calculated from facility email 3/27/23 - excel spreadsheet titled: Cape May U12 Tub Grinder Emissions - Tub Grinde U12 HAP Tab (MMBtu/hr = 0.139 MMBtu/gal x 51.6 gal/hour)</li> </ol>

# 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E413 (Manufacturing and Materials Handling Equipment) Print Date: 7/13/2023

Make:	Discharge Conveyor Belt
Manufacturer:	CW MIIIs Equipment Company
Model:	HTC-1464T
Type of Manufacturing and Materials Handling Equipment:	Dicharge Conveyor Belt
Capacity:	1.50E+02
Units:	other units
Description (if other):	tons 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?	Yes
Comments:	

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E601 (Stationary Reciprocating Engine) Print Date: 7/13/2023

Make:	VSG Series Gas Enginator Generator	
Manufacturer:	Waukesha Power Systems	
Model:	VSG11GSID	
Maximum Rated Gross Heat Input (MMBtu/hr):		1.9
Class:	Rich Burn	
Description:		
Duty:	Other	
Description:	Continuous Duty	
Minimum Load Range (%):		
Maximum Load Range (%):		
Stroke:	4-stroke	
Power Output (BHP):		229
Electric Output(KW):	P	150
Compression Ratio:		10
Ignition Type:	Spark 💌	
Description:		
Engine Speed (RPM):		1800
Engine Exhaust Temperature (°F):		1008
Air to Fuel Ratio at Peak Load:		5.8
Ratio Basis:	Volume Basis 💌	
Lambda Factor (scfm/scfm):		
Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr):		7817
Output Type:	Electric	
Heat to Power Ratio:		
Is the Engine Using a	J	
Turbocharger?	🗨 Yes 🔘 No	
Is the Engine Using an Aftercooler?	Ves No	
Is the Engine Using (check all that	apply):	
A Prestratified Charge (PSC)	A NOx Converter	
Air to Fuel Adjustment (AF)	✓ Ignition Timing Retard	
Low Emission Combustion	Non-Selective Catalytic Retard	(NSCR)
Other		
Description:		
Have you attached a diagram showing the location and/or the configuration of this equipment?	<ul> <li>Yes</li> <li>No</li> <li>Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?</li> </ul>	● Yes ○ No
Comments:		

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E602 (Stationary Reciprocating Engine) Print Date: 7/13/2023

Make:	VSG Series Gas Enginator Generator	
Manufacturer:	Waukesha Power Systems	
Model:	VSG11GSID	
Maximum Rated Gross Heat Input (MMBtu/hr):		1.9
Class:	Rich Burn	
Description:		
Duty:	Other	
Description:	Continuous Duty	
Minimum Load Range (%):		
Maximum Load Range (%):		
Stroke:	4-stroke	
Power Output (BHP):		229
Electric Output(KW):	p.	150
Compression Ratio:		10
Ignition Type:	Spark 💌	
Description:		
Engine Speed (RPM):		1800
Engine Exhaust Temperature (°F):		1008
Air to Fuel Ratio at Peak Load:		5.8
Ratio Basis:	Volume Basis	
Lambda Factor (scfm/scfm):		
Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr):		7817
Output Type:	Electric	
Heat to Power Ratio:		
Is the Engine Using a		
Turbocharger?	🗨 Yes 🔘 No	
Is the Engine Using an Aftercooler?	Ves No	
Is the Engine Using (check all that	apply):	
A Prestratified Charge (PSC)	A NOx Converter	
Air to Fuel Adjustment (AF)	✓ Ignition Timing Retard	
Low Emission Combustion	Non-Selective Catalytic Retard	(NSCR)
Other		
Description:		
Have you attached a diagram showing the location and/or the configuration of this equipment?	<ul> <li>Yes</li> <li>No</li> <li>Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?</li> </ul>	● Yes ○ No
Comments:		

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E603 (Stationary Reciprocating Engine) Print Date: 7/13/2023

Make:	VSG Series Gas Enginator Generator		
Manufacturer:	Waukesha Power Systems		
Model:	VSG11GSID		
Maximum Rated Gross Heat Input (MMBtu/hr):		1.9	
Class:	Rich Burn		
Description:			
Duty:	Other 💌		
Description:	Continuous Duty		
Minimum Load Range (%):			
Maximum Load Range (%):	p		
Stroke:	4-stroke		
Power Output (BHP):		229	
Electric Output(KW):	8	150	
Compression Ratio:		10	
Ignition Type:	Spark 💌		
Description:			
Engine Speed (RPM):	-	1800	
Engine Exhaust Temperature (°F):		1008	
Air to Fuel Ratio at Peak Load:	p	5.8	
Ratio Basis:	Volume Basis 💌		
Lambda Factor (scfm/scfm):			
Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr):		7817	
Output Type:	Electric		
Heat to Power Ratio:			
Is the Engine Using a	J		
Turbocharger?	🗨 Yes 🔘 No		
Is the Engine Using an Aftercooler?	Ves • No		
Is the Engine Using (check all that	apply):		
A Prestratified Charge (PSC)	A NOx Converter		
Air to Fuel Adjustment (AF)	✓ Ignition Timing Retard		
Low Emission Combustion	Non-Selective Catalytic Retard	(NSCR)	
Other			
Description:			
Have you attached a diagram showing the location and/or the configuration of this equipment?	<ul> <li>Yes</li> <li>No</li> <li>Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?</li> </ul>	● Yes ○ No	
Comments:			

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E801 (Stationary Reciprocating Engine) Print Date: 7/13/2023

Make:	Jenbacher	
Manufacturer:	General Electric	
Model:	JMS-320 GS C82	
Maximum Rated Gross Heat		
Input (MMBtu/hr):	9.8	
Class:	Lean Burn 💌	
Description:		
Duty:	Base Loaded	
Description:		
Minimum Load Range (%):		
Maximum Load Range (%):		
Stroke:	4-stroke	
Power Output (BHP):	1468	
Electric Output(KW):	1059	
Compression Ratio:	12.5	
Ignition Type:	Spark	
Description:		
Engine Speed (RPM):	1800	
Engine Exhaust		
Temperature (°F):	954	
Air to Fuel Ratio at Peak Load:	7.9	
Ratio Basis:	Volume Basis	
Lambda Factor (scfm/scfm):		
Brake Specific Fuel Consumption at Peak Load		
(Btu/BHP-hr):	6671	
Output Type:	Electric	
Heat to Power Ratio:		
Is the Engine Using a		
Turbocharger?	Ves No	
Is the Engine Using an		
Aftercooler?	Yes No	
Is the Engine Using (check all tha		
A Prestratified Charge (PSC)	A NOx Converter	
Air to Fuel Adjustment (AF)	Ignition Timing Retard	
Low Emission Combustion	Non-Selective Catalytic Retard (NSCR)	
Other		
Description:	LEANOX Lean-Burn Combustion System.	
Have you attached a	Have you attached any manuf.'s data or	
diagram showing the location and/or the	specifications to aid the	
configuration of this	Yes Dept. in its review of this Yes	
equipment?	No application?     No	
Comments:	This generator is used to generate electricity by	
using landfill gas. Diagrams and Manufact Specifications were submitted to the NJDE		
	original air permit application.	

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E802 (Stationary Reciprocating Engine) Print Date: 7/13/2023

Make:	Jenbacher
Manufacturer:	General Electric
Model:	
Model. Maximum Rated Gross Heat	JMS-320 GS C82
Input (MMBtu/hr):	9.8
Class:	Lean Burn
Description:	
	Base Loaded
Duty:	
Description:	
Minimum Load Range (%):	
Maximum Load Range (%):	
Stroke:	4-stroke
Power Output (BHP):	1468
Electric Output(KW):	1059
Compression Ratio:	12.5
Ignition Type:	Spark
Description:	
Engine Speed (RPM):	1800
Engine Exhaust	
Temperature (°F):	954
Air to Fuel Ratio at Peak Load:	7.9
Ratio Basis:	Volume Basis 💌
Lambda Factor (scfm/scfm):	
Brake Specific Fuel	
Consumption at Peak Load (Btu/BHP-hr):	6671
,	
Output Type:	
Heat to Power Ratio:	
Is the Engine Using a Turbocharger?	Yes No
0	Yes No
Is the Engine Using an Aftercooler?	Yes No
Is the Engine Using (check all tha	• •
A Prestratified Charge (PSC)	A NOx Converter
Air to Fuel Adjustment (AF)	✓ Ignition Timing Retard
Low Emission Combustion	✓ Non-Selective Catalytic Retard (NSCR)
Other	
Description:	
	LEANOX Lean-Burn Combustion System.
Have you attached a diagram showing the	Have you attached any manuf.'s data or
location and/or the	specifications to aid the
configuration of this	Yes Dept. in its review of this Yes application?
equipment?	No Application:
Comments:	This generator is used to generate electricity by using
	landfill gas. Diagrams and Manufacturer Specifications were submitted to the NJDEP with the
	original air permit application.

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 E803 (Stationary Reciprocating Engine) Print Date: 7/13/2023

	2	
Make:	Jenbacher	
Manufacturer:	General Electric	
Model:	JMS-320 GS C82	
Maximum Rated Gross Heat Input (MMBtu/hr):	9.8	
Class:	Lean Burn	
Description:		
Duty:	Base Loaded 👻	
Description:		
Minimum Load Range (%):		
Maximum Load Range (%):		
Stroke:	4-stroke	
Power Output (BHP):	1468	
Electric Output(KW):	1059	
Compression Ratio:	12.5	
Ignition Type:	Spark 💌	
Description:		
Engine Speed (RPM):	1800	
Engine Exhaust	1000	
Temperature (°F):	954	
Air to Fuel Ratio at Peak Load:	7.9	
Ratio Basis:	Volume Basis 💌	
Lambda Factor (scfm/scfm):		
Brake Specific Fuel Consumption at Peak Load (Btu/BHP-hr):	6671	
	Electric	
Output Type:		
Heat to Power Ratio: Is the Engine Using a		
Turbocharger?	• Yes No	
Is the Engine Using an Aftercooler?	Ves No	
Is the Engine Using (check all that	apply):	
A Prestratified Charge (PSC)	A NOx Converter	
Air to Fuel Adjustment (AF)	✓ Ignition Timing Retard	
Low Emission Combustion	Non-Selective Catalytic Retard (NSCR)	
Other	$\checkmark$	
Description:	LEANOX Lean-Burn Combustion System.	
Have you attached a diagram showing the location and/or the configuration of this equipment?	<ul> <li>Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?</li> <li>Yes</li> <li>No</li> </ul>	
Comments:	This generator is used to generate electricity by using landfill gas. Diagrams and Manufacturer Specifications were submitted to the NJDEP with the original air permit application.	

## New Jersey Department of Environmental Protection Control Device Inventory

CD NJID	Facility's Designation	Description	СD Туре	Install Date	Grand- Fathered	Last Mod. (Since 1968)	CD Set ID
CD101	Flare	Enclosed Flare	Flare	9/1/1996	No		
CD102	Flare	Candlestick Flare	Flare	3/1/2010	No		
CD601	S-1	Hydrogen Sulfide Scrubber	Scrubber (Other)	12/1/2006	No	12/1/2006	
CD801	S-5	Hydrogen Sulfide Scrubber #5	Scrubber (Other)	6/1/2010	No	6/1/2010	
CD802	S-6	Hydrogen Sulfide Scrubber #6	Scrubber (Other)	6/1/2010	No	6/1/2010	

Make:	Callidus Technologies
Manufacturer:	Callidus Technologies
Model:	G-6601
Туре:	Enclosed
Minimum Residence Time (sec):	0.50
Maximum Rated Gross Heat Input (MMBtu/hr):	20.47
	20.47
Auxilliary Fuel:	Propane
Description: Method of Pilot Flame Monitoring:	UV Scanner
Monitoring Location:	Local
Automatic Gas Shutoff After Loss of Flame?	Yes No
Automatic Reignition After Loss of Flame?	Yes No
Minimum Gas Flow Rate (acfm):	150.0
Minimum Operating Temperature (°F):	1,500.0
Minimum Heat Content at Burner Tip (Btu/ft <sup>3</sup> ):	250.00
Flare Operation Type:	Continuous
Does Flare have smokeless design?	Ves No
Is Flare equipped with flame retainer?	🔵 Yes 🌑 No
Is Flare equipped with flame arrestor?	Yes No
Is Flare equipped with LEL monitor?	🔵 Yes 🌑 No
Flare Stack Diameter (inches):	72.00
Lower Heat Content of source gas (BTU/scf):	450
Lower Heat Content of Supplemental Fuel (BTU/scf):	
Destruction and Removal Efficency (%):	98.00
How was Efficency determined?	Provided in Manufacturer's literature
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 testing.
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?	

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 CD101 (Flare) Print Date: 7/13/2023

#### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 CD101 (Flare) Print Date: 7/13/2023 Yes No diagram showing

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

Comments:

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 CD102 (Flare) Print Date: 7/13/2023

Make:	
Manufacturer:	Perennial Energy
Model:	FL-8-C
Туре:	Open 💌
Minimum Residence Time (sec): Maximum Rated Gross Heat Input (MMBtu/hr):	33.00
Auxilliary Fuel:	Propane
Description:	
Method of Pilot Flame Monitoring:	Thermocouple
Monitoring Location: Automatic Gas Shutoff After Loss of Flame?	Ves No
Automatic Reignition After Loss of Flame?	Ves No
Minimum Gas Flow Rate (acfm):	100.0
Minimum Operating Temperature ( <sup>o</sup> F):	
Minimum Heat Content at Burner Tip (Btu/ft <sup>3</sup> ):	250.00
Flare Operation Type:	Continuous
Does Flare have smokeless design?	Yes No
Is Flare equipped with flame retainer?	Ves No
Is Flare equipped with flame arrestor?	Ves No
Is Flare equipped with LEL monitor?	Ves No
Flare Stack Diameter (inches):	8.00
Lower Heat Content of source gas (BTU/scf):	450
Lower Heat Content of Supplemental Fuel (BTU/scf):	
Destruction and Removal Efficency (%):	
How was Efficency determined?	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing? Have you attached any manufacturer's	Ves No
data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	► V/ ► NI

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 CD102 (Flare) Print Date: 7/13/2023 Yes No

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

Comments:

🔵 Yes 🌑 No

Operating specifications were submitted to the NJDEP with the air permit modification.

## 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 CD601 (Scrubber (Other)) Print Date: 7/13/2023

Make:	H2S PLUS
Manufacturer:	MV LLC
Model:	H2S PLUS
Scrubber Type:	04
Description:	Iron Sponge
Is the Scrubber Used for Particulate Control?	🔿 Yes 🌑 No
Is the Scrubber Used for Gas Control?	Yes No
Is the Scrubber Equipped with a	
Mist Eliminator?	🔿 Yes 🌑 No
Minimum Pump Discharge Pressure (in. H20):	
Maximum Pump Discharge Pressure (in. H20)	:
Method of Monitoring Pump Discharge Pressure:	
Minimum Pump Current (amps):	
Maximum Pump Current (amps):	
Method of Monitoring Pump Current:	
Minimum Scrubber Medium Inlet Pressure (in. H20):	
Minimum Operating Liquid Flow Rate (gpm):	
Maximum Operating Liquid Flow Rate (gpm):	
Method of Monitoring Liquid Flow Rate:	
Minimum Operating Gas Flow Rate (acfm):	75.00
Maximum Operating Gas Flow Rate (acfm):	225.00
Method of Monitoring Gas Flow Rate:	Orifice Meter
Minimum Operating Pressure Drop (in. H20):	3.00
Maximum Operating Pressure Drop (in. H20):	9.00
Method of Monitoring Pressure Drop:	n/a
Relative Direction of the Gas-Liquid Flow:	Other 🔽
Description:	Landfill Gas flows through an Iron Sponge media.
Number of Plates:	
Type of Plates:	
Spacing between Plates (in.):	
Maximum Inlet Gas Temperature (°F):	120.0
Maximum Outlet Gas Temperature (°F):	60.0
Inlet Particle Grain Loading (gr/dscf):	
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	To ensure sulfur levels are acceptable, sulfur levels are less than permit limits, scrubber outlet monitored
Properly:	continuously by lab testing.
Have you attached data from recent	
performance testing?	Ves No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control	
apparatus?	

### 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 CD601 (Scrubber (Other)) Print Date: 7/13/2023

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

Comments:

🔵 Yes 🌑 No

LFG flows through iron sponge media for pretreatment (reduction) of H2S in gas before on site consumption. Manufacturer Specifications were submitted to the NJDEP with the original air permit application.

## 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 CD801 (Scrubber (Other)) Print Date: 7/13/2023

Make:	H2S PLUS
Manufacturer:	MV LLC
Model:	H2S PLUS
Scrubber Type:	04
Description:	Iron Sponge
Is the Scrubber Used for Particulate Control?	🔿 Yes 🌑 No
Is the Scrubber Used for Gas Control?	Yes No
Is the Scrubber Equipped with a	
Mist Eliminator?	🔿 Yes 🌑 No
Minimum Pump Discharge Pressure (in. H20):	
Maximum Pump Discharge Pressure (in. H20)	:
Method of Monitoring Pump Discharge Pressure:	
Minimum Pump Current (amps):	
Maximum Pump Current (amps):	
Method of Monitoring Pump Current:	
Minimum Scrubber Medium Inlet Pressure (in. H20):	
Minimum Operating Liquid Flow Rate (gpm):	
Maximum Operating Liquid Flow Rate (gpm):	
Method of Monitoring Liquid Flow Rate:	
Minimum Operating Gas Flow Rate (acfm):	75.00
Maximum Operating Gas Flow Rate (acfm):	225.00
Method of Monitoring Gas Flow Rate:	Orifice Meter
Minimum Operating Pressure Drop (in. H20):	3.00
Maximum Operating Pressure Drop (in. H20):	9.00
Method of Monitoring Pressure Drop:	n/a
Relative Direction of the Gas-Liquid Flow:	Other 💌
Description:	Landfill Gas flows through an Iron Sponge media.
Number of Plates:	
Type of Plates:	
Spacing between Plates (in.):	
Maximum Inlet Gas Temperature (°F):	120.0
Maximum Outlet Gas Temperature (°F):	60.0
Inlet Particle Grain Loading (gr/dscf):	
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	To ensure sulfur levels are acceptable, sulfur levels are less than permit limits, scrubber outlet monitored
Properly:	continuously by lab testing.
Have you attached data from recent	
performance testing?	Ves No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control	
apparatus?	

# 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 CD801 (Scrubber (Other)) Print Date: 7/13/2023

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

Comments:

🔵 Yes 🌑 No

LFG flows through iron sponge media for pretreatment (reduction) of H2S in gas before on site consumption. Manufacturer Specifications were submitted to the NJDEP with the original air permit application.

# 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 CD802 (Scrubber (Other)) Print Date: 7/13/2023

Make:	H2S PLUS
Manufacturer:	MV LLC
Model:	H2S PLUS
Scrubber Type:	04
Description:	Iron Sponge
Is the Scrubber Used for Particulate Control?	🔿 Yes 🌑 No
Is the Scrubber Used for Gas Control?	Ves 🔿 No
Is the Scrubber Equipped with a	
Mist Eliminator?	🔿 Yes 🌑 No
Minimum Pump Discharge Pressure (in. H20):	
Maximum Pump Discharge Pressure (in. H20)	
Method of Monitoring Pump Discharge Pressure:	
Minimum Pump Current (amps):	
Maximum Pump Current (amps):	
Method of Monitoring Pump Current:	
Minimum Scrubber Medium Inlet Pressure (in. H20):	
Minimum Operating Liquid Flow Rate (gpm):	
Maximum Operating Liquid Flow Rate (gpm):	
Method of Monitoring Liquid Flow Rate:	
Minimum Operating Gas Flow Rate (acfm):	75.00
Maximum Operating Gas Flow Rate (acfm):	225.00
Method of Monitoring Gas Flow Rate:	Orifice Meter
Minimum Operating Pressure Drop (in. H20):	3.00
Maximum Operating Pressure Drop (in. H20):	9.00
Method of Monitoring Pressure Drop:	n/a
Relative Direction of the Gas-Liquid Flow:	Other 🔽
Description:	Landfill Gas flows through an Iron Sponge media.
Number of Plates:	
Type of Plates:	
Spacing between Plates (in.):	
Maximum Inlet Gas Temperature (°F):	120.0
Maximum Outlet Gas Temperature (°F):	60.0
Inlet Particle Grain Loading (gr/dscf):	
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 Property:	To ensure sulfur levels are acceptable, sulfur levels are less than permit limits, scrubber outlet monitored continuously by lab testing.
Properly:	continuously by lab testing.
Have you attached data from recent performance testing?	Ves No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control	
apparatus?	

# 73258 CAPE MAY CNTY MUA SANITARY LANDFILL BOP220001 CD802 (Scrubber (Other)) Print Date: 7/13/2023

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

Comments:

🔵 Yes 🌑 No

LFG flows through iron sponge media for pretreatment (reduction) of H2S in gas before on site consumption. Manufacturer Specifications were submitted to the NJDEP with the original air permit application.

# New Jersey Department of Environmental Protection Emission Points Inventory

PT NJID	Facility's	Description	Config.	Equiv.	Height	Dist. to	Exhaus	st Temp.	(deg. F)	Exha	aust Vol. (a	cfm)	Discharge Direction	PT Set ID
NJID	Designation			Diam. (in.)	(ft.)	Prop. Line (ft)	Avg.	Min.	Max.	Avg.	Min.	Max.	Direction	Set ID
PT1	L. Tank #1	Leachate Storage Tank West	Round	999	16	260	70.0	32.0	110.0	13.0	13.0	13.0	Up	
PT2	L. Tank #2	Leachate Storage Tank East	Round	999	16	260	70.0	32.0	110.0	13.0	13.0	13.0	Up	
PT3	LANDFILL	LANDFILL	Surface	999	130	180	70.0	0.0	110.0	849.0	849.0	849.0	Up	
PT11	PT-1	Emerg. Gen. E11 Stack	Round	4	76	233	0.0	0.0	836.0	0.0	0.0	1,162.0	Up	
PT101	Flare	Enclosed Flare	Round	72	40	640	1,600.0	1,500.0	2,000.0	645,089.0	139,064.0	645,089.0	Up	
PT102	Flare	Candlestick Flare	Round	8	24	640	1,600.0	1,500.0	2,000.0	860,119.0	185,419.0	860,119.0	Up	
PT402	Grinder	Horizontal Wood Grinder	Rectangle	55	6	1,000	70.0	32.0	100.0	79.0	0.0	157.5	Horizontal	
PT403	Engine	860 HP Diesel Engine	Round	8	10	1,000	300.0	150.0	400.0	1,000.0	0.0	1,000.0	Up	
PT404	Feed Hopper	Steel Feed Hopper	Rectangle	119	9	1,000	70.0	32.0	100.0	79.0	0.0	157.5	Up	
PT405	Coveyor	Discharge Belt Conveyor	Surface	36	15	1,000	70.0	32.0	100.0	79.0	0.0	157.5	Down	
PT406	Grinder	Tub Wood Grinder	Rectangle	70	6	1,000	70.0	32.0	100.0	79.0	0.0	157.5	Horizontal	
PT407	Engine	1050 HP Diesel Engine	Round	8	10	1,000	300.0	150.0	400.0	1,000.0	0.0	1,000.0	Up	
PT408	Feed Hopper	Steel Feed Hopper	Round	168	9	1,000	70.0	32.0	100.0	79.0	0.0	157.5	Up	
PT409	Conveyor	Discharge Belt Conveyor	Surface	36	15	1,000	70.0	32.0	100.0	79.0	0.0	157.5	Down	
PT411	Wood Grinder	Tub Wood Grinder	Round	168	8	1,000	70.0	32.0	100.0	79.0	0.0	158.0	Horizontal	
PT412	Engine	1,000 HP Diesel Engine	Round	8	10	1,000	300.0	100.0	400.0	1,000.0	0.0	1,000.0	Up	
PT413	Converyor	Discharge Conveyor Belt	Surface	36	15	1,000	70.0	32.0	100.0	79.0	0.0	158.0	Down	
PT601	EG-1	Electrical Generator 1	Round	6	7	1,090	1,008.0	1,008.0	1,008.0	398.0	398.0	398.0	Up	
PT602	EG-2	Electrical Generator 2	Round	6	7	1,090	1,008.0	1,008.0	1,008.0	398.0	398.0	398.0	Up	

# New Jersey Department of Environmental Protection Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam.	Height (ft.)	Dist. to Prop.	Exhaus	t Temp.	(deg. F)	Exh	aust Vol. (a	cfm)	Discharge Direction	PT Set ID
11310	Designation			(in.)	(11.)	Line (ft)	Avg.	Min.	Max.	Avg.	Min.	Max.	Direction	Set ID
PT603	EG-3	Electrical Generator 3	Round	6	7	1,090	1,008.0	1,008.0	1,008.0	398.0	398.0	398.0	Up	
PT801	EG-4	Electrical Generator No. 4	Round	12	50	900	804.0	725.0	954.0	8,380.0	2,845.0	8,518.0	Up	
PT802	EG-5	Electrical Generator No. 5	Round	12	50	900	804.0	725.0	954.0	8,380.0	2,845.0	8,518.0	Up	
PT803	EG-6	Electrical Generator No. 6	Round	12	50	900	804.0	725.0	954.0	8,380.0	2,845.0	8,518.0	Up	
PT804	Flare	Enclosed Flare	Round	72	40	640	1,600.0	1,500.0	2,000.0	645,089.0	139,064.0	645,089.0	Up	
PT805	L. Tank #1	Leachate Storage Tank West	Round	999	16	260	70.0	32.0	110.0	13.0	13.0	13.0	Up	

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

## U1 Leach. Tanks Two Leachate Storage Tanks 700,000 Gallons each

UOS	Facility's	UOS	Operation	Signif.	Control	Emission	SCC(s)	Annual Oper. Hours	VOC	Flov (acfn			mp. eg F)
NJID	Designation	Description	Туре	Equip.	Device(s)	Point(s)	SCC(8)	Min. Max	Range	Min.	Max.	Min.	Max.
OS1	West Tank	Leachate Storage Tank West	Normal - Steady State	E101		PT1	5-01-820-01	8,760.0 8,760	.0	13.0	13.0	32.0	110.0
OS2	East Tank	Leachate Storage Tank East	Normal - Steady State	E301		PT2	5-01-820-01	8,760.0 8,760	.0	13.0	13.0	32.0	110.0

#### U 4 Landfill Landfill Operations

UOS	Facility's	UOS	Operation	Signif.	Control	Emission		Annı Oper. H		voc	Flov (acfi			mp. eg F)
NJID	Designation	Description	Туре	Equip.	Device(s)	Point(s)	SCC(s)	Min.	Max.	Range	Min.	Max.	Min.	Max.
OS1	Old Flare	Original Enclosed Flare	Normal - Steady State	E100	CD101 (P)	PT101	5-01-004-06	8,760.0	8,760.0		150.0	750.0	1,500.0	2,100.0
OS2	Flare	Candlestick Flare - Used for emergency only	Normal - Steady State	E100	CD102 (P)	PT102	5-01-004-06	8,760.0	8,760.0		0.0	1,000.0	1,500.0	2,000.0
OS4	LANDFILL	Fugitive Emissions from Landfill	Normal - Steady State	E100		PT3	5-01-004-02							

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

## U 5 Grinder Mobile wood grinder powered by 860 HP diesel engine

UOS	Facility's UOS	Operation	Signif.	Control	Emission		Ann Oper. I		VOC	Flov (acfi			mp. g F)
NJID	Designation Description	Туре	Equip.	<b>Device</b> (s)	Point(s)	SCC(s)	Min.	Max.	Range	Min.	Max.	Min.	Max.
OS1	Wood grinder	Normal - Steady State	E402		PT402		500.0	1,920.0		0.0	157.5	32.0	100.0
OS2	860 HP Diesel Engine	Normal - Steady State	E403		PT403		500.0	1,920.0		0.0	1,200.0	150.0	400.0
OS3	Feeding Hopper	Normal - Steady State	E404		PT404		500.0	1,920.0		0.0	157.5	32.0	100.0
OS4	Discharge Belt Conveyor	Normal - Steady State	E405		PT405		500.0	1,920.0		0.0	157.5	32.0	100.0

#### U 6 EG-1,2,&3 150 KW Electrical Generators (RICE-driven), controlled by H2S Scrubber, CD601

UOS	Facility's	UOS	Operation	Signif.	Control	Emission	SCC(s)	Ann Oper. I		voc	Flow (acfn			mp. eg F)
NJID	Designation	Description	Туре	Equip.	Device(s)	Point(s)	SCC(S)	Min.	Max.	Range	Min.	Max.	Min.	Max.
OS1	EG-1	Waukesha Engine Model F11GSID, engine #1	Normal - Steady State	E601	CD601 (P)	PT601		0.0	8,760.0		58.0	58.0	1,008.0	1,008.0
OS2	EG-2	Waukesha Engine Model F11GSID, engine #2	Normal - Steady State	E602	CD601 (P)	PT602		0.0	8,760.0		58.0	58.0	1,008.0	1,008.0
OS3	EG-3	Waukesha Engine Model F11GSID, engine #3	Normal - Steady State	E603	CD601 (P)	PT603		0.0	8,760.0		58.0	58.0	1,008.0	1,008.0

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

## U 7 Tub Grinder Mobile Tub Wood Grinder Powered by a 1050 HP Diesel Engine (E407)

UOS	Facility's	UOS	Operation	Signif.	Control	Emission	SCC(s)	Ann Oper. H		VOC	Flov (acfr			np. g F)
NJID	Designation	Description	Туре	Equip.	Device(s)	Point(s)	SCC(8)	Min.	Max.	Range	Min.	Max.	Min.	Max.
OS1	Grinder	Tub Wood Grinder	Normal - Steady State	E406		PT406	A26-50-000-002	500.0	691.0		0.0	157.5	32.0	100.0
OS2	Engine	1050 HP Diesel Engine	Normal - Steady State	E407		PT407	2-02-001-02	500.0	691.0		0.0	122.0	150.0	400.0
OS3	Hopper	Feeding Hopper	Normal - Steady State	E408		PT408	A26-50-000-002	500.0	691.0		0.0	157.5	32.0	100.0
OS4	Conveyor	Discharge Belt Conveyor	Normal - Steady State	E409		PT409	A26-50-000-002	500.0	691.0		0.0	157.5	32.0	100.0

#### U 8 EG-4,5,&6 Electrical Generators No. 4, 5, and 6

UOS	Facility's	UOS	Operation	Signif.	Control	Emission	SCC(s)	Annual Oper. Hours	VOC	Flov (acfr			np. g F)
NJID	Designation	Description	Туре	Equip.	Device(s)	Point(s)	SCC(S)	Min. Max.	Range	Min.	Max.	Min.	Max.
OS1	EG-4	Jenbacher Engine Model JMS-320, Engine #4	Normal - Steady State	E801	CD601 (P) CD801 (P) CD802 (P)	PT801	2-01-008-02	0.0 8,760.0		2,845.0	8,518.0	725.0	954.0
OS2	EG-5	Jenbacher Engine Model JMS-320, Engine #5	Normal - Steady State	E802	CD601 (P) CD801 (P) CD802 (P)	PT802	2-01-008-02	0.0 8,760.0		2,845.0	8,518.0	725.0	954.0

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

## U 8 EG-4,5,&6 Electrical Generators No. 4, 5, and 6

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Ann Oper. I Min.		VOC Range	Flov (acfr Min.			mp. eg F) Max.
OS3	EG-6	Jenbacher Engine Model JMS-320, Engine #6	Normal - Steady State	E803	CD601 (P) CD801 (P) CD802 (P)	PT803	2-01-008-02		8,760.0		2,845.0	8,518.0	725.0	954.0

## U 11 Generator (EG-003-2) Emerg. Gen., 150 kW

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	nual Hours Max.	VOC Range	(8	Flow acfm) Max.	mp. eg F) Max.
OS1	Generator	1.55 MMBTU/hr (HHV) Emerg. Gen. (150 kW) Diesel fuel,	Normal - Steady State	E11		PT11						

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

## U 12 Wood Grinder Wood Tub Grinder Powered by a 1,000 HP Diesel Engine

UOS	Facility's	UOS	Operation	Signif.	Control	Emission	SCC(s)	Ann Oper. H		VOC	Flov (acfr			mp. eg F)
NJID	Designation	Description	Туре	Equip.	Device(s)	Point(s)	SCC(8)	Min.	Max.	Range	Min.	Max.	Min.	Max.
OS1	Grinder	Tub Wood Grinder	Normal - Steady State	E411		PT411	A26-50-000-002	100.0	1,500.0		0.0	158.0	32.0	100.0
OS2	Engine	1,000 HP Diesel Engine	Normal - Steady State	E412		PT412	2-02-001-02	100.0	1,500.0		0.0	122.0	150.0	400.0
OS3	Conveyor	Discharge Conveyor Belt	Normal - Steady State	E413		PT413	A26-50-000-002	100.0	1,500.0		0.0	158.0	32.0	100.0

# New Jersey Department of Environmental Protection Subject Item Group Inventory

Group NJID: GR1 U8 & U4 Comb

Members:

:s:	Туре	ID	OS	Step
	U	U 4	OS0 Summary	
	U	U 8	OS0 Summary	

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

✓ Other

Other (explain): Combined limits for LFG combustion by either U8 engines or U4 flares.

#### Condition/Requirements that will be complied with or are no longer

applicable as a result of this Group:

**Operating Circumstances:** 

# New Jersey Department of Environmental Protection Subject Item Group Inventory

Group NJID: GR2 U5 & U7

Members:

ers:	Туре	ID	OS	Step
	U	U 5	OS0 Summary	
	U	U 7	OS0 Summary	

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

✓ Other

Other (explain): Limit on fuel consumption for both grinders.

## Condition/Requirements that will be complied with or are no longer

applicable as a result of this Group:

**Operating Circumstances:**