



## State of New Jersey

PHILIP D. MURPHY  
Governor

TAHESHA L. WAY  
Lt. Governor

### DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

SHAWN M. LATOURETTE  
Commissioner

### Air Pollution Control Operating Permit Renewal

Permit Activity Number: BOP220001

Program Interest Number: 18050

Mailing Address	Plant Location
SANJAY SINGH PLANT MANAGER LANXESS CORP 1020 KING GEORGES RD Fords, NJ 08863	LANXESS CORPORATION 1020 King Georges Rd Fords Middlesex County

**Initial Operating Permit Approval Date:** December 2, 2003  
**Operating Permit Approval Date:** DRAFT  
**Operating Permit Expiration Date:** T B D (Operating Under Application Shield)

#### AUTHORITY AND APPLICABILITY

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

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

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

#### PERMIT SHIELD

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

#### COMPLIANCE SCHEDULES

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

#### COMPLIANCE CERTIFICATIONS AND DEVIATION REPORTS

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

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

### **ACCESSING PERMITS**

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

### **HELPLINE**

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

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

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

### **COMPLIANCE ASSURANCE MONITORING**

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

### **ADMINISTRATIVE HEARING REQUEST**

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

If you have any questions regarding this permit approval, please call Boran Wang at (609) 940-7225.

Approved by:

\_\_\_\_\_  
Shafi Ahmed

Enclosure

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

**Facility Name: LANXESS CORPORATION**  
**Program Interest Number: 18050**  
**Permit Activity Number: BOP220001**

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## Section A

**Facility Name: LANXESS CORPORATION**  
**Program Interest Number: 18050**  
**Permit Activity Number: BOP220001**

### **POLLUTANT EMISSIONS SUMMARY**

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

Facility's Potential Emissions from all Significant Source Operations (tons per year)										
Source Categories	VOC (total)	NO <sub>x</sub>	CO	SO <sub>2</sub>	TSP (total)	PM <sub>10</sub> (total)	PM <sub>2.5</sub> (total)	Pb	HAPs* (total)	CO <sub>2</sub> e <sup>2</sup>
Emission Units Summary	6.998	64.013	54.543	9.729	6.472	6.472	6.472	NA	NA	
Batch Process Summary	7.6	NA	NA	NA	2.1	2.1	2.1	NA	NA	
Group Summary	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total Emissions	14.588	64.013	54.543	9.729	8.572	8.572	8.572	NA	NA	134,673

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

Emissions from all Insignificant Source Operations and Non-Source Fugitive Emissions (tons per year)									
Source Categories	VOC (total)	NO <sub>x</sub>	CO	SO <sub>2</sub>	TSP (total)	PM <sub>10</sub> (total)	PM <sub>2.5</sub> <sup>2</sup> (total)	Pb	HAPs (total)
Insignificant Source Operations	10.742	0.19	0.046	0.038	2.962	2.883	NA	NA	NA
Non-Source Fugitive Emissions	3.803	NA	NA	NA	5.33	NA	NA	NA	NA

VOC: Volatile Organic Compounds

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

CO: Carbon Monoxide

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

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

TSP: Total Suspended Particulates

Other: Any other air contaminant

regulated under the Federal CAA

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

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

Pb: Lead

HAPs: Hazardous Air Pollutants

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

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

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

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

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

## Section A

**Facility Name: LANXESS CORPORATION**  
**Program Interest Number: 18050**  
**Permit Activity Number: BOP220001**

### **POLLUTANT EMISSIONS SUMMARY**

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

HAP	TPY
N/A	

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

Other Air Contaminant	TPY
N/A	

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<sup>3</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: LANXESS CORPORATION**

**Program Interest Number: 18050**

**Permit Activity Number: BOP220001**

### **GENERAL PROVISIONS AND AUTHORITIES**

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

6. The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this operating permit; or to determine compliance with the operating permit. [N.J.A.C. 7:27-22.16(g)4]
7. The filing of an application for a modification of an operating permit, or of a notice of planned changes or anticipated non-compliance, does not stay any operating permit condition. [N.J.A.C. 7:27-22.16(g)5]
8. The operating permit does not convey any property rights of any sort, or any exclusive privilege. [N.J.A.C. 7:27-22.16(g)6]
9. Upon request, the permittee shall furnish to the Department copies of records required by the operating permit to be kept. [N.J.A.C. 7:27-22.16(g)7]
10. The affirmative defense shall be available for a violation of a provision or condition of the operating permit only if:
  - a. The violation occurred as a result of an equipment malfunction, an equipment start-up or shutdown, or during the performance of necessary equipment maintenance; and
  - b. The affirmative defense is asserted and established as required by N.J.S.A. 26:2C[1]19.1 through 19.5 and any implementing rules. [N.J.A.C. 7:27-22.16(l)]
11. In the event of a challenge to any part of this operating permit, all other parts of the permit shall continue to be valid. [N.J.A.C. 7:27-22.16(f)]
12. Each owner and each operator of any facility, source operation, or activity to which this permit applies is responsible for ensuring compliance with all requirements of N.J.A.C. 7:27-22. If the owner and operator are separate persons, or if there is more than one owner or operator, each owner and each operator is jointly and severally liable for any fees due under N.J.A.C. 7:27-22, and for any penalties for violation of N.J.A.C. 7:27-22. [N.J.A.C. 7:27-22.3]
13. The permittee shall ensure that no air contaminant is emitted from any significant source operation at a rate, calculated as the potential to emit, that exceeds the applicable threshold for reporting emissions set forth in the Appendix to N.J.A.C. 7:27-22 or 7:27-17.9(a), unless emission of the air contaminant is authorized by this operating permit. [N.J.A.C. 7:27-22.3(c)]
14. Consistent with the provisions of N.J.A.C. 7:27-22.3(e), the permittee shall ensure that all requirements of this operating permit are met. In the event that there are multiple emission limitations, monitoring, recordkeeping, and/or reporting requirements for a given source operation, the facility must comply with all requirements, including the most stringent.
15. Consistent with the provisions of N.J.A.C. 7:27-22.3(s), Except as otherwise provided in this subchapter, the submittal of any information or application by a permittee including, but not limited to, an application or notice for any change to the operating permit, including any administrative amendment, any minor or significant modification, renewal, a notice of a seven-day notice change, a notice of past or anticipated noncompliance, does not stay any operating permit condition, nor relieve a permittee from the obligation to obtain other necessary permits and to comply with all applicable Federal, State, and local requirements.
16. Applicable requirements derived from an existing or terminated consent decree with EPA will not be changed without advance consultation by the Department with EPA. N.J.A.C. 7:27-22.3(uu).
17. Unless specifically exempted from permitting, temporary mobile equipment for short-term activities may be periodically used at major facilities, on site for up to 90 days if the requirements listed below, (a) through (h) are satisfied.
  - a. The permittee will ensure that the temporary mobile equipment will not be installed permanently or used permanently on site.

- b. The permittee will ensure that the temporary mobile equipment will not circumvent any State or Federal rules and regulations, even for a short period of time, and the subject equipment will comply with all applicable performance standards.
  - c. The permittee cannot use temporary mobile equipment unless the owner or operator of the subject equipment has obtained and maintains an approved Air Pollution Control Permit, issued pursuant to N.J.A.C. 7:27-8 or 22, prior to bringing the temporary mobile equipment to operate at the major facility.
  - d. The permittee is responsible for ensuring the temporary mobile equipment's compliance with the terms and conditions specified in its approved Air Pollution Control Permit when the temporary mobile equipment operates on the property of the permittee.
  - e. The permittee will ensure that temporary mobile equipment utilized for short-term activities will not operate on site for more than a total of 90 days during any calendar year.
  - f. The permittee will keep on site a list of temporary mobile equipment being used at the facility with the start date, end date, and record of the emissions from all such equipment (amount and type of each air contaminant) no later than 30 days after the temporary mobile equipment completed its job in accordance with N.J.A.C. 7:27-22.19(i)3.
  - g. Emissions from the temporary mobile equipment must be included in the emission netting analysis required of the permittee by N.J.A.C. 7:27-18.7. This information is maintained on site by the permittee and provided to the Department upon request in accordance with existing applicable requirements in the FC Section of its Title V permit.
  - h. Where short-term activities (employing temporary mobile equipment) will reoccur on at least an annual basis, the permittee is required to include such activities (and the associated equipment) within one year of the first use, in its Title V permit through the appropriate modification procedures.
18. Consistent with the provisions of N.J.A.C. 7:27-22.9(c), the permittee shall use monitoring of operating parameters, where required by the compliance plan, as a surrogate for direct emissions testing or monitoring, to demonstrate compliance with applicable requirements.
19. The permittee is responsible for submitting timely and administratively complete operating permit applications:
- Administrative Amendments [N.J.A.C. 7:27-22.20(c)];
  - Seven-Day Notice changes [N.J.A.C. 7:27-22.22(e)];
  - Minor Modifications [N.J.A.C. 7:27-22.23(e)];
  - Significant Modifications [N.J.A.C. 7:27-22.24(e)]; and
  - Renewals [N.J.A.C. 7:27-22.30(b)].
20. The operating permit renewal application consists of a RADIUS application and the application attachment available at the Department's website <https://dep.nj.gov/boss/applications-and-forms/> (Attachment to the RADIUS Operating Permit Renewal Application). Both the RADIUS application and the Application Attachment, along with any other supporting documents must be submitted using the Department's Portal at: <https://njdeponline.com/>. The application is considered timely if it is received at least 12 months before the expiration date of the operating permit. To be deemed administratively complete, the renewal application shall include all information required by the application form for the renewal and the information required pursuant to N.J.A.C. 7:27-22.30(d). However, consistent with N.J.A.C. 7:27-22.30(c), the permittee is encouraged to submit the renewal application at least 15 months prior to expiration of the operating permit, so that any deficiencies can be identified and addressed to ensure that the application is administratively complete by the renewal deadline. Only renewal applications which are timely and administratively complete are eligible for an application shield.
21. For all source emissions testing performed at the facility, the phrase "worst case conditions without creating an unsafe condition" used in the enclosed compliance plan is consistent with EPA's National Stack



Testing Guidance, dated April 27, 2009, where all source emission testing performed at the facility shall be under the representative (normal) conditions that:

- a. 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
  - b. Are likely to most challenge the emissions control measures of the facility with regard to meeting the applicable emission standards, but without creating an unsafe condition.
22. Consistent with EPA's National Stack Testing Guidance and Technical Manual 1004, a facility may not stop an ongoing stack test because it would have failed the test unless the facility also ceases operation of the equipment in question to correct the issue. Stopping an ongoing stack test in these instances will be considered credible evidence of emissions non-compliance.
  23. Each permittee shall maintain records of all source emissions testing or monitoring performed at the facility and required by the operating permit in accordance with N.J.A.C. 7:27-22.19. Records shall be maintained, for at least five years from the date of each sample, measurement, or report. Each permittee shall maintain all other records required by this operating permit for a period of five years from the date each record is made. At a minimum, source emission testing or monitoring records shall contain the information specified at N.J.A.C. 7:27-22.19(b). [N.J.A.C. 7:27-22.19(a) and N.J.A.C. 7:27-22.19(b)]
  24. A Permittee may seek the approval of the Department for a delay in testing required pursuant to this permit by submitting a written request to the appropriate Regional Enforcement Office in accordance with N.J.A.C. 7:27-22.18(k). A Permittee may also seek advanced approval for a longer period for submittal of a source emissions test report required by the permit by submitting a request to the Department's Regional Enforcement Office in accordance with N.J.A.C. 7:27-22.19. [N.J.A.C. 7:27-22.18(k) and N.J.A.C. 7:27-22.19]
  25. Any emission limit values in an operating permit shall be interpreted to be followed by inherent trailing zeros (0) in the decimal portion of the limit to three significant figures (e.g. a printed limit of "1 lb/hr" means a limit of "1.00 lb/hr") except for concentration limits less than 10 parts per million (ppm). For such concentration limits, the emission limit shall be interpreted to be followed by inherent trailing zeros (0) in the decimal portion of the limit to two significant figures (e.g. a printed limit of "1 ppm" means a limit of "1.0 ppm").
  26. Testing every five years shall be defined as no later than the end of the 60th month after the first required and each subsequent stack test was completed for the new or modified source.

## Section C

**Facility Name: LANXESS CORPORATION**

**Program Interest Number: 18050**

**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:

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

## Section D

**Facility Name: LANXESS CORPORATION**

**Program Interest Number: 18050**

**Permit Activity Number: BOP220001**

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

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

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

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**Insignificant Sources (IS):**

IS NJID	IS Description	
IS8001	R&D Lab./Exec. Office Heaters; No.2 fuel oil (<1 MMBTU/Hr Total)	7
IS8011	Emergency Diesel Fire Pump (< 1 MMBtu/hr)	8

**Groups (GR):**

GR NJID	GR Designation	GR Description	
GR1	Storage Tank	Insignificant Storage Tanks greater than 10,000 gallon storing Non-HAP, Low Vapor Pressure Liquids (VOC, Caustic and Sludge)	15
GR2	Blend/Mix Tk	Insignificant Non-HAP, low Vapor Pressure (non-Applicable) VOC Blending/Mixing Tanks	17
GR6	Fuel Oil	Insignificant Fuel Oil Tanks <2,000 Gallons	19

**Batch Processes (BP)**

BP NJID	BP Designation	BP Description	
BP1	Ester I	Ester I Batch Plant	20

**Emission Units (U):**

U NJID	U Designation	U Description	
U1	WH4 Drumming	WH#4 Drumming Process Area (2 Lines) - Drumming Non-HAP, Non-Applicable VOC	35
U2	Pilot Plant	Pilot Plant Drumming Process Area - Drumming Non-HAP, Non-Applicable VOC	37
U2500	BP6 Storage	Storage Tanks related to EsterII / SSP Batch Plant Process	39
U8012	Fire Pump	Fire Pump, 142kW	48
U8167	SH-1	SH-1, Process Heater: 6.3 MMBTU/Hr on Natural Gas	58
U8168	SH-2	One Process Heater: 11 MMBtu/hr Burning NG.	62
U8243	Boiler #7&#8	Boiler #7 and #8 - Natural Gas (97.7 MMBTU/Hr each)	66

U8259	SH-3, SH-4	SH-3 and SH-4, Process Heaters: 12.25 MMBTU/Hr each; Natural Gas	76
U8265	Emer.Gen.	Pretreatment Plant Emergency Generator; 1.96 MMBTU/HR; No.2 Fuel Oil	82
U71540	15G Reactor	Pilot Plant Reactor - 15 Gallon	94
U71570	40G Reactor	Pilot Plant Reactor - 40 Gallon	97
U72040	150/500G PPR	Pilot Plant Reactors - 150 and 500 Gallons	100

**LANXESS CORPORATION (18050)**  
**BOP220001**

Date: 3/11/2025

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

**Permit Being Modified**

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

**Description of Modifications:** The following application is for the LANXESS Corporation (PI 18050) Fords, NJ facility Title V Renewal. The current Title V Permit (BOP210001) is set to expire on December 2, 2023, with the following modifications outlined:

1. Removal of BP6 and and U8290 with all associated equipment and emission points;
2. Removal of the following Insignificant Sources: IS1501, IS1502, IS2001 - IS2009, IS2012 - IS2014, IS2015, IS2017 - IS2022, IS2029, IS2030, IS2102 -IS2104, IS2106, IS8007 - IS8010, and Equipment SH-7 (E8290).
3. Removal of all control devices;
4. Removal of U2500 OS2, OS5, OS9 and OS23;
5. Updating the tank sizes to 12,000 gallon for IS1134, IS1135 and IS1136.

BOP220001

**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.

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

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



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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)].	<p>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.</p> <p>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.</p> <p>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.</p> <p>The NJDEP online web portal can be accessed at:  <a href="http://www.state.nj.us/dep/online/">http://www.state.nj.us/dep/online/</a> . The Compliance Certification forms are available by selecting Documents and Forms and then Periodic Compliance Certification. [N.J.A.C. 7:27-22]</p>
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]

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

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

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

**Subject Item:** IS8001 R&D Lab./Exec. Office Heaters; No.2 fuel oil (<1 MMBTU/Hr Total), IS8003 Envir. Bldg. Heater; No.2 fuel oil (<1 MMBTU/Hr)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No person shall cause, suffer, allow or permit visible smoke to be emitted into the outdoor air from the combustion of fuel in any stationary indirect heat exchanger. This provision shall not apply to smoke which is visible for a period of not longer than three minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] and. [N.J.A.C. 7:27- 3.2(c)]	None.	None.	None.
2	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time the fuel was stored in New Jersey may be stored, offered for sale, sold, delivered or exchanged in trade, for use in New Jersey, after the effective date of the applicable standard in Table 1B. [N.J.A.C. 7:27- 9.2(a)]	None.	None.	None.
3	Sulfur Content in Fuel <= 15 ppmw. Maximum allowable sulfur content in No. 2 (or lighter) fuel oil for geographical Zone 4. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by fuel sampling (e.g. oil) each month during operation. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Recordkeeping by certified lab analysis results per delivery. Keep certificate of analysis showing fuel sulfur content, per delivery. [N.J.A.C. 7:27- 9.2(b)]	None.

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**Subject Item:** IS8011 Emergency Diesel Fire Pump (< 1 MMBtu/hr)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR 63, MACT Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [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	Particulate Emissions <= 0.5 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
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.

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Facility Specific Requirements**

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

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Facility Specific Requirements**

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

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



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	Hours of Operation <= 100 hr/yr for testing and maintenance. The limit on the allowable hours for testing and maintenance in accordance with the documentation from manufacturer, the vendor, or the insurance company associated with the engine. [N.J.A.C. 7:27-22.16(a)]	Hours of Operation: Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall maintain on site and record the following information:  For each time the emergency generator is specifically operated for testing or maintenance: i. The reason for its operation; ii. The date(s) of operation and the start up and shut down time; iii. The total operating time for testing or maintenance based on the generator's hour meter; and iv. The name of the operator. [N.J.A.C. 7:27-19.11]	None.
10	The owner or operator of an emergency or black start CI RICE constructed or reconstructed before June 12, 2006 shall change oil and filter every 500 hours of operation or annually, whichever comes first, as prescribed in Table 2d, item 4a to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6603(a)]	Other: The owner or operator shall change oil and filter every 500 hours of operation or annually, whichever comes first. The owner or operator must develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with Table 6 item 9 to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6640(a)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator must keep records of the oil and filter change. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)(2)]	None.
11	The owner or operator of an emergency or black start CI RICE constructed or reconstructed before June 12, 2006 shall inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary, as prescribed in Table 2d, item 4b and 4c to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6603(a)]	Other: The owner or operator shall inspect air cleaner every 1000 hours or annually, whichever comes first and inspect all hoses and belts every 500 hours of operation or annually, whichever comes first. The owner or operator must develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with Table 6 item 9 to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6640(a)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator must keep records of the maintenance procedures and air cleaner, belt and hoses replacements events. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)(2)]	None.

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

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	The owner or operator may operate an emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. The owner or operator may operate an emergency RICE up to 50 hours per year in non-emergency situations as allowed by 40 CFR 63.6640(f)(1)(iii) but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. [40 CFR 63.6640(f)(1)]	Monitored by hour/time monitor continuously. The owner or operator of an emergency stationary internal combustion engine must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]	Recordkeeping by manual logging of parameter or storing data in a computer data system annually. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR 63.6655(f)(2)]	None.
16	The owner or operator shall comply with the General Provisions as shown in Table 8 to Subpart ZZZZ of 40 CFR 63 that apply to an existing emergency or black start CI RICE constructed or reconstructed before June 12, 2006 and located at an area source of HAP emissions except for a residential, commercial, or institutional emergency stationary RICE. [40 CFR 63.6665]	None.	None.	None.

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Facility Specific Requirements**

**Subject Item:** GR1 Insignificant Storage Tanks greater than 10,000 gallon storing Non-HAP, Low Vapor Pressure Liquids (VOC, Caustic and Sludge)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Temperature <= 350 degrees F. The operating temperature shall not be greater than 350 degrees F. [N.J.A.C. 7:27-22.1]	None.	None.	None.
2	Vapor Pressure <= 0.02 psia @ 70 degrees F The vapor pressure of the liquid, excluding the vapor pressure of water, shall be less than 0.02 psia at the liquid's actual temperature or at 70 degrees F, whichever is higher. [N.J.A.C. 7:27-22.1]	None.	None.	None.
3	The tank shall have no visible emissions, exclusive of water vapor, to the outdoor atmosphere. [N.J.A.C. 7:27-22.1]	None.	None.	None.
4	The tank shall not emit any air contaminants which may cause an odor detectable outside the property boundaries of the facility. [N.J.A.C. 7:27-22.1]	None.	None.	None.
5	The tank's potential to emit each TXS and each HAP shall not exceed the de minimis reporting thresholds as specified in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.1]	None.	None.	None.
6	The percentage by weight of all HAPs collectively in the raw material stored in the tank shall be less than 1.0 percent. [N.J.A.C. 7:27-22.1]	None.	None.	None.
7	The owner or operator shall have readily available upon Department request a statement certified in accordance with N.J.A.C. 7:27-1.39, signed by the responsible official, as defined at N.J.A.C. 7:27-1.4, that: (1) specifies the contents of the tank; (2) affirms that the tank meets the above applicable requirements and (3) attests that the tank is in compliance with all other applicable State or federal air pollution requirements. [N.J.A.C. 7:27-22.1]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	The tank(s) shall not qualify for any NESHAPS, MACT, or NSPS air pollution control standards, excluding the NSPS requirements (if applicable) to maintain a record of the contents of the tank, the period of storage of these contents, and the maximum true vapor pressure of the liquid stored. [N.J.A.C. 7:27-22.1]	None.	None.	None.

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**Subject Item:** GR2 Insignificant Non-HAP, low Vapor Pressure (non-Applicable) VOC Blending/Mixing Tanks

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Mixing or blending of liquids in the tank takes place in a non-reactive process. [N.J.A.C. 7:27-22.1]	None.	None.	None.
2	Temperature <= 350 degrees F. The operating temperature shall not be greater than 350 degrees F. [N.J.A.C. 7:27-22.1]	None.	None.	None.
3	Vapor Pressure <= 0.02 psia @ 70 degrees F. The vapor pressure of the liquid, excluding the vapor pressure of water, shall be less than 0.02 psia at the liquid's actual temperature or at 70 degrees F, whichever is higher. [N.J.A.C. 7:27-22.1]	None.	None.	None.
4	The tank shall have no visible emissions, exclusive of water vapor, to the outdoor atmosphere. [N.J.A.C. 7:27-22.1]	None.	None.	None.
5	The tank shall not emit any air contaminants which may cause an odor detectable outside the property boundaries of the facility. [N.J.A.C. 7:27-22.1]	None.	None.	None.
6	The tank's potential to emit each TXS and each HAP shall not exceed the de minimis reporting thresholds as specified in N.J.A.C. 7:27-17. [N.J.A.C. 7:27-22.1]	None.	None.	None.
7	The percentage by weight of all HAPs collectively in the raw material stored in the tank shall be less than 1.0 percent. [N.J.A.C. 7:27-22.1]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	The owner or operator shall have readily available upon Department request a statement certified in accordance with N.J.A.C. 7:27-1.39, signed by the responsible official, as defined at N.J.A.C. 7:27-1.4, that: (1) specifies the contents of the tank; (2) affirms that the tank meets the above applicable requirements and (3) attests that the tank is in compliance with all other applicable State or federal air pollution requirements. [N.J.A.C. 7:27-22.1]	None.	None.	None.
9	The tank(s) shall not qualify for any NESHAPS, MACT, or NSPS air pollution control standards, excluding the NSPS requirements (if applicable) to maintain a record of the contents of the tank, the period of storage of these contents, and the maximum true vapor pressure of the liquid stored. [N.J.A.C. 7:27-22.1]	None.	None.	None.

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**Subject Item:** GR6 Insignificant Fuel Oil Tanks <2,000 Gallons

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time the fuel was stored in New Jersey may be stored, offered for sale, sold, delivered or exchanged in trade, for use in New Jersey, after the effective date of the applicable standard in Table 1B. [N.J.A.C. 7:27- 9.2(a)]	None.	None.	None.
2	Sulfur Content in Fuel <= 15 ppmw. Maximum allowable sulfur content in No. 2 (or lighter) fuel oil for geographical Zone 4. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery , showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.



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Batch Process: BP1 Ester I Batch Plant

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 0.5 lb/hr. No person shall cause, suffer, allow or permit particles to be emitted through any stack or chimney (PT1005, PT1015, PT1100 thru PT1106, PT1150, PT1200 thru PT1208, PT1300 thru PT1304, PT1400 thru PT1404, and PT1500 thru PT1502) into the outside air in excess of the maximum allowable emission rate of 0.5 lbs/hour based on 0.02 gr/scf or 99% efficiency of collection. [N.J.A.C. 7:27- 6.2(a)]	Other: Monitored by adhering to the operating scenario steps contained in the batch process inventory for BP1 and the batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping by maintaining records of batch process operations.[N.J.A.C. 7:27-22.16(o)].	None.
2	Opacity <= 20 %. No person shall cause, suffer, allow or permit particles to be emitted from any stack or chimney (PT1005, PT1015, PT1100 thru PT1106, PT1150, PT1200 thru PT1208, PT1300 thru PT1304, PT1400 thru PT1404, and PT1500 thru PT1502) into the outdoor air the shade or appearance of which is greater than 20 percent opactiy, exclusive of condensed water vapor for a period of not longer than three 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.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	VOC (Total) <= 3.5 lb/hr. Maximum allowable emission rate as determined from Tables 16A and 16B, based on VOC vapor pressure and percent by volume of the VOC from each source operation (Range A). [N.J.A.C.7:27-16.16(c)] &. [N.J.A.C. 7:27-16.16(d)]	Other: Monitored by adhering to the operating scenario steps contained in the batch process inventory for BP1 and the batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: The owner or operator shall maintain records for each different kind of batch or continuous process for which the source operation is used. i. The following shall be recorded with the information determined in accordance with the Procedure for Using Table 16A: 1. The chemical name and vapor pressure of each VOC used. 2. The percent concentration by volume of VOC in the source gas 3. The volumetric gas flow rate 4. The source gas range classification 5. The maximum allowable emission rate 6. The maximum actual emission rate. 7. Maintain any calculation and test data used to determine the actual emission rate. 8. If the source operation is used for more than one process, the dates the source operation is used for each process. or ii. Conduct an analysis of the source operation, which demonstrates that, under the worst case operating conditions that maximize the VOC emissions after any control, the VOC emission rate of the source operation is in compliance with this section; and maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operations does not exceed the VOC emission rate under worst case operating conditions.[N.J.A.C. 7:27-16.16(g)1].	None.

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
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)]	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. 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 emissions 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)]	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)]	None.
5	BATCH PROCEDURE REQUIREMENT: Utilize procedures for each batch operating scenario that ensures compliance with the emission limits (pounds per batch, pounds per hour and pounds per step) specified for each pollutant in the batch scenario ST Summary and the Potential to Emit tables for each scenario step, respectively. [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially and with each procedure revision to assure compliance. If calculations are not performed, document reason(s) why calculations were not necessary to demonstrate continued compliance. [N.J.A.C. 7:27-22.16(o)]	Other: Recordkeeping by maintaining records of all batch scenario procedure revisions and the calculations to demonstrate adherence with emission limits or documentation why calculations were not necessary. [N.J.A.C. 7:27-22.16(o)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Raw material used in the batch processes shall be, i. any solid that is not a HAP (as defined at 40 CFR 63.1(a)(2)), except phthalic anhydride. ii. any VOC that is not a HAP (as defined at 40 CFR 63.1(a)(2)) and has a vapor pressure not greater than 40 mm Hg (0.77 psia) at 70 degrees F. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by production records per batch showing raw material used. [N.J.A.C. 7:27-22.16(o)].	Recordkeeping by production records once per batch during operation showing raw material used. [N.J.A.C. 7:27-22.16(o)]	None.
7	VOC (Total) <= 7.6 tons/yr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). The total emissions per year shall be calculated by the sum of the emission during any one month added to the sum of the emissions during the preceding 11 months. Also complete the Batch Annual Report form. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The owner or operator shall record the monthly emissions, and the monthly emissions added to the sum of the emissions during the preceding 11 months. Also the owner or operator shall maintain the Batch Annual Report Form. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Every April 1 for the previous year. The annual report for the batch plant operations shall be submitted on the forms supplied in the procedure, to the Central Regional Enforcement Office. [N.J.A.C. 7:27-22.16(o)]
8	TSP <= 2.1 tons/yr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). The total emissions per year shall be calculated by the sum of the emission during any one month added to the sum of the emissions during the preceding 11 months. Also complete the Batch Annual Report form. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The owner or operator shall record the monthly emissions, and the monthly emissions added to the sum of the emissions during the preceding 11 months. Also the owner or operator shall maintain the Batch Annual Report Form. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Every April 1 for the previous year. The annual report for the batch plant operations shall be submitted on the forms supplied in the procedure, to the Central Regional Enforcement Office. [N.J.A.C. 7:27-22.16(o)]
9	PM-10 (Total) <= 2.1 tons/yr. [N.J.A.C. 7:27-22.16(e)]	PM-10 (Total): Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis). The total emissions per year shall be calculated by the sum of the emission during any one month added to the sum of the emissions during the preceding 11 months. Also complete the Batch Annual Report form. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The owner or operator shall record the monthly emissions, and the monthly emissions added to the sum of the emissions during the preceding 11 months. Also the owner or operator shall maintain the Batch Annual Report Form. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Every April 1 for the previous year. The annual report for the batch plant operations shall be submitted on the forms supplied in the procedure, to the Central Regional Enforcement Office. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	PM-2.5 (Total) <= 2.1 tons/yr. [N.J.A.C. 7:27-22.16(a)]	Other: Compliance with PM-10 (Total) will satisfy the requirements of PM-2.5 (Total).[N.J.A.C. 7:27-22.16(o)].	Other: Compliance with PM-10 (Total) will satisfy the requirements of PM-2.5 (Total).[N.J.A.C. 7:27-22.16(o)].	Other (provide description): Other : Compliance with PM-10 (Total) will satisfy the requirements of PM-2.5 (Total). [N.J.A.C. 7:27-22.16(o)]
11	Maintain records of each batch process. [N.J.A.C. 7:27-22.16(e)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Maintain batch process procedures and production records for each batch on-site. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements**

Batch Process: BP1 Ester I Batch Plant

Operating Scenario: OS1 High Temperature Batches - 2-Ethylhexyl alcohol

Step: Step Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Total Hours of Operation $\geq$ 33 hours per batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
2	Minimum hours $\geq$ 10 hr for the worst case VOC emission in Step 3 Stripping. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
3	VOC (Total) $\leq$ 8.309 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
4	VOC (Total) $\leq$ 0.7 lb/hr based on the worst case emissions in Step 3 Stripping. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP $\leq$ 0.05 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations once initially. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain emission calculation records based on batch process formula showing that the potential to emit (PTE) for TSP is below the reporting threshold in Appendix to N.J.A.C. 7:27-22. [N.J.A.C. 7:27-22.16(o)]	None.

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Batch Process: BP1 Ester I Batch Plant

Operating Scenario: OS2 High Temperature Batches - 2-Octanol

Step: Step Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Minimum hours $\geq$ 1 hr for the worst case TSP, PM-10 and PM-2.5 emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
2	Minimum hours $\geq$ 10 hr for the worst case VOC emission in Step 6 Strip/Drying. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
3	Total Hours of Operation $\geq$ 31 hours per batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
4	VOC (Total) $\leq$ 38 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
6	PM-10 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
7	PM-2.5 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
8	VOC (Total) $\leq$ 2.8 lb/hr based on the worst case emissions in Step 6 Strip/Drying. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
9	TSP $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
10	PM-10 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
11	PM-2.5 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.

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Batch Process: BP1 Ester I Batch Plant

Operating Scenario: OS3 High Temperature Batches - C5 and C6 acids

Step: Step Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Total Hours of Operation $\geq$ 33 hours per batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
2	Minimum hours $\geq$ 1 hr for the worst case TSP, PM-10 and PM-2.5 emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
3	Minimum hours $\geq$ 8 hr for the worst case VOC emission in Step 3 Stripping. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
4	VOC (Total) $\leq$ 4.198 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
6	PM-10 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
7	PM-2.5 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
8	VOC (Total) $\leq$ 0.3125 lb/hr based on the worst case emissions in Step 3 Stripping. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
9	TSP $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
10	PM-10 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
11	PM-2.5 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.



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Batch Process: BP1 Ester I Batch Plant

Operating Scenario: OS4 High Temperature Batches - C7 and higher acids

Step: Step Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Total Hours of Operation $\geq$ 31 hours per batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
2	Minimum hours $\geq$ 1 hr for the worst case TSP, PM-10 and PM-2.5 emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
3	Minimum hours $\geq$ 8 hr for the worst case VOC emission in Step 3 Stripping. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
4	VOC (Total) $\leq$ 2.498 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
6	PM-10 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
7	PM-2.5 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
8	VOC (Total) $\leq$ 0.25 lb/hr based on the worst case emissions in Step 3 Stripping. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
9	TSP $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
10	PM-10 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
11	PM-2.5 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.

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

Batch Process: BP1 Ester I Batch Plant

Operating Scenario: OS5 Low Temperature Batches - 2-Ethylhexyl alcohol and C6-10 alcohol

Step: Step Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Total Hours of Operation $\geq$ 25 hours per batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
2	Minimum hours $\geq$ 1 hr for the worst case TSP, PM-10 and PM-2.5 emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
3	Minimum hours $\geq$ 8 hr for the worst case VOC emission in Step 2 Reacting. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
4	VOC (Total) $\leq$ 45 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
6	PM-10 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
7	PM-2.5 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
8	VOC (Total) $\leq$ 0.25 lb/hr based on the worst case emissions in Step 2 Reacting. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
9	TSP $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
10	PM-10 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
11	PM-2.5 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.

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

**Batch Process:** BP1 Ester I Batch Plant**Operating Scenario:** OS6 Low Temperature Batches - C8 to C10 alcohols**Step:** Step Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Total Hours of Operation $\geq$ 23 hours per batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
2	Minimum hours $\geq$ 1 hr for the worst case TSP, PM-10 and PM-2.5 emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
3	Minimum hours $\geq$ 8 hr for the worst case VOC emission in Step 6 Strip/Drying. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
4	VOC (Total) $\leq$ 12 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
6	PM-10 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
7	PM-2.5 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
8	VOC (Total) $\leq$ 1.375 lb/hr based on the worst case emissions in Step 6 Strip/Drying. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
9	TSP $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
10	PM-10 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
11	PM-2.5 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.

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

Batch Process: BP1 Ester I Batch Plant

Operating Scenario: OS7 Low Temperature Batches - C13 and higher alcohols

Step: Step Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Total Hours of Operation $\geq$ 23 hours per batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
2	Minimum hours $\geq$ 1 hr for the worst case TSP, PM-10 and PM-2.5 emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
3	Minimum hours $\geq$ 8 hr for the worst case VOC emission in Step 6 Strip/Drying. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
4	VOC (Total) $\leq$ 4.2 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
6	PM-10 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
7	PM-2.5 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
8	VOC (Total) $\leq$ 0.513 lb/hr based on the worst case emissions in Step 6 Strip/Drying. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
9	TSP $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
10	PM-10 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
11	PM-2.5 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.

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

Batch Process: BP1 Ester I Batch Plant

Operating Scenario: OS8 Low Temperature Batches - 2-Ethylhexanoic acid

Step: Step Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Total Hours of Operation $\geq$ 23 hours per batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
2	Minimum hours $\geq$ 1 hr for the worst case TSP, PM-10 and PM-2.5 emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
3	Minimum hours $\geq$ 8 hr for the worst case VOC emission in Step 6 Strip/Drying. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
4	VOC (Total) $\leq$ 0.52 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
6	PM-10 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
7	PM-2.5 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
8	VOC (Total) $\leq$ 0.05 lb/hr based on the worst case emissions in Step 6 Strip/Dry. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
9	TSP $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
10	PM-10 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
11	PM-2.5 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.

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

Batch Process: BP1 Ester I Batch Plant

Operating Scenario: OS9 Low Temperature Batches - Production of Di-Ester

Step: Step Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Total Hours of Operation $\geq$ 21.5 hours per batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
2	Minimum hours $\geq$ 1 hr for the worst case TSP, PM-10 and PM-2.5 emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
3	Minimum hours $\geq$ 3 hr for the worst case VOC emission in Step 3 Stripping. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
4	VOC (Total) $\leq$ 4.198 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
6	PM-10 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
7	PM-2.5 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
8	VOC (Total) $\leq$ 0.67 lb/hr based on the worst case emissions in Step 3 Stripping. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
9	TSP $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
10	PM-10 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
11	PM-2.5 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.

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

**Batch Process:** BP1 Ester I Batch Plant  
**Operating Scenario:** OS10 Repetitive Process Step Batches  
**Step:** Step Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Total Hours of Operation $\geq$ 34 hours per batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
2	Minimum hours $\geq$ 1 hr for the worst case TSP, PM-10 and PM-2.5 emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
3	Minimum hours $\geq$ 8 hr for the worst case VOC emission in Step 5 Stripping. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
4	VOC (Total) $\leq$ 10.249 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
5	TSP $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
6	PM-10 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(e)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
7	PM-2.5 (Total) $\leq$ 0.1 lb/batch. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
8	VOC (Total) $\leq$ 0.875 lb/hr based on the worst case emissions in Step 5 Stripping. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
9	TSP $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
10	PM-10 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.
11	PM-2.5 (Total) $\leq$ 0.1 lb/hr based on the worst case emissions in Step 1 Charging. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	Other: See batch procedure requirement in OS Summary.[N.J.A.C. 7:27-22.16(o)].	None.

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

**Emission Unit:** U1 WH#4 Drumming Process Area (2 Lines) - Drumming Non-HAP, Non-Applicable VOC

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	VOC (Total) <= 3.5 lb/hr. Maximum allowable emission rate as determined from Tables 16A and 16B, based on VOC vapor pressure and percent VOC in source gas shall be 3.5 lb/hr (Range A). [N.J.A.C.7:27-16.16(c)] and. [N.J.A.C. 7:27-16.16(d)]	Other: Monitored by process records based on a batch cycle average..[N.J.A.C. 7:27-22.16(o)].	Other: The owner or operator shall maintain records for each different kind of batch or continuous process for which the source operation is used.  i. The following shall be recorded with the information determined in accordance with the Procedure for Using Table 16A: 1. The chemical name and vapor pressure of each VOC used. 2. The percent concentration by volume of VOC in the source gas 3. The volumetric gas flow rate 4. The source gas range classification 5. The maximum allowable emission rate 6. The maximum actual emission rate. 7. Maintain any calculation and test data used to determine the actual emission rate. 8. If the source operation is used for more than one process, the dates the source operation is used for each process. or ii. Conduct an analysis of the source operation, which demonstrates that, under worst case operating conditions that maximize the VOC emissions after any control, the VOC emission rate of the source operation is in compliance with this section; and maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operations does not exceed the VOC emission rate under worst case operating conditions.[N.J.A.C. 7:27-16.16(g)1].	None.



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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	VOC (Total) <= 0.05 lb/hr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by process records.[N.J.A.C. 7:27-22.16(o)].	Other: Maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operations does not exceed the VOC emission rate under worst case operating conditions.[N.J.A.C. 7:27-22.16(o)].	None.
3	Vapor Pressure <= 0.02 psia @ 70 degrees F. Contents shall be limited to VOC that contain by weight collectively less than 1.0 percent HAPs as defined at 40 CFR 63.1(a)(2). [N.J.A.C. 7:27-22.16(a)]	Other: Vapor Pressure: Monitored by reviewing MSDS or equivalent records for each product (product code) loaded.[N.J.A.C. 7:27-22.16(o)].	Vapor Pressure: Recordkeeping by records of MSDS or equivalent records.[N.J.A.C. 7:27-22.16(o)].	None.
4	Total Material Transferred <= 210 MMgal/yr for two lines (total) based on 8760 hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	Other: Review of production records.[N.J.A.C. 7:27-22.16(o)].	Total Material Transferred: Recordkeeping by production records at the approved frequency. [N.J.A.C. 7:27-22.16(o)]	None.

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

**Emission Unit:** U2 Pilot Plant Drumming Process Area - Drumming Non-HAP, Non-Applicable VOC

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	VOC (Total) <= 3.5 lb/hr. Maximum allowable emission rate as determined from Tables 16A and 16B, based on VOC vapor pressure and percent VOC in source gas shall be 3.5 lb/hr (Range A). [N.J.A.C.7:27-16.16(c)] and. [N.J.A.C. 7:27-16.16(d)]	Other: Monitored by process records based on a batch cycle average.[N.J.A.C. 7:27-22.16(o)].	Other: The owner or operator shall maintain records for each different kind of batch or continuous process for which the source operation is used.  i. The following shall be recorded with the information determined in accordance with the Procedure for Using Table 16A: 1. The chemical name and vapor pressure of each VOC used. 2. The percent concentration by volume of VOC in the source gas 3. The volumetric gas flow rate 4. The source gas range classification 5. The maximum allowable emission rate 6. The maximum actual emission rate. 7. Maintain any calculation and test data used to determine the actual emission rate. 8. If the source operation is used for more than one process, the dates the source operation is used for each process. or ii. Conduct an analysis of the source operation, which demonstrates that, under worst case operating conditions that maximize the VOC emissions after any control, the VOC emission rate of the source operation is in compliance with this section; and maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operations does not exceed the VOC emission rate under worst case operating conditions.[N.J.A.C. 7:27-16.16(g)1].	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	VOC (Total) <= 0.05 lb/hr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by process records.[N.J.A.C. 7:27-22.16(o)].	Other: Maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operations does not exceed the VOC emission rate under worst case operating conditions.[N.J.A.C. 7:27-22.16(o)].	None.
3	Vapor Pressure <= 0.02 psia @ 70 degrees F. Loading shall be limited to VOC that contain by weight collectively less than 1.0 percent HAPs as defined at 40 CFR 63.1(a)(2). [N.J.A.C. 7:27-22.16(a)]	Other: Vapor Pressure: Monitored by reviewing MSDS or equivalent records for each product (product code) loaded.[N.J.A.C. 7:27-22.16(o)].	Vapor Pressure: Recordkeeping by records of MSDS or equivalent records.[N.J.A.C. 7:27-22.16(o)].	None.
4	Total Material Transferred <= 79 MMgal/yr based on 8760 hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Total Production Rate <= 150 gal/min. The maximum drum filling rate. [N.J.A.C. 7:27-22.16(a)]	Other: Maximum design pumping rate.[N.J.A.C. 7:27-22.16(o)].	Total Production Rate: Recordkeeping by production records at the approved frequency showing the design rate. [N.J.A.C. 7:27-22.16(o)]	None.

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

**Emission Unit:** U2500 Storage Tanks related to EsterII / SSP Batch Plant Process

**Operating Scenario:** OS Summary

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	No person shall cause, suffer, allow or permit the storage of any applicable VOC in any stationary storage tank having a maximum capacity of 2,000 gallons or greater exposed to the rays of the sun unless the external surface of the tank is painted and maintained white. [N.J.A.C. 7:27-16.2(b)1i]	None.	None.	None.
3	No person shall cause, suffer, allow, or permit the storage of any applicable VOC in any stationary storage tank having a maximum capacity of 10,000 gallons or greater unless such stationary storage tank is equipped with control apparatus as determined in accordance with the procedures for using Table 2A or as approved by the Department as being equally or more effective in preventing the emission of a VOC into the outdoor atmosphere. (See Operating Scenarios for Department approved control devices). [N.J.A.C. 7:27-16.2(b)2]	None.	None.	None.
4	No person shall cause, suffer, allow or permit the storage of any VOC in any stationary storage tank subject to the provisions of subsection (b) in Ranges II and III and equipped with gauging and /or sampling systems unless such systems are vapor-tight except when gauging or sampling is taking place. [N.J.A.C. 7:27-16.2(d)]	None.	None.	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	Any stationary storage tank in Range III as determined from Table 2A, constructed or installed on or after December 17, 1979, shall be provided with a double seal floating roof or other control apparatus approved by the Department as being equally or more effective in preventing the emission of any VOC into the outdoor atmosphere. [N.J.A.C. 7:27-16.2(l)8i]	None.	None.	None.
6	No person shall cause, suffer, allow or permit the transfer of any applicable VOC into any receiving vessel having a maximum capacity of 2,000 gallons (7,570 liters) or greater unless such transfer is made through a submerged fill pipe or by other means approved by the Department as being equally or more effective in preventing the emission of any VOC into the outdoor atmosphere during transfer. [N.J.A.C. 7:27-16.4(b)]	None.	None.	None.
7	VOC (Total) <= 1.15 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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

**Emission Unit:** U2500 Storage Tanks related to EsterII / SSP Batch Plant Process

**Operating Scenario:** OS3 T-251 Storage Tank - 80,000 Gallons - Storage of Non-HAP low vapor pressure material

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Vapor Pressure <= 0.02 psia @ 70 degrees F. Material stored in the tank shall be limited to non-HAP VOC material. [N.J.A.C. 7:27-22.16(a)]	None.	Vapor Pressure: Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency Maintain records specifying each VOC stored and the vapor pressure of each VOC at standard conditions. [N.J.A.C. 7:27-22.16(o)] and. [N.J.A.C. 7:27-16.2(s)1]	None.
2	Total Throughput <= 1.6 MMgal/yr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by production records monthly.[N.J.A.C. 7:27-22.16(o)].	Total Throughput: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record the material usage monthly, and sum of that month added to the sum of the throughput amount during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.

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

**Emission Unit:** U2500 Storage Tanks related to EsterII / SSP Batch Plant Process

**Operating Scenario:** OS6 T-255 Storage Tank - 10,000 Gallons - Storage of Non-HAP low vapor pressure material

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Vapor Pressure <= 0.02 psia @ 70 degrees F. Material stored in the tank shall be limited to non-HAP VOC material. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by Material Safety Data Sheets (MSDS) or similar document shows vapor pressure.[N.J.A.C. 7:27-22.16(o)].	Vapor Pressure: Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. Maintain records specifying each VOC stored and the vapor pressure of each VOC at standard conditions. [N.J.A.C. 7:27-22.16(o)] and. [N.J.A.C. 7:27-16.2(s)1]	None.
2	Total Throughput <= 0.2 MMgal/yr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by production records monthly.[N.J.A.C. 7:27-22.16(o)].	Total Throughput: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record the material usage monthly, and sum of that month added to the sum of the throughput amount during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.

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

**Emission Unit:** U2500 Storage Tanks related to EsterII / SSP Batch Plant Process

**Operating Scenario:** OS8 T-252 Storage Tank - 20,000 Gallons

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Vapor Pressure <= 2.1 psia @ 70 degrees F. The contents of the tank shall be limited to any VOC that is not a HAP as defined at 40 CFR 63.1(a)(2) and methanol. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by Material Safety Data Sheets (MSDS) or similar document shows vapor pressure.[N.J.A.C. 7:27-22.16(o)].	Vapor Pressure: Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. Maintain records specifying each VOC stored and the vapor pressure of each VOC at standard conditions. [N.J.A.C. 7:27-22.16(o)] and. [N.J.A.C. 7:27-16.2(s)1]	None.
2	Total Throughput <= 445,000 gal/yr. The annual throughput for the tank. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by production records monthly.[N.J.A.C. 7:27-22.16(o)].	Total Throughput: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record the monthly material usage, and sum of that month added to the sum of the amount used during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.



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Facility Specific Requirements**

**Emission Unit:** U2500 Storage Tanks related to EsterII / SSP Batch Plant Process

**Operating Scenario:** OS10 T253 Storage Tank - 40,000 Gallons - Storage of Non-HAP low vapor pressure material

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Vapor Pressure <= 0.02 psia @ 70 degrees F. Material stored in the tank shall be limited to non-HAP VOC material. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by Material Safety Data Sheets (MSDS) or similar document shows vapor pressure.[N.J.A.C. 7:27-22.16(o)].	Vapor Pressure: Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. Maintain records specifying each VOC stored and the vapor pressure of each VOC at standard conditions. [N.J.A.C. 7:27-22.16(o)] and. [N.J.A.C. 7:27-16.2(s)1]	None.
2	Total Throughput <= 0.8 MMgal/yr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by production records monthly.[N.J.A.C. 7:27-22.16(o)].	Total Throughput: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record the material usage monthly, and sum of that month added to the sum of the throughput amount during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.

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

**Emission Unit:** U2500 Storage Tanks related to EsterII / SSP Batch Plant Process

**Operating Scenario:** OS18 T-290 Storage Tank - 30,000 Gallons; Non-HAP, Non applicable VOC

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Vapor Pressure <= 0.02 psia @ 70 degrees F. Material stored in the tank shall be limited to any VOC that is not a HAP (as defined at 40 CFR 63.1(a)(2)). [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by Material Safety Data Sheets (MSDS) or similar document shows vapor pressure.[N.J.A.C. 7:27-22.16(o)].	Vapor Pressure: Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. Maintain records specifying each VOC stored and the vapor pressure of each VOC at standard conditions. [N.J.A.C. 7:27-22.16(o)] and. [N.J.A.C. 7:27-16.2(s)1]	None.
2	Total Throughput <= 10 MMgal/yr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by production records monthly.[N.J.A.C. 7:27-22.16(o)].	Total Throughput: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record the material usage monthly, and sum of that month added to the sum of the throughput amount during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.

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

**Emission Unit:** U2500 Storage Tanks related to EsterII / SSP Batch Plant Process

**Operating Scenario:** OS21 T-269 Storage Tank - 45,000 Gallons; Triethylene Glycol

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Vapor Pressure <= 0.02 psia @ 70 degrees F. Material stored in the tank shall be limited to any VOC that is not a HAP (as defined at 40 CFR 63.1(a)(2)). [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by Material Safety Data Sheets (MSDS) or similar document shows vapor pressure.[N.J.A.C. 7:27-22.16(o)].	Vapor Pressure: Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. Maintain records specifying each VOC stored and the vapor pressure of each VOC at standard conditions. [N.J.A.C. 7:27-22.16(o)] and. [N.J.A.C. 7:27-16.2(s)1]	None.
2	Total Throughput <= 1.324 MMgal/yr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by production records monthly.[N.J.A.C. 7:27-22.16(o)].	Total Throughput: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record the material usage monthly and sum of that month added to the sum of the throughput amount during the preceeding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.

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

**Emission Unit:** U2500 Storage Tanks related to EsterII / SSP Batch Plant Process

**Operating Scenario:** OS22 T-254 Storage Tank - 80,000 Gallons; MAME

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Vapor Pressure <= 0.02 psia @ 70 degrees F. Material stored in the tank shall be limited to any VOC that is not a HAP (as defined at 40 CFR 63.1(a)(2)). [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by Material Safety Data Sheets (MSDS) or similar document shows vapor pressure.[N.J.A.C. 7:27-22.16(o)].	Vapor Pressure: Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. Maintain records specifying each VOC stored and the vapor pressure of each VOC at standard conditions. [N.J.A.C. 7:27-22.16(o)] and. [N.J.A.C. 7:27-16.2(s)1]	None.
2	Total Throughput <= 0.3 MMgal/yr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by production records monthly.[N.J.A.C. 7:27-22.16(o)].	Total Throughput: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record the material usage monthly, and sum of that month added to the sum of the throughput amount during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.

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

Emission Unit: U8012 Emergency Fire Pump, 142kW

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations:  40 CFR 60, NSPS Subpart A - General Provisions, 40 CFR 60, NSPS Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [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	Particulate Emissions <= 0.85 lb/hr. The maximum allowable particulate emission rate based on Maximum Gross Heat Input. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	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 the fuel was stored in New Jersey may be stored, offered for sale, sold, delivered or exchanged in trade, for use in New Jersey, after the effective date of the applicable standard in Table 1B. [N.J.A.C. 7:27- 9.2(a)]	None.	None.	None.
5	Maximum allowable sulfur content in fuel oil by fuel type/viscosity and geographical zone. [N.J.A.C. 7:27- 9.2(b)]	Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements**

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

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	<p>This emergency generator shall not be used:</p> <p>1. For normal testing and maintenance on days when the Department forecasts air quality anywhere in New Jersey to be "unhealthy for sensitive groups," "unhealthy," or "very unhealthy" as defined in the EPA's Air Quality Index at <a href="http://www.airnow.gov/">http://www.airnow.gov/</a>, as supplemented or amended and incorporated herein by reference, unless required in writing by a Federal or State law or regulation. Procedures for determining the air quality forecasts for New Jersey are available at the Department's air quality permitting web site at <a href="https://dep.nj.gov/boss/air-quality-forecast-for-emergency-generators/">https://dep.nj.gov/boss/air-quality-forecast-for-emergency-generators/</a>; and</p> <p>2. As a source of energy or power after the primary energy or power source has become operable again after emergency or after power disruption resulted from construction, repair, or maintenance activity. Operation of the emergency generator during construction, repair, or maintenance activity shall be limited to no more than 30 days of operation per calendar year. If the primary energy or power source is under the control of the owner or operator of the emergency generator, the owner or operator shall make a reasonable, timely effort to repair the primary energy or power source. [N.J.A.C. 7:27-19.2(d)]</p>	None.	None.	None.
8	<p>The owner or operator shall submit an annual statement certified in accordance with N.J.A.C. 7:27-1.39 and signed by the responsible official, as defined at N.J.A.C. 7:27-1.4. The Responsible Official shall certify annually that the emergency generator is operated as defined in this permit. [N.J.A.C. 7:27-22.1]</p>	None.	None.	None.

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	Sulfur Content in Fuel $\leq$ 0.0015 % by weight. Maximum allowable sulfur content in No. 2 fuel oil, diesel fuel or kerosene shall be no more than 15 ppm (0.0015% by wt.). [N.J.A.C. 7:27-22.16(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
10	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.	Other: The owner or operator shall keep records of engine manufacturer data for the life of the equipment showing the rated Maximum Gross Heat Input, Maximum Rated Power Output, Model Year and Displacement. [N.J.A.C. 7:27-22.16(o)].	None.
11	Generator fuel limited to No. 2 fuel oil, diesel fuel or kerosene. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	Hours of Operation $\leq$ 100 hr/yr The permittee shall comply with the above hour per year limit for maintenance and testing purpose only. [N.J.A.C. 7:27-22.16(a)]	Hours of Operation: Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall maintain on site and record the following information:  For each time the emergency generator is specifically operated for testing or maintenance: i. The reason for its operation; ii. The date(s) of operation and the start up and shut down time; iii. The total operating time for testing or maintenance based on the generator's hour meter; and iv. The name of the operator. [N.J.A.C. 7:27-19.11]	None.
13	Maximum Gross Heat Input $\leq$ 1.41 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(e)]	None.	Other: Keep records showing maximum heat input rate.[N.J.A.C. 7:27-22.16(o)].	None.
14	VOC (Total) $\leq$ 0.0025 tons/yr. Annual emission limit based on 100 hours/year of operation for normal testing and maintenance. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	NOx (Total) <= 0.0565 tons/yr. Annual emission limit based on 100 hours/year of operation for normal testing and maintenance. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
16	CO <= 0.0188 tons/yr. Annual emission limit based on 100 hours/year of operation for normal testing and maintenance. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
17	TSP <= 0.0021 tons/yr. Annual emission limit based on 100 hours/year of operation for normal testing and maintenance. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
18	PM-10 (Total) <= 0.0021 tons/yr. Annual emission limit based on 100 hours/year of operation for normal testing and maintenance. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
19	PM-2.5 (Total) <= 0.0021 tons/yr. Annual emission limit based on 100 hours/year of operation for normal testing and maintenance. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
20	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)]
21	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)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	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.
23	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)]
24	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.
25	The owner or operator of a fire pump engine with a displacement of less than 30 liters per cylinder must comply with the emissions standards in table 4 to NSPS IIII for the same model year and nameplate engine power as follows: NMHC + NO <sub>x</sub> ≤ 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(c)]	None.	Other: The owner or operator of a 2007 model year or later engine 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.

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
26	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.
27	Beginning October 1, 2010, the CI internal combustion engines with a displacement of less than 30 liters per cylinder subject to NSPS IIII (manufactured after April 1, 2006 or modified or reconstructed after July 11, 2005) that use diesel fuel must 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, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [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.
28	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, 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.

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
29	Emergency generators may be operated for the purpose of maintenance checks and readiness testing limited to 100 hours per year, provided that those tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year (NSPS Subpart IIII). [40 CFR 60.4211(f)]	Monitored by hour/time monitor continuously. The owner or operator of an emergency stationary internal combustion engine that does not meet the standards applicable to non-emergency engines must install a non-resettable hour meter prior to startup of the engine. [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. Starting with the model year 2011, 2012, or 2013, depending on the maximum engine power as provided in Table 5 in NSPS IIII, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter if the emergency engine does not meet the standards in 40 CFR 60.4204, applicable to non-emergency engines, in the applicable model year. The emergency engine must comply with the labeling requirements in 40 CFR 60.4210(f). [40 CFR 60.4214(b)]	None.
30	The owner or operator of a fire pump engine that was manufactured starting with or after the model year that applies to the engine power rating and a rated speed in table 3 to NSPS IIII and must comply with the emission standards in 40 CFR 60.4205(c), must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(c), 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.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
31	A new or reconstructed stationary RICE located at an area HAP source must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60 subpart IIII, for compression ignition engines or 40 CFR 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR 63. (MACT 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.

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

Emission Unit: U8012 Emergency Fire Pump, 142kW

Operating Scenario: OS1 1.41 MMBTU/hr (HHV) Fire Pump (142kW) Diesel fuel, 100 hrs/yr

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	VOC (Total) <= 0.12 grams/brake horsepower-hour. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	VOC (Total) <= 0.0503 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
3	NOx (Total) <= 2.7 grams/brake horsepower-hour. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	NOx (Total) <= 1.131 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	CO <= 0.9 grams/brake horsepower-hour. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
6	CO <= 0.377 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	TSP <= 0.1 grams/brake horsepower-hour. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	TSP <= 0.0419 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
9	PM-10 (Total) <= 0.1 grams/brake horsepower-hour. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
10	PM-10 (Total) <= 0.0419 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
11	PM-2.5 (Total) <= 0.1 grams/brake horsepower-hour. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
12	PM-2.5 (Total) <= 0.0419 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: U8167 SH-1, Process Heater: 6.3 MMBTU/Hr on Natural Gas  
Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 3.78 lb/hr. The maximum allowable particulate emission rate based on the Maximum Gross Heat Input. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<p>The owner or operator of an industrial/commercial/institutional boiler or other indirect heat exchanger with a gross heat input of at least five million BTU per hour or more shall adjust the combustion process annually in the same quarter of each calendar year.</p> <p>If the source is not operated during the quarter of the calendar year in which the annual adjustment is to be performed, the owner or operator shall perform the adjustment within seven days after the boiler or other indirect heat exchanger is next operated.</p> <p>The adjustment of the combustion process shall be done in accordance with the procedure set forth at N.J.A.C. 7:27-19.16. [N.J.A.C. 7:27-16.8(b)], [N.J.A.C. 7:27-16.8(c)] and [N.J.A.C. 7:27-19.7(g)]</p>	<p>Monitored by periodic emission monitoring annually. The owner or operator shall perform the adjustment of the combustion process in accordance with the combustion adjustment monitoring procedures specified in NJDEP Technical Manual 1005 and the procedure at N.J.A.C. 7:27-19.16(a) as follows: 1. Inspect the burner, and clean or replace any components of the burner as necessary; 2. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern consistent with the manufacturer's specifications; 3. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly; 4. Minimize the total emissions of NOx and CO consistent with the manufacturer's specifications; 5. Measure the concentrations in the effluent stream of NOx and CO in ppmvd and O2 in percent, before and after the adjustment is made; and 6. Convert the measured emission values of NOx, CO and O2 concentrations to lb/MMBTU according to the following formula: <math>\text{Lb/MMBTU} = \text{ppmvd} * \text{MW} * \text{F dry factor} * \text{O2 correction factor} / 387,000,000</math>, where: ppmvd is the concentration in parts per million by volume, dry basis, of NOx or CO; MW is the Molecular Weight for NOx=46 lb/lb-mole, CO=28 lb/lb-mole; F Dry factor for: Natural Gas = 8,710 dscf/MMBTU, Residual or fuel oil = 9,190 dscf/MMBTU; O2 correction factor: <math>(20.9\%) / (20.9\% - \text{O2 measured})</math>, where O2 measured is percent oxygen on a dry basis. [N.J.A.C. 7:27-19.16(a)]</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system upon performing combustion adjustment of the following information for each adjustment: 1. The date of the adjustment and the times at which it began and ended; 2. The name, title and affiliation of the person who made the adjustment; 3. The NOx and CO concentrations in the effluent stream, in ppmvd, before and after each actual adjustment was made; 4. The concentration of O2 (in percent dry basis) at which the CO and NOx concentrations were measured; 5. A description of any corrective action taken; 6. Results from any subsequent test performed after taking any corrective action, including concentrations and converted emission values in (lb/MMBTU); 7. The type and amount of fuel used over the 12 months prior to the annual adjustment; 8. Any other information which the Department or the EPA has required as a condition of approval of any permit or certificate issued for the source operation. The records must be retained for a minimum of five years and to be made readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(b)]</p>	<p>Submit a report: Annually. The owner or operator shall submit an annual adjustment combustion process report to the department within 45 days after the adjustment of the combustion process is completed. The report shall be submitted electronically to: <a href="http://www.njdeponline.com">www.njdeponline.com</a>. Instructions for submitting this report online are specified at: <a href="https://dep.nj.gov/boss/annual-combustion-a">https://dep.nj.gov/boss/annual-combustion-a</a> [N.J.A.C. 7:27-19.16(d)] and. [N.J.A.C. 7:27-19.16(c)]</p>



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	The owner or operator of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)]	Other: Monitor and maintain the operating parameter settings that are established after the combustion process is adjusted in order to operate consistent with the annual adjustment. [N.J.A.C. 7:27-22.16(o)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall record the operating parameter settings that are established after the combustion process is adjusted. [N.J.A.C. 7:27-22.16(o)]	None.
4	NOx (Total) <= 3.2 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	CO <= 2.5 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	TSP <= 0.27 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	PM-10 (Total) <= 0.27 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	PM-2.5 (Total) <= 0.27 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	Maximum Gross Heat Input <= 6.3 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records showing maximum heat input rate. [N.J.A.C. 7:27-22.16(o)].	None.
10	Natural Gas Usage <= 60 MMft <sup>3</sup> /yr. Maximum annual fuel usage. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel usage totalizing meter each month during operation, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record the gas usage monthly, and sum of that month added to the sum of the usage amount during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.

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

**Emission Unit:** U8167 SH-1, Process Heater: 6.3 MMBTU/Hr on Natural Gas

**Operating Scenario:** OS3 Natural Gas Fired Process Heater SH-1

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No visible emissions except for a period of not longer than three minutes in any consecutive 30-minute period. [N.J.A.C. 7:27- 3.2(a)]	None.	None.	None.
2	NOx (Total) <= 0.74 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	CO <= 0.575 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	TSP <= 0.061 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 0.061 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 0.061 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: U8168 One Process Heater: 11 MMBtu/hr Burning NG.  
Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 6.2 lb/hr. The maximum allowable particulate emission rate shall based on the Maximum Gross Heat Input. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<p>The owner or operator of an industrial/commercial/institutional boiler or other indirect heat exchanger with a gross heat input of at least five million BTU per hour or more shall adjust the combustion process annually in the same quarter of each calendar year.</p> <p>If the source is not operated during the quarter of the calendar year in which the annual adjustment is to be performed, the owner or operator shall perform the adjustment within seven days after the boiler or other indirect heat exchanger is next operated.</p> <p>The adjustment of the combustion process shall be done in accordance with the procedure set forth at N.J.A.C. 7:27-19.16. [N.J.A.C. 7:27-16.8(b)], [N.J.A.C. 7:27-16.8(c)] and [N.J.A.C. 7:27-19.7(g)]</p>	<p>Monitored by periodic emission monitoring annually. The owner or operator shall perform the adjustment of the combustion process in accordance with the combustion adjustment monitoring procedures specified in NJDEP Technical Manual 1005 and the procedure at N.J.A.C. 7:27-19.16(a) as follows: 1. Inspect the burner, and clean or replace any components of the burner as necessary; 2. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern consistent with the manufacturer's specifications; 3. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly; 4. Minimize the total emissions of NOx and CO consistent with the manufacturer's specifications; 5. Measure the concentrations in the effluent stream of NOx and CO in ppmvd and O2 in percent, before and after the adjustment is made; and 6. Convert the measured emission values of NOx, CO and O2 concentrations to lb/MMBTU according to the following formula: <math>\text{Lb/MMBTU} = \text{ppmvd} * \text{MW} * \text{F dry factor} * \text{O2 correction factor} / 387,000,000</math>, where: ppmvd is the concentration in parts per million by volume, dry basis, of NOx or CO; MW is the Molecular Weight for NOx=46 lb/lb-mole, CO=28 lb/lb-mole; F Dry factor for: Natural Gas = 8,710 dscf/MMBTU, Residual or fuel oil = 9,190 dscf/MMBTU; O2 correction factor: <math>(20.9\%)/(20.9\% - \text{O2 measured})</math>, where O2 measured is percent oxygen on a dry basis. [N.J.A.C. 7:27-19.16(a)]</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system upon performing combustion adjustment of the following information for each adjustment: 1. The date of the adjustment and the times at which it began and ended; 2. The name, title and affiliation of the person who made the adjustment; 3. The NOx and CO concentrations in the effluent stream, in ppmvd, before and after each actual adjustment was made; 4. The concentration of O2 (in percent dry basis) at which the CO and NOx concentrations were measured; 5. A description of any corrective action taken; 6. Results from any subsequent test performed after taking any corrective action, including concentrations and converted emission values in (lb/MMBTU); 7. The type and amount of fuel used over the 12 months prior to the annual adjustment; 8. Any other information which the Department or the EPA has required as a condition of approval of any permit or certificate issued for the source operation. The records must be retained for a minimum of five years and to be made readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(b)]</p>	<p>Submit a report: Annually. The owner or operator shall submit an annual adjustment combustion process report to the department within 45 days after the adjustment of the combustion process is completed. The report shall be submitted electronically to: <a href="http://www.njdeponline.com">www.njdeponline.com</a>. Instructions for submitting this report online are specified at: <a href="https://dep.nj.gov/boss/annual-combustion-a">https://dep.nj.gov/boss/annual-combustion-a</a> [N.J.A.C. 7:27-19.16(d)] and. [N.J.A.C. 7:27-19.16(c)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	The owner or operator of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)]	Other: Monitor and maintain the operating parameter settings that are established after the combustion process is adjusted in order to operate consistent with the annual adjustment. [N.J.A.C. 7:27-22.16(o)].	Other: The owner or operator shall record the operating parameter settings that are established after the combustion process is adjusted. [N.J.A.C. 7:27-19.16(e)].	None.
4	VOC (Total) <= 0.19 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	NOx (Total) <= 9.5 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	CO <= 2.4 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	SO2 <= 9.12 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	TSP <= 1.27 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	PM-10 (Total) <= 1.27 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	PM-2.5 (Total) <= 1.27 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	Natural Gas Usage <= 53 MMft <sup>3</sup> per year. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by gas use totalizing meter continuously, based on a consecutive 12 month period (rolling 1 month basis). The usage per any consecutive 12-month period shall be calculated by the sum of the amount consumed during any one month added to the sum of the amount consumed during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The permittee shall record the amount consumed for the month added to the sum of the amount consumed during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.
12	Maximum Gross Heat Input <= 11 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records showing maximum heat input rate. [N.J.A.C. 7:27-22.16(o)].	None.

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Facility Specific Requirements**

**Emission Unit:** U8168 One Process Heater: 11 MMBtu/hr Burning NG.

**Operating Scenario:** OS3 11 MMBTU/Hr Natural Gas Process Heater SH-2

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	VOC (Total) <= 0.077 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	NOx (Total) <= 1.3 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	CO <= 1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	TSP <= 0.11 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 0.11 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 0.11 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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**Emission Unit:** U8243 Boiler #7 and #8 - Natural Gas (97.7 MMBTU/Hr each)

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR 60, NSPS Subpart A - General Provisions 40 CFR 60, NSPS Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. [40 CFR Federal Rules Summary]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	The owner or operator of an industrial/commercial/institutional boiler or other indirect heat exchanger with a gross heat input of at least five million BTU per hour or more shall adjust the combustion process annually in the same quarter of each calendar year. The adjustment of the combustion process shall be done in accordance with the procedure set forth at N.J.A.C. 7:27-19.16. [N.J.A.C. 7:27-16.8(b)], [N.J.A.C. 7:27-16.8(c)] and [N.J.A.C. 7:27-19.7(g)]	Monitored by periodic emission monitoring annually. The owner or operator shall perform the adjustment of the combustion process in accordance with the specific procedures for combustion adjustment monitoring specified in NJDEP Technical Manual 1005 and the procedure set forth at N.J.A.C. 7:27-19.16(a) as follows: 1. Inspect the burner, and clean or replace any components of the burner as necessary; 2. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern consistent with the manufacturer's specifications; 3. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly; 4. Minimize the total emissions of NOx and CO consistent with the manufacturer's specifications; 5. Measure the concentrations in the effluent stream of NOx, CO and O2 in ppmvd, before and after the adjustment is made; and 6. Convert the emission values of NOx, CO and O2 concentrations measured in lb/MMBTU according to the following formula: $\text{Lb/MMBTU} = \text{ppmvd} * \text{MW} * \text{F dry factor} * \text{O2 correction factor} / 387,000,000$ , where: ppmvd is the concentration in parts per million by volume, dry basis, of NOx or CO; MW is the Molecular Weight for NOx=46 lb/lb-mole, CO=28 lb/lb-mole; F Dry factor for: Natural Gas = 8,710 dscf/MMBTU, Residual or fuel oil = 9,190 dscf/MMBTU; O2 correction factor: $(20.9\%)/(20.9\% - \text{O2 measured})$ , where O2 measured is percent oxygen on a dry basis. [N.J.A.C. 7:27-19.16(a)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon performing combustion adjustment of the following information for each adjustment: 1. The date of the adjustment and the times at which it began and ended; 2. The name, title and affiliation of the person who made the adjustment; 3. The NOx and CO concentrations in the effluent stream, in ppmvd, before and after each actual adjustment was made; 4. The concentration of O2 (in percent dry basis) at which the CO and NOx concentrations were measured; 5. A description of any corrective action taken; 6. Results from any subsequent test performed after taking any corrective action, including concentrations and converted emission values in (lb/MMBTU); 7. The type and amount of fuel used over the 12 months prior to the annual adjustment; 8. Any other information which the Department or the EPA has required as a condition of approval of any permit or certificate issued for the source operation. The records must be retained for a minimum of five years and to be made readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(b)]	Submit a report: Annually. The owner or operator shall submit an annual adjustment combustion process report to the department within 45 days after the adjustment of the combustion process is completed. The report shall be submitted electronically to: <a href="http://www.njdeponline.com">www.njdeponline.com</a> . Instructions for submitting this report online are specified at: <a href="https://dep.nj.gov/boss/annual-combustion-a">https://dep.nj.gov/boss/annual-combustion-a</a> [N.J.A.C. 7:27-19.16(d)] and. [N.J.A.C. 7:27-19.16(c)]



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	The owner or operator of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.17(e)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system annually. The owner or operator of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.17(e)]	None.
4	Maximum Gross Heat Input $\leq$ 97.7 MMBTU/hr (HHV) for each boiler (#7 and #8). [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records showing maximum heat input rate.[N.J.A.C. 7:27-22.16(o)].	None.
5	The fuel fired in the boilers shall be limited to natural gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) $\leq$ 5.17 tons/yr for the combined use of Boiler #7 and Boiler #8. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations annually. [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. The owner or operator shall maintain readily accessible records of the annual calculations. [N.J.A.C. 7:27-22.16(o)]	None.
7	NOx (Total) $\leq$ 42.8 tons/yr for the combined use of Boiler #7 and Boiler #8. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations annually. [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 annually. The owner or operator shall maintain readily accessible records of the annual calculations. [N.J.A.C. 7:27-22.16(o)]	None.
8	CO $\leq$ 42.8 tons/yr for the combined use of Boiler #7 and Boiler #8. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. The owner or operator shall maintain readily accessible records of the annual calculations. [N.J.A.C. 7:27-22.16(o)]	None.
9	SO <sub>2</sub> $\leq$ 0.53 tons/yr for the combined use of Boiler #7 and Boiler #8. [N.J.A.C. 7:27-22.16(a)]	SO <sub>2</sub> : Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	SO <sub>2</sub> : Recordkeeping by manual logging of parameter or storing data in a computer data system annually. The owner or operator shall maintain readily accessible records of the annual calculations. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	TSP <= 4.29 tons/yr for the combined use of Boiler #7 and Boiler #8. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations annually. [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. The owner or operator shall maintain readily accessible records of the annual calculations. [N.J.A.C. 7:27-22.16(o)]	None.
11	PM-10 (Total) <= 4.29 tons/yr for the combined use of Boiler #7 and Boiler #8. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations annually. [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. The owner or operator shall maintain readily accessible records of the annual calculations. [N.J.A.C. 7:27-22.16(o)]	None.
12	PM-2.5 (Total) <= 4.29 tons/yr for the combined use of Boiler #7 and Boiler #8. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations annually. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. The owner or operator shall maintain readily accessible records of the annual calculations. [N.J.A.C. 7:27-22.16(o)]	None.
13	Natural Gas Usage <= 1,661.75 MMft <sup>3</sup> per year for the combined use of Boilers #7 and #8. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis). The flow monitors and recorders shall be maintained and calibrated consistent with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage each month during operation or manual logging each month during operation. The usage per any consecutive 12-month period shall be calculated by the sum of the amount consumed during any one month added to the sum of the amount consumed during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.
14	All requests, reports, applications, submittal, and other communications to the Administrator pursuant to 40 CFR 60 shall be submitted in duplicate to the EPA Region 2 Office to the attention of: Air and Radiation Division United States Environmental Protection Agency, Region 2 290 Broadway New York, NY 10007-1866. [40 CFR 60.4(a)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	Submit copy of all requests, reports, applications, submittals, and other communications required by 40 CFR 60 to the NJDEP Central Regional Enforcement Office: NJDEP Bureau of Air Enforcement-Central Mail Code 22-03A 401 East State Street PO Box 420 Trenton, NJ 08625-0420 [40 CFR 60.4(b)]	None.	None.	None.
16	Notify the Administrator of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]	None.	None.	None.
17	Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	Maintain a file of all measurements, including continuous monitoring systems, monitoring device, and performance testing measurements: all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspections. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records. [40 CFR 60.7(f)]	None.	None.	None.
19	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollutions 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 operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]	None.	None.	None.
20	No owner or operator shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	Record and maintain the amount of each fuel combusted in the boiler each month. [40 CFR 60.48c(g)]	Monitored by fuel flow/firing rate instrument continuously. The flow meters shall be maintained and calibrated consistent with the manufacturer's specifications which must be made available to the NJDEP upon request. [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 the fuel usage monthly. [N.J.A.C. 7:27-22.16(o)]	None.
22	Maintain all required records for a period of two years following the date of such record. [40 CFR 60.48c(i)]	None.	Other: Maintain all required records for a period of two years following the date of such record.[40 CFR 60.48c(i)].	None.
23	The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by 40 CFR 60.7. This notification shall include information specified in 40 CFR 60.48c(a)1 through (a)4. [40 CFR 60.48c(a)]	None.	None.	Submit a report: Upon occurrence of event. [40 CFR 60.48c(a)]
24	The owner or operator shall record and maintain records of the amounts of each fuel combusted in the unit each operating day. [40 CFR 60.48c(g)(1)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system daily. [40 CFR 60.48c(g)(1)]	None.
25	The owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f), fuels not subject to an emission standard (excluding opacity), or a mixture of these fuels shall record and maintain records of each fuel combusted during each calendar month. [40 CFR 60.48c(g)(2)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [40 CFR 60.48c(g)(2)]	None.
26	The owner or operator of an affected facility or multiple affected facilities located on a contiguous property where the only fuels combusted in any steam generating unit (including steam generating units not subject to NSPS Dc) at that property are natural gas, wood or distillate oil may record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month. [40 CFR 60.48c(g)(3)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [40 CFR 60.48c(g)(3)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
27	The owner or operator shall maintain all required records for a period of two years following the date of such record. [40 CFR 60.48c(i)]	None.	None.	None.

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**Emission Unit:** U8243 Boiler #7 and #8 - Natural Gas (97.7 MMBTU/Hr each)

**Operating Scenario:** OS1 Boiler #7 Firing Natural Gas, OS3 Boiler #8 Firing Natural Gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No visible emissions except for a period of not longer than three minutes in any consecutive 30-minute period. [N.J.A.C. 7:27- 3.2(a)]	None.	None.	None.
2	Particulate Emissions <= 14.9 lb/hr. The maximum allowable particulate emissions rate based on the maximum gross heat input. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	VOC (Total) <= 50 ppm <sub>dv</sub> @ 7% O <sub>2</sub> . [N.J.A.C. 7:27-16.8(b)1]	None.	VOC (Total): Recordkeeping by stack test results upon occurrence of event. Keep the stack test results from March 26 and 27, 2013. [N.J.A.C. 7:27-22.16(o)]	None.
4	CO <= 100 ppm <sub>dv</sub> @ 7% O <sub>2</sub> . [N.J.A.C. 7:27-16.8(b)2]	None.	CO: Recordkeeping by stack test results upon occurrence of event. Keep the stack test results from March 26 and 27, 2013. [N.J.A.C. 7:27-22.16(o)]	None.
5	NO <sub>x</sub> (Total) <= 0.05 lb/MMBTU. Maximum allowable NO <sub>x</sub> emission rate as determined from Table 9 based on the firing method and fuel combusted after March 7, 2007. [N.J.A.C. 7:27-19.7(h)]	None.	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. Keep the stack test results from March 26 and 27, 2013. [N.J.A.C. 7:27-22.16(o)]	None.
6	VOC (Total) <= 0.006 lb/MMBTU. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	VOC (Total) <= 0.59 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	NO <sub>x</sub> (Total) <= 4.89 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. Keep the stack test results from March 26 and 27, 2013. [N.J.A.C. 7:27-22.16(o)]	None.
9	CO <= 0.05 lb/MMBTU. [N.J.A.C. 7:27-22.16(e)]	None.	CO: Recordkeeping by stack test results upon occurrence of event. Keep the stack test results from March 26 and 27, 2013. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	CO <= 4.89 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	CO: Recordkeeping by stack test results upon occurrence of event. Keep the stack test results from March 26 and 27, 2013. [N.J.A.C. 7:27-22.16(o)]	None.
11	SO2 <= 0.000588 lb/MMBTU. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
12	SO2 <= 0.06 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
13	TSP <= 0.005 lb/MMBTU. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
14	TSP <= 0.49 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
15	PM-10 (Total) <= 0.005 lb/MMBTU. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
16	PM-10 (Total) <= 0.49 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
17	PM-2.5 (Total) <= 0.49 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.



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Emission Unit: U8259 SH-3 and SH-4, Process Heaters: 12.25 MMBTU/Hr each; Natural Gas  
Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No visible emissions except for a period of not longer than three minutes in any consecutive 30-minute period. [N.J.A.C. 7:27- 3.2(a)]	None.	None.	None.
2	Particulate Emissions <= 6.45 lb/hr. The maximum allowable particulate emissions rate based on the Maximum Gross Heat Input. [N.J.A.C. 7:27- 4.2]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<p>The owner or operator of an industrial/commercial/institutional boiler or other indirect heat exchanger with a gross heat input of at least five million BTU per hour or more shall adjust the combustion process annually in the same quarter of each calendar year.</p> <p>If the source is not operated during the quarter of the calendar year in which the annual adjustment is to be performed, the owner or operator shall perform the adjustment within seven days after the boiler or other indirect heat exchanger is next operated.</p> <p>The adjustment of the combustion process shall be done in accordance with the procedure set forth at N.J.A.C. 7:27-19.16. [N.J.A.C. 7:27-16.8(b)], [N.J.A.C. 7:27-16.8(c)] and [N.J.A.C. 7:27-19.7(g)]</p>	<p>Monitored by periodic emission monitoring annually. The owner or operator shall perform the adjustment of the combustion process in accordance with the combustion adjustment monitoring procedures specified in NJDEP Technical Manual 1005 and the procedure at N.J.A.C. 7:27-19.16(a) as follows: 1. Inspect the burner, and clean or replace any components of the burner as necessary; 2. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern consistent with the manufacturer's specifications; 3. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly; 4. Minimize the total emissions of NOx and CO consistent with the manufacturer's specifications; 5. Measure the concentrations in the effluent stream of NOx and CO in ppmvd and O2 in percent, before and after the adjustment is made; and 6. Convert the measured emission values of NOx, CO and O2 concentrations to lb/MMBTU according to the following formula: <math>\text{Lb/MMBTU} = \text{ppmvd} * \text{MW} * \text{F dry factor} * \text{O2 correction factor} / 387,000,000</math>, where: ppmvd is the concentration in parts per million by volume, dry basis, of NOx or CO; MW is the Molecular Weight for NOx=46 lb/lb-mole, CO=28 lb/lb-mole; F Dry factor for: Natural Gas = 8,710 dscf/MMBTU, Residual or fuel oil = 9,190 dscf/MMBTU; O2 correction factor: <math>(20.9\%)/(20.9\% - \text{O2 measured})</math>, where O2 measured is percent oxygen on a dry basis. [N.J.A.C. 7:27-19.16(a)]</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system upon performing combustion adjustment of the following information for each adjustment: 1. The date of the adjustment and the times at which it began and ended; 2. The name, title and affiliation of the person who made the adjustment; 3. The NOx and CO concentrations in the effluent stream, in ppmvd, before and after each actual adjustment was made; 4. The concentration of O2 (in percent dry basis) at which the CO and NOx concentrations were measured; 5. A description of any corrective action taken; 6. Results from any subsequent test performed after taking any corrective action, including concentrations and converted emission values in (lb/MMBTU); 7. The type and amount of fuel used over the 12 months prior to the annual adjustment; 8. Any other information which the Department or the EPA has required as a condition of approval of any permit or certificate issued for the source operation. The records must be retained for a minimum of five years and to be made readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(b)]</p>	<p>Submit a report: Annually. The owner or operator shall submit an annual adjustment combustion process report to the department within 45 days after the adjustment of the combustion process is completed. The report shall be submitted electronically to: <a href="http://www.njdeponline.com">www.njdeponline.com</a>. Instructions for submitting this report online are specified at: <a href="https://dep.nj.gov/boss/annual-combustion-a">https://dep.nj.gov/boss/annual-combustion-a</a> [N.J.A.C. 7:27-19.16(d)] and. [N.J.A.C. 7:27-19.16(c)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	The owner or operator of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)]	Other: Monitor and maintain the operating parameter settings that are established after the combustion process is adjusted in order to operate consistent with the annual adjustment. [N.J.A.C. 7:27-22.16(o)].	Other: The owner or operator shall record the operating parameter settings that are established after the combustion process is adjusted. [N.J.A.C. 7:27-19.16(e)].	None.
5	Natural gas shall be the only fuel used in the process heater. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Maximum Gross Heat Input <= 12.25 MMBTU/hr (HHV) for each process heater. [N.J.A.C. 7:27-22.16(e)]	None.	Other: Keep records showing maximum heat input rate. [N.J.A.C. 7:27-22.16(o)].	None.
7	Natural Gas Usage <= 160.3 MMft <sup>3</sup> per year, for the combined use of the Process Heaters, SH-3 and SH-4. [N.J.A.C. 7:27-22.16(e)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis). The facility uses the gas meter installed by the Gas company to determine gas usage. [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The usage per any consecutive 12-month period shall be calculated by the sum of the amount consumed during any one month added to the sum of the amount consumed during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.
8	VOC (Total) <= 0.44 tons/yr , for the combined use of SH-3 and SH-4. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 8.02 tons/yr , for the combined use of SH-3 and SH-4. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	CO <= 6.73 tons/yr , for the combined use of SH-3 and SH-4. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	SO2 <= 0.05 tons/yr , for the combined use of SH-3 and SH-4. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	TSP <= 0.61 tons/yr , for the combined use of SH-3 and SH-4. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	PM-10 (Total) <= 0.61 tons/yr , for the combined use of SH-3 and SH-4. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	PM-2.5 (Total) <= 0.61 tons/yr , for the combined use of SH-3 and SH-4. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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**Emission Unit:** U8259 SH-3 and SH-4, Process Heaters: 12.25 MMBTU/Hr each; Natural Gas

**Operating Scenario:** OS1 SH-3 Firing Natural Gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	VOC (Total) <= 0.07 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	NOx (Total) <= 1.2 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	CO <= 1.01 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	SO2 <= 0.01 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	TSP <= 0.09 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-10 (Total) <= 0.09 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	PM-2.5 (Total) <= 0.09 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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**Emission Unit:** U8259 SH-3 and SH-4, Process Heaters: 12.25 MMBTU/Hr each; Natural Gas

**Operating Scenario:** OS2 SH-4 Firing Natural Gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	VOC (Total) <= 0.07 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	NOx (Total) <= 1.2 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	CO <= 1.01 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	SO2 <= 0.01 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	TSP <= 0.09 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-10 (Total) <= 0.09 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	PM-2.5 (Total) <= 0.09 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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**Emission Unit:** U8265 Pretreatment Plant Emergency Generator; 1.96 MMBTU/HR; No.2 Fuel Oil

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of Applicable Federal Regulations: 40 CFR 63, MACT Subpart A - General Provisions 40 CFR 63, MACT Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [40 CFR Federal Rules Summary]	None.	None.	None.
2	No person shall cause, suffer, allow or permit smoke the shade or appearance of which is darker than number 1 on the Ringelmann smoke chart or greater than 20 percent opacity, exclusive of visible water vapor, to be emitted into the outdoor air for a period of more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
3	Particulate Emissions <= 1.18 lb/hr. The maximum allowable particulate emission rate based on Maximum Gross Heat Input. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	Sulfur Content in Fuel <= 15 ppmw. Maximum allowable sulfur content in No. 2 (or lighter) fuel oil for geographical Zone 4. [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 the fuel was stored in New Jersey may be stored, offered for sale, sold, delivered or exchanged in trade, for use in New Jersey, after the effective date of the applicable standard in Table 1B. [N.J.A.C. 7:27- 9.2(a)]	None.	None.	None.
6	Maximum Gross Heat Input <= 1.96 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(e)]	None.	Other: Keep records showing maximum heat input rate.[N.J.A.C. 7:27-22.16(o)].	None.

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



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	<p>This emergency generator shall not be used:</p> <p>1. For normal testing and maintenance on days when the Department forecasts air quality anywhere in New Jersey to be "unhealthy for sensitive groups," "unhealthy," or "very unhealthy" as defined in the EPA's Air Quality Index at <a href="http://www.airnow.gov/">http://www.airnow.gov/</a>; as supplemented or amended and incorporated herein by reference, unless required in writing by a Federal or State law or regulation. Procedures for determining the air quality forecasts for New Jersey are available at the Department's air quality permitting web site at <a href="https://dep.nj.gov/boss/air-quality-forecast-for-emergency-generators/">https://dep.nj.gov/boss/air-quality-forecast-for-emergency-generators/</a>; and</p> <p>2. As a source of energy or power after the primary energy or power source has become operable again after emergency or after power disruption resulted from construction, repair, or maintenance activity. Operation of the emergency generator during construction, repair, or maintenance activity shall be limited to no more than 30 days of operation per calendar year. If the primary energy or power source is under the control of the owner or operator of the emergency generator, the owner or operator shall make a reasonable, timely effort to repair the primary energy or power source. [N.J.A.C. 7:27-19.2(d)]</p>	None.	None.	None.
9	<p>The Permittee shall, once per month, record the total operating time from each generator's hour meter. [N.J.A.C. 7:27-19.11]</p>	Monitored by hour/time monitor continuously. [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. The owner or operator shall maintain on site the total operating time from the generator's hour meter. [N.J.A.C. 7:27-19.11]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	VOC (Total) <= 0.035 tons/yr. Annual emission limit based on 100 hours/year of operation for normal testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	NOx (Total) <= 0.436 tons/yr. Annual emission limit based on 100 hours/year of operation for normal testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	CO <= 0.094 tons/yr. Annual emission limit based on 100 hours/year of operation for normal testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	SO2 <= 0.029 tons/yr. Annual emission limit based on 100 hours/year of operation for normal testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	TSP <= 0.03 tons/yr. Annual emission limit based on 100 hrs/yr of operation for normal testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	PM-10 (Total) <= 0.03 tons/yr. Annual emission limit based on 100 hours/year of operation for normal testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	PM-2.5 (Total) <= 0.03 tons/yr. Annual emission limit based on 100 hours/year of operation for normal testing and maintenance. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	<p>Hours of Operation &lt;= 100 hr/yr for normal testing and maintenance. The owner or operator shall comply with the above hour per year limit. This emergency generator shall be operated only:</p> <p>1. During the performance of normal testing and maintenance procedures, as recommended in writing by the manufacturer and/or as required in writing by a Federal or State law or regulation,</p> <p>2. When there is power outage or the primary source of mechanical or thermal energy fails because of an emergency, or</p> <p>3. When there is a voltage reduction issued by PJM and posted on the PJM internet website (www.pjm.com) under the "emergency procedures" menu. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Hours of Operation: Monitored by hour/time monitor continuously. The owner or operator shall install, operate and maintain a non-resettable hour meter prior to startup of the engine in accordance with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(o)]</p>	<p>Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall maintain on site and record the following information:</p> <p>For each time the emergency generator is specifically operated for testing or maintenance:</p> <p>i. The reason for its operation;</p> <p>ii. The date(s) of operation and the start up and shut down time;</p> <p>iii. The total operating time for testing or maintenance based on the generator's hour meter; and</p> <p>iv. The name of the operator. [N.J.A.C. 7:27-19.11]</p>	None.
18	<p>Generator fuel shall be limited to #2 fuel oil. [N.J.A.C. 7:27-22.16(e)]</p>	None.	None.	None.
19	<p>No owner or operator subject to the provisions of MACT Subpart A in 40 CFR 63 shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to: (1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere; (2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions. [40 CFR 63.4(b)]</p>	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	The owner and operator must not use fragmentation or phasing of reconstruction activities (i.e., intentionally dividing reconstruction into multiple parts for purposes of avoiding new source requirements) to avoid becoming subject to new source requirements. [40 CFR 63.4(c)]	None.	None.	None.
21	The owner or operator must operate and maintain any affected source at all times, including periods of startup, shutdown, and malfunction, including associated air pollution control equipment and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in 40 CFR 63.6(e)(3), review of operation and maintenance records, and inspection of the source. [40 CFR 63.6(e)(1)(i)]	None.	None.	None.
22	The owner or operator shall correct malfunctions as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, the owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices. [40 CFR 63.6(e)(1)(ii)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
23	The owner or operator of a new or reconstructed affected source must provide the following information to the Administrator: notification of intention to construct a new affected source, reconstruct an affected source, or reconstruct a source such that the source becomes an affected source: notification of the actual date of startup of the source shall be delivered or postmarked within 15 calendar days after that date. [40 CFR 63.9(b)(5)]	None.	Recordkeeping by other recordkeeping method (provide description) once initially. Notification records shall be maintained and recorded in a form suitable and readily available for expeditious inspection and review for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]	Submit notification: Upon occurrence of event. [40 CFR 63.9(b)(5)]
24	After a title V permit has been issued, the owner or operator shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under 40 CFR 63. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard. [40 CFR 63.9(h)(3)]	None.	Recordkeeping by other recordkeeping method (provide description) upon occurrence of event. Notification records shall be maintained for at least 5 years following the date of each record. At minimum, the most recent two years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on a computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]	Submit notification: As per the approved schedule. The notification shall be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration to NJDEP. [40 CFR 63.9(h)(3)]

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

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
27	The owner or operator of an emergency or black start CI RICE constructed or reconstructed before June 12, 2006 shall change oil and filter every 500 hours of operation or annually, whichever comes first, as prescribed in Table 2d, item 4a to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6603(a)]	Other: The owner or operator shall change oil and filter every 500 hours of operation or annually, whichever comes first. The owner or operator has an option of utilizing an oil analysis program, at the same frequency specified for changing the oil, in order to extend the specified oil change requirement, per 40 CFR 63.6625(j). The owner or operator must develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with Table 6 item 9 to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6640(a)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator must keep records of the oil and filter change. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)(2)]	None.
28	The owner or operator of an emergency or black start CI RICE constructed or reconstructed before June 12, 2006 shall inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary, as prescribed in Table 2d, item 4b and 4c to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6603(a)]	Other: The owner or operator shall inspect air cleaner every 1000 hours or annually, whichever comes first and inspect all hoses and belts every 500 hours of operation or annually, whichever comes first. The owner or operator must develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with Table 6 item 9 to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6640(a)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator must keep records of the maintenance procedures and air cleaner, belt and hoses replacements events. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)(2)]	None.
29	The engine must be in compliance with all applicable emission limitations and operating limitations in Subpart ZZZZ of 40 CFR 63 at all times. [40 CFR 63.6605(a)]	None.	None.	None.
30	At all times the owner or operate must operate and maintain a RICE including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.6605(b)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
31	An owner or operator of an existing stationary emergency or black start RICE must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or the owner or operator must develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e)]	Other: Monitored according to the manufacturer's emission-related written instructions or the maintenance plan developed by the owner or operator. [40 CFR 63.6625(e)].	Other: The owner or operator must keep records of the maintenance procedures. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)].	None.
32	The owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]	Other: Monitored according to the manufacturer's emission-related written instructions or the maintenance plan developed by the owner or operator. [40 CFR 63.6640(a)].	Other: The owner or operator must keep records of the maintenance procedures and replacements events. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)].	None.
33	The owner or operator may operate an emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 63.6640(f)(2i)]	Monitored by hour/time monitor continuously. The owner or operator of an emergency stationary internal combustion engine must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]	Recordkeeping by manual logging of parameter or storing data in a computer data system annually. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 63.6655(f)(2)]	None.



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
34	The owner or operator shall comply with the General Provisions as shown in Table 8 to Subpart ZZZZ of 40 CFR 63 that apply to an existing emergency or black start CI RICE constructed or reconstructed before June 12, 2006 and located at an area source of HAP emissions except for a residential, commercial, or institutional emergency stationary RICE. [40 CFR 63.6665]	None.	None.	None.

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

**Emission Unit:** U8265 Pretreatment Plant Emergency Generator; 1.96 MMBTU/HR; No.2 Fuel Oil

**Operating Scenario:** OS1 EPT Emergency Generator on #2 Fuel Oil

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	VOC (Total) <= 0.69 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	NOx (Total) <= 8.73 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
3	CO <= 1.88 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	SO2 <= 0.57 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	TSP <= 0.618 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
6	PM-10 (Total) <= 0.618 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	PM-2.5 (Total) <= 0.618 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

**Emission Unit:** U71540 Pilot Plant Reactor - 15 Gallon**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 0.5 lb/hr based on 0.02 grains per SCF. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
2	Opacity <= 20 %. Opacity greater than 20%, exclusive of condensed water vapor, shall not exceed a period of 3 minutes in any consecutive 30 minute period. [N.J.A.C.7:27-6.2(d)] &. [N.J.A.C. 7:27-6.2(e)]	None.	None.	None.
3	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	VOC (Total) $\leq$ 2 lb/hr. Maximum allowable emission rate as determined from Tables 16A and 16B, based on VOC vapor pressure and percent VOC in source gas. [N.J.A.C. 7:27-16.16(c)] and. [N.J.A.C. 7:27-16.16(d)]	Other: Monitored by process records based on a batch cycle average.[N.J.A.C. 7:27-22.16(o)].	Other: The owner or operator shall maintain records for each different kind of batch or continuous process for which the source operation is used. i. The following shall be recorded with the information determined in accordance with the Procedure for Using Table 16A: 1. The chemical name and vapor pressure of each VOC used. 2. The percent concentration by volume of VOC in the source gas 3. The volumetric gas flow rate 4. The source gas range classification 5. The maximum allowable emission rate 6. The maximum actual emission rate. 7. Maintain any calculation and test data used to determine the actual emission rate. 8. If the source operation is used for more than one process, the dates the source operation is used for each process. or ii. Conduct an analysis of the source operation, which demonstrates that, under worst case operating conditions that maximize the VOC emissions after any control, the VOC emission rate of the source operation is in compliance with this section; and maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operations does not exceed the VOC emission rate under worst case operating conditions.[N.J.A.C. 7:27-16.16(g)1].	None.
5	VOC (Total) $\leq$ 0.05 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by process records.[N.J.A.C. 7:27-22.16(o)].	Other: Maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operations does not exceed the VOC emission rate under worst case operating conditions.[N.J.A.C. 7:27-22.16(o)].	None.
6	TSP $\leq$ 0.05 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	The equipment shall be used only for small scale experimental reactions using a maximum of 120 lb/batch and 24 hr/batch of raw material. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by production records showing amount of material used, per batch.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by production records once per batch during operation showing the amount of material used. [N.J.A.C. 7:27-22.16(o)]	None.
8	Raw material used in the batch process shall be, i. any solid that is not a HAP (as defined at 40 CFR 63.1(a)(2)), and Phthalic Anhydride and Maleic Anhydride. ii. any liquid that is not a HAP (as defined at 40 CFR 63.1(a)(2)), and hydrochloric acid iii. any VOC that is not a HAP (as defined at 40 CFR 63.1(a)(2)) and has a vapor pressure not greater than 97.7 mm Hg (1.89 psia) at 70 degrees F, and methanol. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by production records showing type of raw material used, per batch.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by production records once per batch during operation showing raw material used. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection  
Facility Specific Requirements

Emission Unit: U71570 Pilot Plant Reactor - 40 Gallon  
Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 0.5 lb/hr based on 0.02 grains per SCF. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
2	Opacity <= 20 %. Opacity greater than 20%, exclusive of condensed water vapor, shall not exceed a period of 3 minutes in any consecutive 30 minute period. [N.J.A.C.7:27-6.2(d)] &. [N.J.A.C. 7:27-6.2(e)]	None.	None.	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	VOC (Total) $\leq$ 2 lb/hr. Maximum allowable emission rate as determined from Tables 16A and 16B, based on VOC vapor pressure and percent VOC in source gas. [N.J.A.C.7:27-16.16(c)] and. [N.J.A.C. 7:27-16.16(d)]	Other: Monitored by process records based on a batch cycle average.[N.J.A.C. 7:27-22.16(o)].	Other: The owner or operator shall maintain records for each different kind of batch or continuous process for which the source operation is used. i. The following shall be recorded with the information determined in accordance with the Procedure for Using Table 16A: 1. The chemical name and vapor pressure of each VOC used. 2. The percent concentration by volume of VOC in the source gas 3. The volumetric gas flow rate 4. The source gas range classification 5. The maximum allowable emission rate 6. The maximum actual emission rate. 7. Maintain any calculation and test data used to determine the actual emission rate. 8. If the source operation is used for more than one process, the dates the source operation is used for each process. or ii. Conduct an analysis of the source operation, which demonstrates that, under worst case operating conditions that maximize the VOC emissions after any control, the VOC emission rate of the source operation is in compliance with this section; and maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operations does not exceed the VOC emission rate under worst case operating conditions.[N.J.A.C. 7:27-16.16(g)1].	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.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	VOC (Total) <= 0.05 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by process records.[N.J.A.C. 7:27-22.16(o)].	Other: Maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operations does not exceed the VOC emission rate under worst case operating conditions.[N.J.A.C. 7:27-22.16(o)].	None.
6	TSP <= 0.05 lb/hr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by process records.[N.J.A.C. 7:27-22.16(o)].	TSP: Recordkeeping by production records once per batch during operation. [N.J.A.C. 7:27-22.16(o)]	None.
7	The equipment shall be used only for small scale experimental reactions not exceeding the use of 40 gallons of mixtures of material, per batch. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by production records showing amount of material used, per batch.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by production records once per batch during operation showing the material usage. [N.J.A.C. 7:27-22.16(o)]	None.
8	Raw material used in the batch process shall be, i. any solid that is not a HAP (as defined at 40 CFR 63.1(a)(2)), and Phthalic Anhydride and Maleic Anhydride. ii. any liquid that is not a HAP (as defined at 40 CFR 63.1(a)(2)), and hydrochloric acid iii. any VOC that is not a HAP (as defined at 40 CFR 63.1(a)(2)) and has a vapor pressure not greater than 97.7 mm Hg (1.89 psia) at 70 degrees F, and methanol. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by production records showing type of raw material used, per batch.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by production records once per batch during operation showing raw material used. [N.J.A.C. 7:27-22.16(o)]	None.



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

**Emission Unit:** U72040 Pilot Plant Reactors - 150 and 500 Gallons**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 0.5 lb/hr based on 0.02 grains per SCF. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
2	Opacity <= 20 %. Opacity greater than 20%, exclusive of condensed water vapor, shall not exceed a period of 3 minutes in any consecutive 30 minute period. [N.J.A.C.7:27-6.2(d)] &. [N.J.A.C. 7:27-6.2(e)]	None.	None.	None.
3	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	VOC (Total) $\leq$ 2.5 lb/hr. Maximum allowable emission rate as determined from Tables 16A and 16B, based on VOC vapor pressure and percent VOC in source gas. [N.J.A.C. 7:27-16.16(c)] and. [N.J.A.C. 7:27-16.16(d)]	Other: Monitored by process records based on a batch cycle average.[N.J.A.C. 7:27-22.16(o)].	Other: The owner or operator shall maintain records for each different kind of batch or continuous process for which the source operation is used. i. The following shall be recorded with the information determined in accordance with the Procedure for Using Table 16A: 1. The chemical name and vapor pressure of each VOC used. 2. The percent concentration by volume of VOC in the source gas 3. The volumetric gas flow rate 4. The source gas range classification 5. The maximum allowable emission rate 6. The maximum actual emission rate. 7. Maintain any calculation and test data used to determine the actual emission rate. 8. If the source operation is used for more than one process, the dates the source operation is used for each process. or ii. Conduct an analysis of the source operation, which demonstrates that, under worst case operating conditions that maximize the VOC emissions after any control, the VOC emission rate of the source operation is in compliance with this section; and maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operations does not exceed the VOC emission rate under worst case operating conditions.[N.J.A.C. 7:27-16.16(g)1].	None.
5	VOC (Total) $\leq$ 0.05 lb/hr for each source. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by process records.[N.J.A.C. 7:27-22.16(o)].	Other: Maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operations does not exceed the VOC emission rate under worst case operating conditions.[N.J.A.C. 7:27-22.16(o)].	None.
6	TSP $\leq$ 0.05 lb/hr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by process records.[N.J.A.C. 7:27-22.16(o)].	TSP: Recordkeeping by production records once per batch during operation. [N.J.A.C. 7:27-22.16(o)]	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	The equipment shall be used only for small scale experimental reactions and production blending using mixtures of materials, not to exceed 150 gallons and 500 gallons in the respective reactors, per batch. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by production records showing amount of material used, per batch.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by production records once per batch during operation showing the material usage. [N.J.A.C. 7:27-22.16(o)]	None.
8	Raw material used in the batch processes shall be, i. any solid that is not a HAP (as defined at 40 CFR 63.1(a)(2)), and Phthalic Anhydride. ii. any VOC that is not a HAP (as defined at 40 CFR 63.1(a)(2)) and has a vapor pressure not greater than 49 mm Hg (0.95 psia) at 70 degrees F. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by production records showing type of raw material used, per batch.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by production records once per batch during operation showing raw material used. [N.J.A.C. 7:27-22.16(o)]	None.

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

**Facility Name (AIMS):** LANXESS Corporation

**Facility ID (AIMS):** 18050

**Street** 1020 KING GEORGES RD  
**Address:** FORDS, NJ 08863

**Mailing** 1020 KING GEORGES RD  
**Address:** FORDS, NJ 08863

**County:** Middlesex  
**Location** Industrial/commercial section of Fords in  
**Description:** Woodbridge Township

**State Plane Coordinates:**  
**X-Coordinate:** 615,000  
**Y-Coordinate:** 543,000  
**Units:** New Jersey State Plane 8  
**Datum:** NAD27  
**Source Org.:**  
**Source Type:**

**Industry:**  
**Primary SIC:** 2869  
**Secondary SIC:**  
**NAICS:** 325199

New Jersey Department of Environmental Protection  
Facility Profile (General)

**Contact Type: Air Permit Information Contact**

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**Org. Type:** Corporation

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Ste105

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**Org. Type:** Corporation

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

**Contact Type: Fees/Billing Contact**

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**Org. Type:** Corporation

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**Contact Type: Operator**

**Organization:** LANXESS Corporation

**Org. Type:** Corporation

**Name:** Sanjay Singh

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

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**Org. Type:** Corporation

**Name:** Sanjay Singh

**NJ EIN:** 46728100000

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**Type:** Mobile

**Email:** Sanjayk.Singh@lanxess.com

**LANXESS CORPORATION (18050)**  
**BOP220001**

Date: 3/11/2025

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

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**Org. Type:** Corporation

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**Type:**

**Email:** Sanjayk.Singh@lanxess.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	CO	SO	TSP (Total)	PM-10	Pb	HAPS (Total)	Other (Total)
FG1	Leaks from valves, flanges, pumps and seals-Ester I, Ester II/SSP and Transfer Pumps	Plant wide	3.303				1.830				
FG8	"Road Dust" - due to Material Movement/Transfer-Pl: Wide	Plant wide	0.500				3.500				
Total			3.803	0.000	0.000	0.000	5.330	0.000	0.000	0.00000000	0.000



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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1001	Tank 402, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1002	Tank 403, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1003	Tank 404, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1004	Tank 405, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1006	Tank 426, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1007	Tank 459, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1008	Tank 460, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1009	Tank 461, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1010	Tank 462, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1011	Tank 463, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1012	Tank 464, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1013	Tank 471, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1014	Tank 472, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1016	T-701, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1017	T-702, 10,000-gallon Non-HAP VOC Blend Tank	Manufacturing and Materials Handling Equipment	Ester I	0.438								
IS1018	T-705, 13,000-gallon Non-HAP VOC Blend Tank	Manufacturing and Materials Handling Equipment	Ester I	0.438				0.438	0.438			
IS1019	Tank 921, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1020	Tank 1010, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1021	Tank 1014, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1022	Tank 1030, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1023	Tank 1050, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1024	Tank 1051, Acid Storage Tank <10,000 Gallons	Storage Vessel	Ester I					0.010				
IS1025	Tank 1052, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010								
IS1026	Lg. Foots Tank, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I	0.010				0.001				
IS1100	T-104, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.139								
IS1101	T-105, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.010								
IS1102	T-106, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.010								
IS1103	T-107, 12,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.010								
IS1104	T-109, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.010								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1105	T-110, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.058								
IS1106	T-111, 21,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.011								
IS1107	T-112, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.010								
IS1108	T-113, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.010								
IS1109	T-114, 10,300-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.010								
IS1110	T-115, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.089								
IS1111	T-116, 10,300-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.010								
IS1112	T-117, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.083								
IS1113	T-118, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.192								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1114	T-119, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.087								
IS1115	T-120, 11,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.131								
IS1116	T-121, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.040								
IS1117	T-122, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.221								
IS1118	T-123, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.010								
IS1119	T-124, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.010								
IS1120	T-125, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.010								
IS1121	T-126, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.010								
IS1122	T-127, 21,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.011								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1123	T-128, 21,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.011								
IS1124	T-129, 21,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.011								
IS1125	T-130, 21,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.011								
IS1126	T-131, 21,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.011								
IS1127	T-132, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.011								
IS1128	T-133, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.016								
IS1129	T-134, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.030								
IS1130	T-135, 30,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.333								
IS1131	T-136, 51,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.002								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1132	T-160, 25,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.043								
IS1133	T-203, 30,000-gallon HAP (<1%) and Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.175								
IS1134	T-204, 12,000-gallon HAP (<1%) and Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.175								
IS1135	T-206, Non-HAP VOCs Storage <0.02 psia at std conditions and 12,000 Gallons	Storage Vessel	Ester I Product TF	0.010								
IS1136	T-207, Non-HAP VOCs Storage <0.02 psia at std conditions and 12,000 Gallons	Storage Vessel	Ester I Product TF	0.010								
IS1137	T-208, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I Product TF	0.010								
IS1138	T-308, 22,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.125								



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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1139	T-310, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.010								
IS1140	T-411, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I Product TF	0.010								
IS1141	T-412, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I Product TF	0.010								
IS1142	T-603, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.132								
IS1143	T-800, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I Product TF	0.010								
IS1144	T-823, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I Product TF	0.010								
IS1145	T-824, 10,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Product TF	0.220								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1146	T-825, 10,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Product TF	0.050								
IS1147	T-826, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I Product TF	0.010								
IS1148	T-831, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.014								
IS1149	T-832, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.014								
IS1151	T-852, 25,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.004								
IS1152	T-855, 10,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Product TF	0.220								
IS1153	T-856, 10,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Product TF	0.220								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1154	T-900, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Product TF	0.011								
IS1155	T-914, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I Product TF	0.010								
IS1156	T-915, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I Product TF	0.010								
IS1157	Additives Tank, Non-HAP VOCs Blend Tank	Manufacturing and Materials Handling Equipment	Ester I Product TF	0.010								
IS1158	B-101, 10,900-gallon Non-HAP VOC Blend Tank	Manufacturing and Materials Handling Equipment	Ester I Product TF	0.438				0.438	0.438			
IS1159	B-102, 5,800-gallon Non-HAP VOC Blend Tank	Manufacturing and Materials Handling Equipment	Ester I Product TF	0.438				0.438	0.438			
IS1160	B-103, 12,000-gallon Non-HAP VOC Blend Tank	Manufacturing and Materials Handling Equipment	Ester I Product TF	0.438				0.438	0.438			
IS1161	B-104, 11,000-gallon Non-HAP VOC Blend Tank	Manufacturing and Materials Handling Equipment	Ester I Product TF	0.438				0.438	0.438			

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1162	B-105, 13,000-gallon Non-HAP VOC Blend Tank	Manufacturing and Materials Handling Equipment	Ester I Product TF	0.035				0.220	0.220			
IS1163	B-106, 13,000-gallon Non-HAP VOC Blend Tank	Manufacturing and Materials Handling Equipment	Ester I Product TF	0.044				0.220	0.220			
IS1164	B-107, 13,000-gallon Non-HAP VOC Blend Tank	Manufacturing and Materials Handling Equipment	Ester I Product TF	0.044				0.220	0.220			
IS1165	Warehouse Tank, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I Product TF	0.010								
IS1201	T-137, 106,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Alcohol TF	0.069								
IS1202	T-138, 106,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Alcohol TF	0.069								
IS1203	T-139, 50,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Alcohol TF	0.038								
IS1204	T-140, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Alcohol TF	0.211								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1205	T-141, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Alcohol TF	0.211								
IS1206	T-142, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Alcohol TF	0.308								
IS1207	T-143, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Alcohol TF	0.005								
IS1208	T-144, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Alcohol TF	0.005								
IS1209	T-145, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Alcohol TF	0.012								
IS1210	T-150, 10,600-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Alcohol TF	0.011								
IS1211	T-151, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I Alcohol TF	0.100								
IS1212	T-152, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Alcohol TF	0.109								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1213	T-153, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Alcohol TF	0.109								
IS1214	T-841, NaOH Storage <10,000 Gallons	Storage Vessel	Ester I Alcohol TF					0.010				
IS1215	T-842 NaOH Storage <10,000 Gallons	Storage Vessel	Ester I Alcohol TF					0.010				
IS1216	T-857, T-858, T-859, T-860 -Non-HAP VOC Liquid Storage Tanks; 12,000 gallons each, Vapor Pressure <0.02 PSI	Storage Vessel	Ester I Alcohol TF	0.270								
IS1301	T-101, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.011								
IS1302	T-307, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.011								
IS1303	T-314, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.287								
IS1304	T-317, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.285								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1305	T-318, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.201								
IS1306	T-821, 21,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.028								
IS1307	T-822, 21,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.062								
IS1308	T-827, 30,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.011								
IS1309	T-828, 30,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.100								
IS1310	T-829, 30,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.077								
IS1311	T-833, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I Acid TF	0.010								
IS1312	T-834, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I Acid TF	0.010								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1313	T-835, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I Acid TF	0.010								
IS1314	T-836, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I Acid TF	0.010								
IS1315	T-838, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester I Acid TF	0.010								
IS1317	T-840, 25,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.074								
IS1318	T-901, 19,800-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.010								
IS1319	T-902, 19,800-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.010								
IS1320	T-903, 20,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Acid TF	0.009								



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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1321	T-904, 20,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Acid TF	0.011								
IS1322	T-905, 30,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Acid TF	0.100								
IS1323	T-906, 30,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Acid TF	0.013								
IS1324	T-907, 50,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Acid TF	0.021								
IS1325	T-908, 10,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Acid TF	0.004								
IS1326	T-909, 10,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Acid TF	0.004								
IS1327	T-910, 10,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Acid TF	0.004								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1328	T-911, 10,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Acid TF	0.004								
IS1329	T-912, 10,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Acid TF	0.004								
IS1330	T-913, 10,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Acid TF	0.004								
IS1331	T-916, 10,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Acid TF	0.050								
IS1332	T-917, 10,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Acid TF	0.220								
IS1333	T-918, 20,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Acid TF	0.129								
IS1334	T-920, 30,000-gallon Non-HAP VOC Storage Tank w/ Carbon Adsorption unit	Storage Vessel	Ester I Acid TF	0.220								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1335	T-7000A, 100,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.052								
IS1336	T-7000B, 100,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.052								
IS1401	T-147, 106,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Scale TF	0.053								
IS1402	T-148, 106,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Scale TF	0.570								
IS1403	T-149, 106,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Scale TF	0.003								
IS2016	T-275, 160,000-gallon Non-HAP VOC storage <0.02 psia at std conditions	Storage Vessel	Ester II/SSP	0.084								
IS2023	T-253, 40,000-gallon Non-HAP Non-Applic. VOC Storage Tank	Storage Vessel	Ester II/SSP	0.010								
IS2024	T-254, 80,000-gallon Non-HAP Non-Applic. VOC Storage Tank	Storage Vessel	Ester II/SSP	0.010								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS2025	T-255, 10,000-gallon Non-HAP Non-Applic. VOC Storage Tank	Storage Vessel	Ester II/SSP	0.010								
IS2026	T-269, 45,000-gallon Non-HAP Non-Applic. VOC Storage Tank	Storage Vessel	Ester II/SSP	0.010								
IS2028	T-290, 30,000-gallon Non-HAP Non-Applic. VOC Storage Tank	Storage Vessel	Ester II/SSP	0.010								
IS2101	Tank T-256, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Ester II/SSP Outside	0.010								
IS2105	S-6300C, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester II/SSP Outside	0.100								
IS3001	T-8, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	ZAA Area	0.002								
IS3002	T-7, 10,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	ZAA Area	0.000								
IS3003	T-10, 20,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	ZAA Area	0.013								

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS3004	T-80 Sodium Hydroxide Storage Tank - 20,000 Gallons	Storage Vessel	ZAA Area					0.019	0.019			
IS3086	T-839, 25,000-gallon Non-HAP VOC Storage Tank	Storage Vessel	Ester I Acid TF	0.012								
IS8001	R&D Lab./Exec. Office Heaters; No.2 fuel oil (<1 MMBTU/Hr Total)	Fuel Combustion Equipment (Other)	R&D Lab./Exec. Office	0.001	0.010	0.003	0.014	0.001				
IS8002	R&D Lab./Exec. Office Fuel Oil Tanks <2000 gallons	Storage Vessel	R&D Lab. Exec. Office	0.010								
IS8003	Envir. Bldg. Heater; No.2 fuel oil (<1 MMBTU/Hr)	Fuel Combustion Equipment (Other)	Envir. Bldg.	0.001	0.010	0.003	0.014	0.001				
IS8004	Envir. Bldg. Fuel Oil Tank <2000 gallons	Storage Vessel	Envir. Bldg.	0.010								
IS8005	Diesel Pump Fuel Oil Tank <2000 gallons	Storage Vessel	Diesel Pump Bldg.	0.010								
IS8006	Boiler M-14 Fuel Oil Tanks <2000 gallons	Storage Vessel	ZAA Area	0.010								
IS8011	Emergency Diesel Fire Pump (< 1 MMBtu/hr)	Emergency Fire Pump	Yard House	0.010	0.170	0.040	0.010	0.010	0.010			
IS9001	T-552, Non-HAP VOCs Mixing Tank	Manufacturing and Materials Handling Equipment	Effluent Pretreatment					0.010				

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS9002	T-554, Non-HAP VOCs Storage <0.02 psia at std conditions and <10,000 Gallons	Storage Vessel	Effluent Pretreatment	0.010								
IS9003	T-557, Acid Storage Tank <10,000 Gallons	Storage Vessel	Effluent Pretreatment					0.010				
IS9004	T-556, 250,000-gallon Caustic Storage Tank	Storage Vessel	Effluent Pretreatment					0.004	0.004			
IS9005	T-553 25,000-Gallon Non-HAP VOCs Storage <0.02 psia at std conditions	Storage Vessel	Effluent Pretreatment	0.004								
IS9006	T-555, 10,000-gallon Sludge Storage Tank	Storage Vessel	Effluent Pretreatment	0.002								
IS92350	Two storage tanks and three oil/water separators	Other Equipment	Effluent Pretreatment	0.020								
Total				10.742	0.190	0.046	0.038	2.936	2.883	0.000	0.00000000	0.000

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

<b>Equip. NJID</b>	<b>Facility's Designation</b>	<b>Equipment Description</b>	<b>Equipment Type</b>	<b>Certificate Number</b>	<b>Install Date</b>	<b>Grand-Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>Equip. Set ID</b>
E1	WH4 Drumming	WH#4 Drumming Process Area	Other Equipment		10/20/1995	No		
E2	Pilot Plant	Pilot Plant Drumming Process Area	Other Equipment			No		
E1005	T-416	Filter Receiver Tank- 9,000 Gallons	Manufacturing and Materials Handling Equipment	N/A	1/1/1966	No	1/1/1968	ES5
E1015	T-700	Filter Receiver Tank- 7,000 Gallons	Manufacturing and Materials Handling Equipment	N/A	1/1/1962	No	1/1/1968	ES5
E1100	R-711	Reactor/Stripper/Refiner/Dryer with packed column/partial condenser and total condenser- 12,000 Gallon	Manufacturing and Materials Handling Equipment	PCP960148	5/24/1994	No	6/29/1995	ES1 ES2 ES3 ES4
E1101	T-723	Dryer/Filter Feed with condenser- 9,950 Gallon	Manufacturing and Materials Handling Equipment	PCP960148	1/1/1968	No	6/29/1995	ES4 ES7
E1102	T-740	Filter Receiver Tank- 9,700 Gallon	Manufacturing and Materials Handling Equipment	PCP960148	1/1/1967	No	6/29/1995	ES5
E1103	T-722	Refiner- 10,400 Gallon	Manufacturing and Materials Handling Equipment	PCP960148	1/1/1968	No	6/29/1995	ES3 ES6
E1104	T-713	Hold Tank- 10,000 Gallon	Manufacturing and Materials Handling Equipment	PCP960148	1/1/1958	No	6/29/1995	ES5

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

<b>Equip. NJID</b>	<b>Facility's Designation</b>	<b>Equipment Description</b>	<b>Equipment Type</b>	<b>Certificate Number</b>	<b>Install Date</b>	<b>Grand- Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>Equip. Set ID</b>
E1105	T-780	Filter Receiver Tank- 9,700 Gallon	Manufacturing and Materials Handling Equipment	PCP960148	1/1/1967	No	6/29/1995	ES5
E1106	T-770	Filter Receiver Tank- 9,700 Gallon	Manufacturing and Materials Handling Equipment	PCP960148	1/1/1967	No	6/29/1995	ES5
E1150	T-849	Filter Receiver Tank- 10,000 Gallon	Manufacturing and Materials Handling Equipment	N/A	1/1/1998	No	1/1/1998	ES5
E1200	R-715	Reactor/Strippe/Refiner/Dryer/F Feed with packed column/partial condenser and total condenser- 12,000 Gallon	Manufacturing and Materials Handling Equipment	PCP970018	1/8/1998	No	1/8/1998	ES1 ES2 ES3 ES4
E1201	R-714	Reactor/Stripper/Refiner/Dryer/I Feed with condenser- 10,000 Gallons	Manufacturing and Materials Handling Equipment	PCP970018	1/1/1991	No	1/8/1998	ES1 ES2 ES3 ES4
E1202	T-716	Dryer/Filter Feed with condenser- 10,000 Gallons	Manufacturing and Materials Handling Equipment	PCP970018	1/8/1998	No	1/8/1998	ES2 ES4 ES7
E1203	T-432	Refiner- 10,000 Gallons	Manufacturing and Materials Handling Equipment	PCP970018	1/1/1964	No	1/8/1998	ES3 ES6
E1204	T-400	Filter Receiver Tank- 9,000 Gallons	Manufacturing and Materials Handling Equipment	PCP970018	1/1/1958	No	1/8/1998	ES5



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

<b>Equip. NJID</b>	<b>Facility's Designation</b>	<b>Equipment Description</b>	<b>Equipment Type</b>	<b>Certificate Number</b>	<b>Install Date</b>	<b>Grand- Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>Equip. Set ID</b>
E1205	T-440	Filter Receiver Tank- 9,000 Gallons	Manufacturing and Materials Handling Equipment	PCP970018	1/1/1958	No	1/8/1998	ES5
E1206	T-480	Filter Receiver Tank- 9,000 Gallons	Manufacturing and Materials Handling Equipment	PCP970018	1/1/1958	No	1/8/1998	ES5
E1207	T-850	Filter Receiver Tank- 10,000 Gallons	Manufacturing and Materials Handling Equipment	PCP970018	1/8/1998	No	1/8/1998	ES5
E1208	T-851	Filter Receiver Tank- 10,000 Gallons	Manufacturing and Materials Handling Equipment	PCP970018	1/8/1998	No	1/8/1998	ES5
E1300	R-410	Reactor - 10,000 Gallon (w/70 gal premixer) w/ dist.column, process condensers & 3-stage vacuum jet system	Manufacturing and Materials Handling Equipment	L971641	11/14/1997	No	11/14/1997	ES1 ES2 ES3 ES4
E1301	R-420	Reactor with process condenser - 9,000 Gallons	Manufacturing and Materials Handling Equipment	L971641	1/1/1964	No	11/14/1997	ES1 ES2 ES3 ES4
E1302	T-422	Refiner - 10,700 Gallons	Manufacturing and Materials Handling Equipment	L971641	1/1/1976	No	11/14/1997	ES3 ES6
E1303	T-790	Filter Receiver- 7,000 Gallons	Manufacturing and Materials Handling Equipment	L971641	1/1/1967	No	11/14/1997	ES5

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

<b>Equip. NJID</b>	<b>Facility's Designation</b>	<b>Equipment Description</b>	<b>Equipment Type</b>	<b>Certificate Number</b>	<b>Install Date</b>	<b>Grand- Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>Equip. Set ID</b>
E1304	T-443	Dryer/Filter Feed with process condenser - 9,700 Gallons	Manufacturing and Materials Handling Equipment	L971641	1/1/1967	No	11/14/1997	ES4 ES7
E1400	R-430	Reactor/Refiner/Stripper with condenser- 9,000 Gallons	Manufacturing and Materials Handling Equipment	L980051	1/1/1965	No	6/26/1998	ES1 ES2 ES3 ES4
E1401	T-406	Refiner- 9,700 Gallons	Manufacturing and Materials Handling Equipment	L980051	1/1/1958	No	6/26/1998	ES3 ES6
E1402	T-423	Filter Feed Tank- 7,500 Gallons	Manufacturing and Materials Handling Equipment	L980051	1/1/1958	No	6/26/1998	ES1 ES5
E1403	T-433	Filter Feed Tank- 7,500 Gallons	Manufacturing and Materials Handling Equipment	L980051	1/1/1958	No	6/26/1998	ES1 ES5
E1404	T-434	Refiner/Stripper/Dryer with condenser- 10,000 Gallons	Manufacturing and Materials Handling Equipment	L980051	2/2/1995	No	6/26/1998	ES2 ES4 ES7
E1500	R-710	Reactor/Stripper/Refiner/Dryer/I Feed - 9,000 Gallon w/ dist.column, process condensers & 3-stage vacuum jet system	Manufacturing and Materials Handling Equipment	L980050	1/1/1961	No	6/26/1998	ES1 ES2 ES3 ES4
E1501	T-732	Refiner - 9,000 Gallons	Manufacturing and Materials Handling Equipment	L980050	1/1/1968	No	6/26/1998	ES3 ES6

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

<b>Equip. NJID</b>	<b>Facility's Designation</b>	<b>Equipment Description</b>	<b>Equipment Type</b>	<b>Certificate Number</b>	<b>Install Date</b>	<b>Grand- Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>Equip. Set ID</b>
E1502	T-733	Dryer/Filter Feed with process condenser- 8,000 Gallons	Manufacturing and Materials Handling Equipment	L980050	1/1/1968	No	6/26/1998	ES4 ES7
E2249	T-290	Storage Tank- 30,000 Gallons	Storage Vessel	PCP020004	1/1/1993	No	8/31/1995	
E2502	T-251	Storage Tank - 80,000 Gallons	Storage Vessel	PCP020004	1/1/1994	No	12/18/1995	
E2507	T-255	Storage Tank - 10,000 Gallons	Storage Vessel	PCP020004	1/1/1994	No	12/18/1995	
E2510	T-252	Storage Tank- 20,000 Gallons	Storage Vessel	PCP020004	1/1/1994	No	12/18/1995	
E2511	T-253	Storage Tank - 40,000 Gallons	Storage Vessel	PCP020004	1/1/1994	No	12/18/1995	
E2512	T-254	Storage Tank- 80,000 Gallons	Storage Vessel	PCP020004	1/1/1994	No	12/18/1995	
E2520	R-5300B	Reactor/Stripper- 10,000 Gallons	Manufacturing and Materials Handling Equipment	PCP020004	1/1/1964	No	12/18/1995	ES7 ES10
E2523	T-269	Storage Tank- 39,600 Gallons	Storage Vessel	PCP020004	12/18/1995	No	12/18/1995	
E8012	Fire Pump	1.41 MMBTU/hr (HHV) Fire Pump (142kW)	Emergency Fire Pump		1/13/2023	No		
E8167	SH-1	6.3 MMBTU/hr Process Heater	Process Heater	NA	8/1/2012	No	7/1/2004	
E8168	SH-2	8 MMBTU/hr Process Heater	Process Heater	Pre-1968	1/1/1966	Yes	7/1/2004	
E8243	Boiler #7	97.7 MMBTU/Hr Dual Fuel Fired Boiler	Boiler	126690	5/6/1996	No	5/6/1996	

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

<b>Equip. NJID</b>	<b>Facility's Designation</b>	<b>Equipment Description</b>	<b>Equipment Type</b>	<b>Certificate Number</b>	<b>Install Date</b>	<b>Grand- Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>Equip. Set ID</b>
E8259	SH-3	12.25 MMBTU/hr Process Heater	Process Heater	118430	7/1/1994	No	9/12/1994	
E8260	Boiler #8	97.7 MMBTU/Hr Dual Fuel Fired Boiler 97.7mmBTU/hr	Boiler	126095	7/1/1994	No	2/7/1996	
E8265	Emer.Gen.	Emergency Generator	Emergency Generator	123224	1/1/1990	No	6/30/1995	
E8275	SH-4	12.25 MMBTU/hr Process Heater	Process Heater	L973331	1/20/1998	No	1/20/1998	
E71540	15G Reactor	Pilot Plant Reactor- 15 Gallons	Manufacturing and Materials Handling Equipment	089711	8/1/1967	No	3/13/1995	
E71570	40G Reactor	Pilot Plant Reactor- 40 Gallons	Manufacturing and Materials Handling Equipment	089052	8/1/1967	No	3/13/1995	
E72041	150G Reactor	Pilot Plant Reactor- 150 Gallons	Manufacturing and Materials Handling Equipment	091000	1/1/1965	No	10/3/1995	
E72042	500G Reactor	Pilot Plant Reactor- 500 Gallons	Manufacturing and Materials Handling Equipment	091000	1/1/1965	No	10/3/1995	

Make:	Hatco
Manufacturer:	
Model:	T-416
Type of Manufacturing and Materials Handling Equipment:	Filter Receiver Tank
Capacity:	9.00E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	Hatco
Manufacturer:	
Model:	T-700
Type of Manufacturing and Materials Handling Equipment:	Filter Receiver Tank
Capacity:	7.00E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	Hatco
Manufacturer:	
Model:	R-711
Type of Manufacturing and Materials Handling Equipment:	Chemical Reactor
Capacity:	1.20E+04
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	Hatco
Manufacturer:	
Model:	T-723
Type of Manufacturing and Materials Handling Equipment:	Dryer/Filter Feed
Capacity:	9.95E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	



Make:	Hatco
Manufacturer:	
Model:	T-740
Type of Manufacturing and Materials Handling Equipment:	Filter Receiver Tank
Capacity:	9.70E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	Hatco
Manufacturer:	
Model:	T-722
Type of Manufacturing and Materials Handling Equipment:	Refiner
Capacity:	1.04E+04
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	Hatco
Manufacturer:	
Model:	T-713
Type of Manufacturing and Materials Handling Equipment:	Hold Tank
Capacity:	1.00E+04
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	Hatco
Manufacturer:	
Model:	T-780
Type of Manufacturing and Materials Handling Equipment:	Filter Receiver Tank
Capacity:	9.70E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	Hatco
Manufacturer:	
Model:	T-770
Type of Manufacturing and Materials Handling Equipment:	Filter Receiver Tank
Capacity:	9.70E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	Hatco
Manufacturer:	
Model:	T-849
Type of Manufacturing and Materials Handling Equipment:	Filter Receiver Tank
Capacity:	1.00E+04
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

18050 LANXESS CORPORATION BOP220001 E1200 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	Hatco
Manufacturer:	
Model:	R-715
Type of Manufacturing and Materials Handling Equipment:	Chemical Reactor
Capacity:	1.20E+04
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	Hatco
Manufacturer:	
Model:	R-714
Type of Manufacturing and Materials Handling Equipment:	Chemical Reactor
Capacity:	1.00E+04
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	



Make:

Hatco

Manufacturer:

Model:

T-716

Type of Manufacturing and Materials Handling Equipment:

Dryer/Filter Feed

Capacity:

1.00E+04

Units:

gallons

Description (if other):

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

Yes

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

No

Comments:

Make:	Hatco
Manufacturer:	
Model:	T-432
Type of Manufacturing and Materials Handling Equipment:	Refiner
Capacity:	1.00E+04
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:

Hatco

Manufacturer:

Model:

T-400

Type of Manufacturing and Materials Handling Equipment:

Filter Receiver

Capacity:

9.00E+03

Units:

gallons

Description (if other):

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

Yes

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

No

Comments:

Make:	Hatco
Manufacturer:	
Model:	T-440
Type of Manufacturing and Materials Handling Equipment:	Filter Receiver
Capacity:	9.00E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

18050 LANXESS CORPORATION BOP220001 E1206 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	Hatco
Manufacturer:	
Model:	T-480
Type of Manufacturing and Materials Handling Equipment:	Filter Receiver
Capacity:	9.00E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	Hatco
Manufacturer:	
Model:	T-850
Type of Manufacturing and Materials Handling Equipment:	Filter Receiver
Capacity:	1.00E+04
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

18050 LANXESS CORPORATION BOP220001 E1208 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	Hatco
Manufacturer:	
Model:	T-851
Type of Manufacturing and Materials Handling Equipment:	Filter Receiver
Capacity:	1.00E+04
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	Hatco
Manufacturer:	
Model:	R-410
Type of Manufacturing and Materials Handling Equipment:	Reactor
Capacity:	1.00E+04
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	



18050 LANXESS CORPORATION BOP220001 E1301 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	Hatco
Manufacturer:	
Model:	R-420
Type of Manufacturing and Materials Handling Equipment:	Reactor
Capacity:	9.00E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	Hatco
Manufacturer:	
Model:	T-422
Type of Manufacturing and Materials Handling Equipment:	Refiner
Capacity:	1.07E+04
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

18050 LANXESS CORPORATION BOP220001 E1303 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	Hatco
Manufacturer:	
Model:	790
Type of Manufacturing and Materials Handling Equipment:	Filter Receiver
Capacity:	7.20E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

18050 LANXESS CORPORATION BOP220001 E1304 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	Hatco
Manufacturer:	
Model:	T-443
Type of Manufacturing and Materials Handling Equipment:	Dryer/Filter Feed
Capacity:	9.70E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

18050 LANXESS CORPORATION BOP220001 E1400 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	Hatco
Manufacturer:	
Model:	R-430
Type of Manufacturing and Materials Handling Equipment:	Chemical Reactor
Capacity:	9.00E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

18050 LANXESS CORPORATION BOP220001 E1401 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	Hatco
Manufacturer:	
Model:	406
Type of Manufacturing and Materials Handling Equipment:	Refiner
Capacity:	9.70E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	Hatco
Manufacturer:	
Model:	423
Type of Manufacturing and Materials Handling Equipment:	Filter Feed Tank
Capacity:	7.50E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	Hatco
Manufacturer:	
Model:	433
Type of Manufacturing and Materials Handling Equipment:	Filter Feed Tank
Capacity:	7.50E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	



18050 LANXESS CORPORATION BOP220001 E1404 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	Hatco
Manufacturer:	
Model:	434
Type of Manufacturing and Materials Handling Equipment:	Refiner/Stripper/Dryer
Capacity:	1.00E+04
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

18050 LANXESS CORPORATION BOP220001 E1500 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	Hatco
Manufacturer:	
Model:	R-710
Type of Manufacturing and Materials Handling Equipment:	Chemical Reactor
Capacity:	9.10E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	Hatco
Manufacturer:	
Model:	732
Type of Manufacturing and Materials Handling Equipment:	Refiner
Capacity:	9.10E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

18050 LANXESS CORPORATION BOP220001 E1502 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	Hatco
Manufacturer:	
Model:	733
Type of Manufacturing and Materials Handling Equipment:	Dryer/Filter Feed Tank
Capacity:	8.30E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

18050 LANXESS CORPORATION BOP220001 E2249 (Storage Vessel)  
Print Date: 2/24/2025

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

Liquids Only

Storage Vessel Type:

Tank

Design Capacity:

30,000

Units:

gallons

Ground Location:

Above Ground

Is the Shell of the Equipment

Yes

Exposed to Sunlight?

Shell Color:

Diffuse Aluminum

Description (if other):

Shell Condition:

Paint Condition:

Good

Shell Construction:

Welded

Is the Shell Insulated?

Yes

Type of Insulation:

Fiberglass

Insulation Thickness (in):

2.0

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

1.10000

Shape of Storage Vessel:

Cylindrical

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

35.50

Length (ft):

Width (ft):

Diameter (ft):

12.00

Other Dimension

Description:

Value:

Units:

Fill Method:

Submerged

Description (if other):

Maximum Design Fill Rate:

150.00

Units:

gal/min

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

Roof

Roof Type:

Vertical fixed roof tank

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

1.00

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

No

Does the storage vessel

18050 LANXESS CORPORATION BOP220001 E2249 (Storage Vessel)

Print Date: 2/24/2025

Does the storage vessel  
have a Conservation Vent?

Yes ▼

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

No ▼

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

No ▼

Comments:

18050 LANXESS CORPORATION BOP220001 E2502 (Storage Vessel)  
Print Date: 2/24/2025

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

Liquids Only

Storage Vessel Type:

Tank

Design Capacity:

80,000

Units:

gallons

Ground Location:

Above Ground

Is the Shell of the Equipment

Yes

Exposed to Sunlight?

Shell Color:

White

Description (if other):

Shell Condition:

Paint Condition:

Good

Shell Construction:

Welded

Is the Shell Insulated?

No

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

32.00

Length (ft):

Width (ft):

Diameter (ft):

20.80

Other Dimension

Description:

Value:

Units:

Fill Method:

Submerged

Description (if other):

Maximum Design Fill Rate:

150.00

Units:

gal/min

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

Roof

Roof Type:

Vertical fixed roof tank

Roof Height (From Roof Bottom

to Roof Top) (ft):

1.00

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel have a Vapor Return Loop?

No

Does the storage vessel

18050 LANXESS CORPORATION BOP220001 E2502 (Storage Vessel)

Print Date: 2/24/2025

Does the storage vessel  
have a Conservation Vent?

Yes

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

No

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

No

Comments:

unit has condenser



18050 LANXESS CORPORATION BOP220001 E2507 (Storage Vessel)  
Print Date: 2/24/2025

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

Liquids Only

Storage Vessel Type:

Tank

Design Capacity:

10,000

Units:

gallons

Ground Location:

Above Ground

Is the Shell of the Equipment

Yes

Exposed to Sunlight?

Shell Color:

White

Description (if other):

Shell Condition:

Paint Condition:

Good

Shell Construction:

Welded

Is the Shell Insulated?

Yes

Type of Insulation:

Fiberglass

Insulation Thickness (in):

2.0

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

0.00800

Shape of Storage Vessel:

Cylindrical

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

15.50

Length (ft):

Width (ft):

Diameter (ft):

10.50

Other Dimension

Description:

Value:

Units:

Fill Method:

Submerged

Description (if other):

Maximum Design Fill Rate:

150.00

Units:

gal/min

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

Roof

Roof Type:

Vertical fixed roof tank

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

2.00

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

No

Does the storage vessel

18050 LANXESS CORPORATION BOP220001 E2507 (Storage Vessel)

Print Date: 2/24/2025

Does the storage vessel  
have a Conservation Vent?

Yes

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

No

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

No

Comments:

cold box

18050 LANXESS CORPORATION BOP220001 E2510 (Storage Vessel)  
Print Date: 2/24/2025

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

Liquids Only

Storage Vessel Type:

Tank

Design Capacity:

20,000

Units:

gallons

Ground Location:

Above Ground

Is the Shell of the Equipment

Yes

Exposed to Sunlight?

Shell Color:

White

Description (if other):

Shell Condition:

Paint Condition:

Good

Shell Construction:

Welded

Is the Shell Insulated?

Yes

Type of Insulation:

Fiberglass

Insulation Thickness (in):

2.0

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

0.00800

Shape of Storage Vessel:

Cylindrical

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

31.00

Length (ft):

Width (ft):

Diameter (ft):

10.50

Other Dimension

Description:

Value:

Units:

Fill Method:

Submerged

Description (if other):

Maximum Design Fill Rate:

150.00

Units:

gal/min

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

Roof

Roof Type:

Vertical fixed roof tank

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

2.00

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

No

**18050 LANXESS CORPORATION BOP220001 E2510 (Storage Vessel)**

**Print Date: 2/24/2025**

Does the storage vessel  
have a Conservation Vent?

Yes ▼

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

No ▼

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

No ▼

Comments:

## 18050 LANXESS CORPORATION BOP220001 E2511 (Storage Vessel)

Print Date: 2/24/2025

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

Liquids Only

Storage Vessel Type:

Tank

Design Capacity:

40,000

Units:

gallons

Ground Location:

Above Ground

Is the Shell of the Equipment

Yes

Exposed to Sunlight?

Shell Color:

White

Description (if other):

Shell Condition:

Paint Condition:

Good

Shell Construction:

Welded

Is the Shell Insulated?

No

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

30.00

Length (ft):

Width (ft):

Diameter (ft):

15.00

Other Dimension

Description:

Value:

Units:

Fill Method:

Submerged

Description (if other):

Maximum Design Fill Rate:

150.00

Units:

gal/min

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

Roof

Roof Type:

Vertical fixed roof tank

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

2.00

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel have a Vapor Return Loop?

Yes

18050 LANXESS CORPORATION BOP220001 E2511 (Storage Vessel)

Print Date: 2/24/2025

Does the storage vessel  
have a Conservation Vent?

Yes

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

No

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

No

Comments:

unit has condenser

18050 LANXESS CORPORATION BOP220001 E2512 (Storage Vessel)  
Print Date: 2/24/2025

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

Liquids Only

Storage Vessel Type:

Tank

Design Capacity:

80,000

Units:

gallons

Ground Location:

Above Ground

Is the Shell of the Equipment

Yes

Exposed to Sunlight?

Shell Color:

White

Description (if other):

Shell Condition:

Paint Condition:

Good

Shell Construction:

Welded

Is the Shell Insulated?

Yes

Type of Insulation:

Fiberglass

Insulation Thickness (in):

2.0

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

0.00800

Shape of Storage Vessel:

Cylindrical

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

32.00

Length (ft):

Width (ft):

Diameter (ft):

21.80

Other Dimension

Description:

Value:

Units:

Fill Method:

Submerged

Description (if other):

Maximum Design Fill Rate:

150.00

Units:

gal/min

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

Roof

Roof Type:

Vertical fixed roof tank

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

2.00

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Yes

Does the storage vessel

18050 LANXESS CORPORATION BOP220001 E2512 (Storage Vessel)

Print Date: 2/24/2025

Does the storage vessel  
have a Conservation Vent?

Yes

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

No

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

No

Comments:

vapor balance, condenser



18050 LANXESS CORPORATION BOP220001 E2520 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	Hatco
Manufacturer:	
Model:	R-5300B
Type of Manufacturing and Materials Handling Equipment:	Stripper
Capacity:	1.00E+04
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

18050 LANXESS CORPORATION BOP220001 E2523 (Storage Vessel)  
Print Date: 2/24/2025

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

Liquids Only

Storage Vessel Type:

Tank

Design Capacity:

39,600

Units:

gallons

Ground Location:

Above Ground

Is the Shell of the Equipment

Yes

Exposed to Sunlight?

Shell Color:

Other

Description (if other):

Shell Condition:

Paint Condition:

Good

Shell Construction:

Welded

Is the Shell Insulated?

Yes

Type of Insulation:

Fiberglass

Insulation Thickness (in):

2.0

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

0.00800

Shape of Storage Vessel:

Cylindrical

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

32.00

Length (ft):

Width (ft):

Diameter (ft):

14.50

Other Dimension

Description:

Value:

Units:

Fill Method:

Submerged

Description (if other):

Maximum Design Fill Rate:

100.00

Units:

gal/min

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

Roof

Roof Type:

Vertical fixed roof tank

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

2.00

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Yes

18050 LANXESS CORPORATION BOP220001 E2523 (Storage Vessel)

Print Date: 2/24/2025

Does the storage vessel  
have a Conservation Vent?

Yes

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

No

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

No

Comments:

condenser

18050 LANXESS CORPORATION BOP220001 E8012 (Emergency Fire Pump)  
Print Date: 2/24/2025

Make:	Clarke Fire Pump Engine		
Manufacturer:	Clarke Fire Protection Products, Inc.(2022)		
Model:	JU6H-UFADNG (2022) Model Year		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1.41		
Will the equipment be used in excess of 500 hours per year?	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="radio"/> Yes	<input checked="" type="radio"/> No	Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?
			<input type="radio"/> Yes
			<input checked="" type="radio"/> No
Comments:	142kW 190HP Displacement per Cylinder:1.13L		

18050 LANXESS CORPORATION BOP220001 E8167 (Process Heater)  
Print Date: 2/24/2025

Make:	
Manufacturer:	Fives North American
Model:	
Equipment Type Description:	Process Heater - Natural Gas Fired

Maximum rated Gross Heat Input (MMBtu/hr-HHV):	6.3
Draft Type:	Forced
Firing Method:	

Is the Process Heater using (check all that apply):

Low NOx Burner	<input type="checkbox"/>
Type of Low NOx Burner:	
Flue Gas Recirculation (FGR):	<input type="checkbox"/>

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

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

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

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

Comments:

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

18050 LANXESS CORPORATION BOP220001 E8168 (Process Heater)  
Print Date: 2/24/2025

Make:	
Manufacturer:	American Hydrotherm
Model:	
Equipment Type Description:	Process Heater - NG / #4 Fuel Oil Fired

Maximum rated Gross Heat Input (MMBtu/hr-HHV):	10
Draft Type:	Forced
Firing Method:	Direct

Is the Process Heater using (check all that apply):

Low NOx Burner	<input type="checkbox"/>
Type of Low NOx Burner:	
Flue Gas Recirculation (FGR):	<input type="checkbox"/>

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

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

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

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

Comments:

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

18050 LANXESS CORPORATION BOP220001 E8243 (Boiler)  
Print Date: 2/24/2025

Make:	
Manufacturer:	Nebraska
Model:	
Maximum Rated Gross Heat Input (MMBtu/hr - HHV):	97.70
Boiler Type:	Package
Utility Type:	Non-Utility
Output Type:	Steam Only
Steam Output (lb/hr):	80,000.00
Fuel Firing Method:	Other firing method
Description (if other):	Face Fired
Draft Type:	Forced
Heat Exchange Type:	Indirect

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

Low NOx Burner:	<input checked="" type="checkbox"/>	Type:	Todd Combustion
Staged Air Combustion:	<input checked="" type="checkbox"/>		
Flue Gas Recirculation (FGR):	<input checked="" type="checkbox"/>	Amount (%):	10.00

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

No

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

No

Comments:

18050 LANXESS CORPORATION BOP220001 E8259 (Process Heater)  
Print Date: 2/24/2025

Make:	
Manufacturer:	Konus Energy Systems
Model:	KV 25
Equipment Type Description:	Hydrotherm Heating System

Maximum rated Gross Heat Input (MMBtu/hr-HHV):	10
Draft Type:	Forced
Firing Method:	

Is the Process Heater using (check all that apply):

Low NOx Burner	<input type="checkbox"/>
Type of Low NOx Burner:	
Flue Gas Recirculation (FGR):	<input type="checkbox"/>

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

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

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

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

Comments:

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



18050 LANXESS CORPORATION BOP220001 E8260 (Boiler)  
Print Date: 2/24/2025

Make:	
Manufacturer:	Nebraska
Model:	
Maximum Rated Gross Heat Input (MMBtu/hr - HHV):	97.70
Boiler Type:	Package
Utility Type:	Non-Utility
Output Type:	Steam Only
Steam Output (lb/hr):	80,000.00
Fuel Firing Method:	Other firing method
Description (if other):	Face Fired
Draft Type:	Forced
Heat Exchange Type:	Indirect

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

Low NOx Burner:	<input checked="" type="checkbox"/>	Type:	Todd Combustion
Staged Air Combustion:	<input checked="" type="checkbox"/>		
Flue Gas Recirculation (FGR):	<input checked="" type="checkbox"/>	Amount (%):	10.00

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

No

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

No

Comments:

18050 LANXESS CORPORATION BOP220001 E8265 (Emergency Generator)  
Print Date: 2/24/2025

Make:

Manufacturer:

Detroit Diesel

Model:

DDC 200

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

1.96

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

Comments:

18050 LANXESS CORPORATION BOP220001 E8275 (Process Heater)  
Print Date: 2/24/2025

Make:	
Manufacturer:	Heatec
Model:	
Equipment Type Description:	Hydrotherm Heating System

Maximum rated Gross Heat Input (MMBtu/hr-HHV):	10
Draft Type:	Forced
Firing Method:	

Is the Process Heater using (check all that apply):

Low NOx Burner	<input type="checkbox"/>
Type of Low NOx Burner:	
Flue Gas Recirculation (FGR):	<input type="checkbox"/>

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

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

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

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

Comments:

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

18050 LANXESS CORPORATION BOP220001 E71540 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	
Manufacturer:	Blaw Knox
Model:	
Type of Manufacturing and Materials Handling Equipment:	15 Gallon Reactor
Capacity:	1.50E+01
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

18050 LANXESS CORPORATION BOP220001 E71570 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	
Manufacturer:	Allied Fabricators
Model:	
Type of Manufacturing and Materials Handling Equipment:	40 Gallon Reactor
Capacity:	4.00E+01
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

18050 LANXESS CORPORATION BOP220001 E72041 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	
Manufacturer:	Brighton
Model:	150 Gal. Pilot Plant Reactor
Type of Manufacturing and Materials Handling Equipment:	Research Reactor with Vacuum/Condenser
Capacity:	1.50E+02
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

18050 LANXESS CORPORATION BOP220001 E72042 (Manufacturing and Materials Handling Equipment)  
Print Date: 2/24/2025

Make:	
Manufacturer:	Lawrence Co.
Model:	500 Gal. SS Reactor
Type of Manufacturing and Materials Handling Equipment:	Research Reactor with Vacuum/Condenser
Capacity:	5.00E+02
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

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

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam. (in.)	Height (ft.)	Dist. to Prop. Line (ft)	Exhaust Temp. (deg. F)			Exhaust Vol. (acfm)			Discharge Direction	PT Set ID
							Avg.	Min.	Max.	Avg.	Min.	Max.		
PT1005	T-416	Filter Receiver Vent	Round	8	32	690	125.0	70.0	200.0	0.0	0.0	30.0	Down	PS 5
PT1015	T-700	Filter Receiver Vent	Round	2	1	600	125.0	70.0	200.0	0.0	0.0	30.0	Down	PS 5
PT1100	R-711	Reactor R-711 Vent	Round	2	60	450	125.0	70.0	250.0	5.0	0.0	300.0	Up	PS 1
PT1101	T-723	Dryer/Filter Feed Vent	Round	4	48	450	125.0	70.0	200.0	5.0	0.0	30.0	Up	PS 4
PT1102	T-740	Filter Receiver Vent	Round	2	27	450	125.0	70.0	200.0	0.0	0.0	30.0	Down	PS 5
PT1103	T-722	Refiner Vent	Round	4	42	450	125.0	70.0	200.0	0.0	0.0	30.0	Up	PS 3
PT1104	T-713	Filter Receiver Vent	Round	4	52	450	125.0	70.0	200.0	0.0	0.0	30.0	Down	PS 5
PT1105	T-780	Filter Receiver Vent	Round	2	27	450	125.0	70.0	200.0	0.0	0.0	30.0	Down	PS 5
PT1106	T-770	Filter Receiver Vent	Round	2	27	450	125.0	70.0	200.0	0.0	0.0	30.0	Down	PS 5
PT1150	T-849	Filter Receiver Vent	Round	3	30	480	125.0	70.0	200.0	0.0	0.0	30.0	Down	PS 5
PT1200	R-715	Reactor Vent	Round	2	52	450	125.0	70.0	250.0	5.0	0.0	300.0	Up	PS 1
PT1201	T-714	Reactor Vent	Round	2	41	450	125.0	70.0	250.0	5.0	0.0	300.0	Up	PS 1
PT1202	T-716	Stripper/Dryer/Filter Feed Vent	Round	4	52	450	125.0	70.0	250.0	5.0	0.0	300.0	Up	PS 2
PT1203	T-432	Refiner Vent	Round	4	55	450	125.0	70.0	200.0	0.0	0.0	30.0	Horizontal	PS 3
PT1204	T-400	Filter Receiver Vent	Round	2	20	450	125.0	70.0	200.0	0.0	0.0	30.0	Down	PS 5
PT1205	T-440	Filter Receiver Vent	Round	2	22	450	125.0	70.0	200.0	0.0	0.0	30.0	Down	PS 5
PT1206	T-480	Filter Receiver Vent	Round	2	25	450	125.0	70.0	200.0	0.0	0.0	30.0	Down	PS 5
PT1207	T-850	Filter Receiver Vent	Round	2	27	450	125.0	70.0	200.0	0.0	0.0	30.0	Down	PS 5
PT1208	T-851	Filter Receiver Vent	Round	2	27	450	125.0	70.0	200.0	0.0	0.0	30.0	Down	PS 5



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

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam. (in.)	Height (ft.)	Dist. to Prop. Line (ft)	Exhaust Temp. (deg. F)			Exhaust Vol. (acfm)			Discharge Direction	PT Set ID
							Avg.	Min.	Max.	Avg.	Min.	Max.		
PT1300	R-410	Reactor Vent	Round	2	52	665	125.0	70.0	250.0	5.0	0.0	300.0	Up	PS 1
PT1301	R-420	Reactor Vent	Round	2	52	450	125.0	70.0	250.0	5.0	0.0	300.0	Up	PS 1
PT1302	T-422	Refiner Vent	Round	4	52	450	125.0	70.0	200.0	0.0	0.0	30.0	Horizontal	PS 3
PT1303	T-790	Filter Receiver Vent	Round	2	14	450	125.0	70.0	200.0	0.0	0.0	30.0	Down	PS 5
PT1304	T-443	Dryer/Filter Feed Vent	Round	2	52	450	125.0	70.0	200.0	5.0	0.0	30.0	Up	PS 4
PT1400	R-430	Reactor Vent	Round	2	52	450	125.0	70.0	250.0	5.0	0.0	300.0	Up	PS 1
PT1401	T-406	Refiner Vent	Round	4	51	450	125.0	70.0	200.0	0.0	0.0	30.0	Up	PS 3
PT1402	T-423	Dryer/Filter Feed vent	Round	4	48	450	125.0	70.0	200.0	5.0	0.0	30.0	Up	PS 5
PT1403	T-433	Dryer/Filter Feed Vent	Round	2	52	450	125.0	70.0	200.0	5.0	0.0	30.0	Up	PS 5
PT1404	T-434	Stripper/Dryer/Filter Feed Vent	Round	2	52	450	125.0	70.0	250.0	5.0	0.0	300.0	Up	PS 2
PT1500	R-710	Reactor Vent	Round	2	52	450	125.0	70.0	250.0	5.0	0.0	30.0	Up	PS 1
PT1501	T-732	Refiner Vent	Round	3	16	450	125.0	70.0	200.0	0.0	0.0	30.0	Down	PS 3
PT1502	T-733	Dryer/Filter Feed Vent	Round	4	47	450	125.0	70.0	200.0	5.0	0.0	30.0	Up	PS 4
PT2249	T-290	Tank Vent	Round	2	38	430	40.0	25.0	55.0	0.0	0.0	24.0	Down	
PT2502	T-251	Tank Vent	Round	2	33	420	70.0	40.0	100.0	0.0	0.0	24.0	Down	
PT2507	T-255	Tank Vent	Round	2	33	450	120.0	70.0	170.0	0.0	0.0	24.0	Down	
PT2510	T-252	Tank Vent	Round	2	33	390	80.0	50.0	110.0	0.0	0.0	24.0	Down	
PT2511	T-253	Tank Vent	Round	2	31	390	70.0	40.0	100.0	0.0	0.0	24.0	Down	
PT2512	T-254	Tank Vent	Round	4	35	450	70.0	40.0	100.0	0.0	0.0	24.0	Down	

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

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam. (in.)	Height (ft.)	Dist. to Prop. Line (ft)	Exhaust Temp. (deg. F)			Exhaust Vol. (acfm)			Discharge Direction	PT Set ID
							Avg.	Min.	Max.	Avg.	Min.	Max.		
PT2523	T-269	Tank Vent	Round	4	33	400	80.0	50.0	110.0	0.0	0.0	24.0	Down	
PT2533	E-268	Condenser Vent (S-6200)	Round	2	45	550	30.0	20.0	45.0	7.0	5.0	9.0	Down	
PT8012	Fire Pump	Fire Pump E8012 Stack	Round	5	11	900			986.0			1,189.0	Up	
PT8167	SH-1	SH-1 Stack	Round	18	35	700	700.0	600.0	800.0	6,000.0	2,000.0	10,000.0	Up	
PT8168	SH-2	SH-2 Stack	Round	30	35	700	700.0	600.0	800.0	6,000.0	2,000.0	10,000.0	Up	
PT8183	Boiler M-14	Boiler Stack	Round	14	10	600	500.0	400.0	600.0	830.0	730.0	930.0	Up	
PT8243	Boiler #7	Boiler #7 Stack	Round	48	45	725	350.0	150.0	530.0	30,000.0	25,000.0	44,000.0	Up	
PT8259	SH-3	SH-3 Stack	Round	28	40	725	745.0	730.0	760.0	6,020.0	2,000.0	10,000.0	Up	
PT8260	Boiler #8	Boiler #8 Stack	Round	48	45	675	350.0	150.0	530.0	30,000.0	25,000.0	44,000.0	Up	
PT8261	CHX Economiz	CHX Economizer Stack	Round	36	45	770	150.0	100.0	400.0	23,000.0	17,000.0	35,000.0	Up	
PT8265	Emer.Gen.	EPT Emergency Generator	Round	5	9	300	655.0	550.0	760.0	2,240.0	1,840.0	2,640.0	Horizontal	
PT8275	SH-4	SH-4 Stack	Round	28	40	725	745.0	730.0	760.0	6,050.0	6,000.0	6,100.0	Up	
PT71540	15G Reactor	15G Reactor Vent	Round	2	15	450	90.0	70.0	110.0	0.1	0.0	0.2	Horizontal	
PT71570	40G Reactor	40G Reactor Vent	Round	2	15	450	90.0	70.0	100.0	0.1	0.0	0.5	Horizontal	
PT72040	150/500G PPR	150/500G Reactor Vent	Round	2	50	450	90.0	70.0	110.0	0.1	0.0	3.0	Horizontal	
PT92350	T-551	Tank Vent	Round	12	40	300	70.0	40.0	100.0	84.0	74.0	94.0	Down	
PT92360	IAF/SK/PS	Water Treatment Unit Vent	Round	3	15	300	70.0	40.0	100.0	50.0	0.0	100.0	Up	
PT92450	T-559	Tank Vent	Round	8	34	300	70.0	40.0	100.0	84.0	74.0	94.0	Down	

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

BP1 Ester I Ester I Batch Plant

OS1 HTL-H2983 High Temperature Batches - 2-Ethylhexyl alcohol BPOS Type: Batch Manufacturing

Batch Process Operating Scenario Run Time (hours)			Min. Calc. Time: 33.0		Max. Calc. Time: 40.0		Min. User Time:			Max. User Time:				
Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST1	Charging	Charging	Normal - Steady State	ES1		PS1	3-01-999-98	1.0	2.0	A	0.0	30.0	60.0	100.0
ST2	Reacting	Reacting	Normal - Steady State	ES1		PS1	3-01-999-98	8.0	10.0	A	0.0	30.0	60.0	500.0
ST3	Stripping	Stripping	Normal - Steady State	ES2		PS1 PS2	3-01-999-98	10.0	14.0	A	0.0	30.0	60.0	500.0
ST4	Charging	Charging	Normal - Steady State	ES6		PS3	3-01-999-98	1.0	1.0	A	0.0	30.0	60.0	500.0
ST5	Refining	Refining	Normal - Steady State	ES3		PS1 PS3		4.0	4.0	A	0.0	30.0	60.0	500.0
ST6	Charging	Charging	Normal - Steady State	ES7		PS2 PS4	3-01-999-98	1.0	1.0	A	0.0	30.0	60.0	500.0
ST7	Drying	Drying	Normal - Steady State	ES4		PS1 PS2 PS4	3-01-999-98	2.0	2.0	A	0.0	30.0	60.0	500.0
ST8	Filtering	Filtering	Normal - Steady State	ES5		PS5		6.0	6.0	A	0.0	30.0	60.0	500.0

OS2 HTL-H5195 High Temperature Batches - 2-Octanol BPOS Type: Batch Manufacturing

Batch Process Operating Scenario Run Time (hours)				Min. Calc. Time: 31.0		Max. Calc. Time: 36.0		Min. User Time:			Max. User Time:			
Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST1	Charging	Charging	Normal - Steady State	ES1		PS1	3-01-999-98	1.0	2.0	A	0.0	30.0	60.0	100.0

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**BOP220001**

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

**BP1 Ester I Ester I Batch Plant**

**OS2 HTL-H5195 High Temperature Batches - 2-Octanol BPOS Type: Batch Manufacturing**

*Batch Process Operating Scenario Run Time (hours)*

*Min. Calc. Time: 31.0*

*Max. Calc. Time: 36.0*

*Min. User Time:*

*Max. User Time:*

Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST2	Reacting	Reacting	Normal - Steady State	ES1		PS1	3-01-999-98	8.0	10.0	A	0.0	30.0	60.0	500.0
ST3	Charging	Charging	Normal - Steady State	ES6		PS3	3-01-999-98	1.0	1.0	A	0.0	30.0	60.0	500.0
ST4	Refining	Refining	Normal - Steady State	ES3		PS1 PS3		4.0	4.0		0.0	30.0	60.0	500.0
ST5	Charging	Charging	Normal - Steady State	ES7		PS2 PS4	3-01-999-98	1.0	1.0	A	0.0	30.0	60.0	500.0
ST6	Strip/Drying	Steam Stripping/Drying	Normal - Steady State	ES4		PS1 PS2 PS4	3-01-999-98	10.0	12.0	A	0.0	30.0	60.0	500.0
ST7	Filtering	Filtering	Normal - Steady State	ES5		PS5	3-01-999-98	6.0	6.0	A	0.0	30.0	60.0	500.0

**OS3 HTL-C5/6 High Temperature Batches - C5 and C6 acids BPOS Type: Batch Manufacturing**

*Batch Process Operating Scenario Run Time (hours)*

*Min. Calc. Time: 33.0*

*Max. Calc. Time: 42.0*

*Min. User Time:*

*Max. User Time:*

Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST1	Charging	Charging	Normal - Steady State	ES1		PS1		1.0	2.0	A	0.0	30.0	60.0	100.0
ST2	Reacting	Reacting	Normal - Steady State	ES1		PS1		10.0	14.0	A	0.0	30.0	60.0	500.0
ST3	Stripping	Stripping	Normal - Steady State	ES2		PS1 PS2		8.0	12.0	A	0.0	30.0	60.0	500.0

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

BP1 Ester I Ester I Batch Plant

OS3 HTL-C5/6 High Temperature Batches - C5 and C6 acids BPOS Type: Batch Manufacturing

Batch Process Operating Scenario				Run Time (hours)	Min. Calc. Time: 33.0	Max. Calc. Time: 42.0	Min. User Time:			Max. User Time:				
Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST4	Charging	Charging	Normal - Steady State	ES6		PS3		1.0	1.0	A	0.0	30.0	60.0	500.0
ST5	Refining	Refining	Normal - Steady State	ES3		PS1 PS3		4.0	4.0	A	0.0	30.0	60.0	500.0
ST6	Charging	Charging	Normal - Steady State	ES7		PS2 PS4		1.0	1.0	A	0.0	30.0	60.0	500.0
ST7	Drying	Drying	Normal - Steady State	ES4		PS1 PS2 PS4		2.0	2.0	A	0.0	30.0	60.0	500.0
ST8	Filtering	Filtering	Normal - Steady State	ES5		PS5		6.0	6.0	A	0.0	30.0	60.0	500.0

OS4 HTL-C7plus High Temperature Batches - C7 and higher acids BPOS Type: Batch Manufacturing

Batch Process Operating Scenario				Run Time (hours)	Min. Calc. Time: 31.0	Max. Calc. Time: 40.0	Min. User Time:			Max. User Time:				
Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST1	Charging	Charging	Normal - Steady State	ES1		PS1		1.0	2.0	A	0.0	30.0	60.0	100.0
ST2	Reacting	Reacting	Normal - Steady State	ES1		PS1		8.0	14.0	A	0.0	30.0	60.0	500.0
ST3	Stripping	Stripping	Normal - Steady State	ES2		PS1 PS2		8.0	10.0	A	0.0	30.0	60.0	500.0
ST4	Charging	Charging	Normal - Steady State	ES6		PS3		1.0	1.0	A	0.0	30.0	60.0	500.0

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

BP1 Ester I Ester I Batch Plant

OS4 HTL-C7plus High Temperature Batches - C7 and higher acids BPOS Type: Batch Manufacturing

Batch Process Operating Scenario				Run Time (hours)	Min. Calc. Time: 31.0		Max. Calc. Time: 40.0		Min. User Time:			Max. User Time:		
Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST5	Refining	Refining	Normal - Steady State	ES3		PS1 PS3		4.0	4.0	A	0.0	30.0	60.0	500.0
ST6	Charging	Charging	Normal - Steady State	ES7		PS2 PS4		1.0	1.0	A	0.0	30.0	60.0	500.0
ST7	Drying	Drying	Normal - Steady State	ES4		PS1 PS2 PS4		2.0	2.0	A	0.0	30.0	60.0	500.0
ST8	Filtering	Filtering	Normal - Steady State	ES5		PS5		6.0	6.0	A	0.0	30.0	60.0	500.0

OS5 LTP-2EH,610 Low Temperature Batches - 2-Ethylhexyl alcohol and C6-10 alcohol BPOS Type: Batch Manufacturing

Batch Process Operating Scenario				Run Time (hours)	Min. Calc. Time: 25.0		Max. Calc. Time: 38.0		Min. User Time:			Max. User Time:		
Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST1	Charging	Charging	Normal - Steady State	ES1		PS1		1.0	2.0	A	0.0	30.0	60.0	100.0
ST2	Reacting	Reacting	Normal - Steady State	ES1		PS1		8.0	12.0	A	0.0	30.0	60.0	350.0
ST3	Charging	Charging	Normal - Steady State	ES6		PS3		1.0	1.0	A	0.0	30.0	60.0	350.0
ST4	Refining	Refining	Normal - Steady State	ES3		PS1 PS3		4.0	8.0	A	0.0	30.0	60.0	350.0
ST5	Charging	Charging	Normal - Steady State	ES7		PS2 PS4		1.0	1.0	A	0.0	30.0	60.0	350.0

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

**BP1 Ester I Ester I Batch Plant**

**OS5 LTP-2EH,610 Low Temperature Batches - 2-Ethylhexyl alcohol and C6-10 alcohol BPOS Type: Batch Manufacturing**

*Batch Process Operating Scenario Run Time (hours)*

*Min. Calc. Time:* 25.0

*Max. Calc. Time:* 38.0

*Min. User Time:*

*Max. User Time:*

Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST6	Strip/Drying	Stripping/Drying	Normal - Steady State	ES4		PS1 PS2 PS4		8.0	10.0	A	0.0	30.0	60.0	300.0
ST7	Filtering	Filtering	Normal - Steady State	ES5		PS5		2.0	4.0	A	0.0	30.0	60.0	300.0

**OS6 LTP-C8/10 Low Temperature Batches - C8 to C10 alcohols BPOS Type: Batch Manufacturing**

*Batch Process Operating Scenario Run Time (hours)*

*Min. Calc. Time:* 23.0

*Max. Calc. Time:* 34.0

*Min. User Time:*

*Max. User Time:*

Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST1	Charging	Charging	Normal - Steady State	ES1		PS1		1.0	2.0	A	0.0	30.0	60.0	100.0
ST2	Reacting	Reacting	Normal - Steady State	ES1		PS1		8.0	12.0	A	0.0	30.0	60.0	350.0
ST3	Charging	Charging	Normal - Steady State	ES6		PS3		1.0	1.0	A	0.0	30.0	60.0	350.0
ST4	Refining	Refining	Normal - Steady State	ES3		PS1 PS3		2.0	4.0	A	0.0	30.0	60.0	350.0
ST5	Charging	Charging	Normal - Steady State	ES7		PS2 PS4		1.0	1.0	A	0.0	30.0	60.0	350.0
ST6	Strip/Drying	Stripping/Drying	Normal - Steady State	ES4		PS1 PS2 PS4		8.0	10.0	A	0.0	30.0	60.0	300.0

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

BP1 Ester I Ester I Batch Plant

OS6 LTP-C8/10 Low Temperature Batches - C8 to C10 alcohols BPOS Type: Batch Manufacturing

Batch Process Operating Scenario Run Time (hours)				Min. Calc. Time: 23.0		Max. Calc. Time: 34.0		Min. User Time:			Max. User Time:			
Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST7	Filtering	Filtering	Normal - Steady State	ES5		PS5		2.0	4.0	A	0.0	30.0	60.0	300.0

OS7 LTP-C13plus Low Temperature Batches - C13 and higher alcohols BPOS Type: Batch Manufacturing

Batch Process Operating Scenario			Run Time (hours)	Min. Calc. Time: 23.0		Max. Calc. Time: 34.0		Min. User Time:			Max. User Time:			
Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST1	Charging	Charging	Normal - Steady State	ES1		PS1		1.0	2.0	A	0.0	30.0	60.0	100.0
ST2	Reacting	Reacting	Normal - Steady State	ES1		PS1		8.0	12.0	A	0.0	30.0	60.0	350.0
ST3	Charging	Charging	Normal - Steady State	ES6		PS3		1.0	1.0	A	0.0	30.0	60.0	350.0
ST4	Refining	Refining	Shutdown	ES3		PS1 PS3		2.0	4.0	A	0.0	30.0	60.0	350.0
ST5	Charging	Charging	Normal - Steady State	ES7		PS2 PS4		1.0	1.0	A	0.0	30.0	60.0	350.0
ST6	Strip/Drying	Stripping/Drying	Normal - Steady State	ES4		PS1 PS2 PS4		8.0	10.0	A	0.0	30.0	60.0	300.0
ST7	Filtering	Filtering	Normal - Steady State	ES5		PS5		2.0	4.0	A	0.0	30.0	60.0	300.0



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

BP1 Ester I Ester I Batch Plant

OS8 LTP-H5145 Low Temperature Batches - 2-Ethylhexanoic acid BPOS Type: Batch Manufacturing

Batch Process Operating Scenario Run Time (hours)			Min. Calc. Time: 23.0			Max. Calc. Time: 34.0			Min. User Time:			Max. User Time:		
Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST1	Charging	Charging	Normal - Steady State	ES1		PS1		1.0	2.0	A	0.0	30.0	60.0	100.0
ST2	Reacting	Reacting	Normal - Steady State	ES1		PS1		8.0	12.0	A	0.0	30.0	60.0	350.0
ST3	Charging	Charging	Normal - Steady State	ES6		PS3		1.0	1.0	A	0.0	30.0	60.0	350.0
ST4	Refining	Refining	Normal - Steady State	ES3		PS1 PS3		2.0	4.0	A	0.0	30.0	60.0	350.0
ST5	Charging	Charging	Normal - Steady State	ES7		PS2 PS4		1.0	1.0	A	0.0	30.0	60.0	350.0
ST6	Strip/Dry	Stripping/Drying	Normal - Steady State	ES4		PS1 PS2 PS4		8.0	10.0	A	0.0	30.0	60.0	300.0
ST7	Filtering	Filtering	Normal - Steady State	ES5		PS5		2.0	4.0	A	0.0	30.0	60.0	300.0

OS9 LTP-H5147 Low Temperature Batches - Production of Di-Ester BPOS Type: Batch Manufacturing

Batch Process Operating Scenario Run Time (hours)			Min. Calc. Time: 21.5			Max. Calc. Time: 44.5			Min. User Time:			Max. User Time:		
Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST1	Charging	Charging	Normal - Steady State	ES1		PS1		1.0	2.0	A	0.0	30.0	60.0	100.0
ST2	Reacting	Heating and Reacting	Normal - Steady State	ES1		PS1		5.0	6.0	A	0.0	30.0	60.0	250.0

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**Emission Unit/Batch Process Inventory**

**BP1 Ester I Ester I Batch Plant**

**OS9 LTP-H5147 Low Temperature Batches - Production of Di-Ester BPOS Type: Batch Manufacturing**

Batch Process Operating Scenario Run Time (hours)				Min. Calc. Time: 21.5		Max. Calc. Time: 44.5		Min. User Time:			Max. User Time:			
Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST3	Stripping	Main Stripping	Normal - Steady State	ES2		PS1 PS2		3.0	5.0	A	0.0	30.0	60.0	250.0
ST4	Charging	Charge/Transfer to Refiner	Normal - Steady State	ES6		PS3		1.0	1.0	A	0.0	30.0	60.0	250.0
ST5	Refining	Refining	Normal - Steady State	ES3		PS1 PS3		3.0	6.0	A	0.0	30.0	60.0	250.0
ST6	Charging	Charge/Transfer to Dryer	Normal - Steady State	ES7		PS2 PS4		0.5	0.5	A	0.0	30.0	60.0	250.0
ST7	Drying	Drying	Normal - Steady State	ES4		PS1 PS2 PS4		4.0	12.0	A	0.0	30.0	60.0	250.0
ST8	Filtering	Filtering	Normal - Steady State	ES5		PS5		4.0	12.0	A	0.0	30.0	60.0	250.0

**OS10 RPS Repetitive Process Step Batches BPOS Type: Batch Manufacturing**

Batch Process Operating Scenario Run Time (hours)				Min. Calc. Time: 34.0		Max. Calc. Time: 41.0		Min. User Time:			Max. User Time:			
Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST1	Charging	Charging	Normal - Steady State	ES1		PS1		1.0	2.0	A	0.0	30.0	60.0	100.0
ST2	Reacting	Reacting	Normal - Steady State	ES1		PS1		4.0	6.0	A	0.0	30.0	60.0	500.0
ST3	Charging	Charging	Normal - Steady State	ES1		PS1		1.0	1.0	A	0.0	30.0	60.0	500.0

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BP1 Ester I Ester I Batch Plant

OS10 RPS Repetitive Process Step Batches BPOS Type: Batch Manufacturing

Batch Process Operating Scenario Run Time (hours)				Min. Calc. Time: 34.0		Max. Calc. Time: 41.0		Min. User Time:			Max. User Time:			
Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
ST4	Reacting	Reacting	Normal - Steady State	ES1		PS1		6.0	8.0	A	0.0	30.0	60.0	500.0
ST5	Stripping	Stripping	Normal - Steady State	ES2		PS1 PS2		8.0	10.0	A	0.0	30.0	60.0	500.0
ST6	Transfer	Transferring	Normal - Steady State	ES7		PS4		1.0	1.0	A	0.0	30.0	60.0	500.0
ST7	Drying	Drying	Normal - Steady State	ES4		PS1 PS2 PS4		2.0	2.0	A	0.0	30.0	60.0	500.0
ST8	Transfer	Transferring	Normal - Steady State	ES6		PS3		1.0	1.0	A	0.0	30.0	60.0	500.0
ST9	Refining	Refining	Normal - Steady State	ES3		PS1 PS3		4.0	4.0	A	0.0	30.0	60.0	500.0
ST10	Filtering	Filtering	Normal - Steady State	ES5		PS5		6.0	6.0	A	0.0	30.0	60.0	500.0

LANXESS CORPORATION (18050)  
BOP220001

Date: 3/11/2025

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

U 1 WH4 Drumming WH#4 Drumming Process Area (2 Lines) - Drumming Non-HAP, Non-Applicable VOC

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	Drumming	Drumming (2 Lines) Non-HAP, Non-Applicable VOC into 55-gal drums or 350-gal steel tote bins, E1	Normal - Steady State	E1			3-01-810-03	0.0	8,760.0	A	0.0	53.5	70.0	70.0

U 2 Pilot Plant Pilot Plant Drumming Process Area - Drumming Non-HAP, Non-Applicable VOC

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	Drumming	Drumming Non-HAP, Non-Applicable VOC into 55-gal drums or 350-gal steel tote bins, E1	Normal - Steady State	E2			3-01-810-03	0.0	8,760.0	A	0.0	20.1	70.0	70.0

**LANXESS CORPORATION (18050)**  
**BOP220001**

Date: 3/11/2025

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

**U 2500 BP6 Storage Storage Tanks related to EsterII / SSP Batch Plant Process**

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS3	T-251	T-251 Storage Tank - 80,000 Gallons - Storage of Non-HAP low vapor pressure material	Normal - Steady State	E2502		PT2502	3-01-810-03	0.0	8,760.0	A	0.0	24.0	0.0	100.0
OS6	T-255	T-255 Storage Tank - 10,000 Gallons - Storage of Non-HAP low vapor pressure material	Normal - Steady State	E2507		PT2507	3-01-810-03	0.0	8,760.0	A	0.0	24.0	0.0	100.0
OS8	T-252	T-252 Storage Tank - 20,000 Gallons	Normal - Steady State	E2510		PT2510	3-01-810-03	0.0	8,760.0	A	0.0	24.0	0.0	100.0
OS10	T-253	T253 Storage Tank - 40,000 Gallons - Storage of Non-HAP low vapor pressure material	Normal - Steady State	E2511		PT2511	3-01-810-03	0.0	8,760.0	A	0.0	24.0	0.0	100.0
OS18	T-290	T-290 Storage Tank - 30,000 Gallons; Non-HAP, Non applicable VOC	Normal - Steady State	E2249		PT2249	3-01-810-03	0.0	8,760.0	A	0.0	24.0	0.0	100.0
OS21	T-269	T-269 Storage Tank - 45,000 Gallons; Triethylene Glycol	Normal - Steady State	E2523		PT2523	3-01-810-03	0.0	8,760.0	A	0.0	24.0	0.0	100.0
OS22	T-254	T-254 Storage Tank - 80,000 Gallons; MAME	Normal - Steady State	E2512		PT2512	3-01-810-03	0.0	8,760.0	A	0.0	24.0	0.0	100.0

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Emission Unit/Batch Process Inventory

U 8012   Fire Pump   Emergency Fire Pump, 142kW

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	Fire Pump	1.41 MMBTU/hr (HHV) Fire Pump (142kW) Diesel fuel, 100 hrs/yr	Normal - Steady State	E8012		PT8012		0.0	100.0					

U 8167   SH-1   SH-1, Process Heater: 6.3 MMBTU/Hr on Natural Gas

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS3	SH-1 NG	Natural Gas Fired Process Heater SH-1	Normal - Steady State	E8167		PT8167	3-01-900-03	0.0	8,760.0	A	2,000.0	10,000.0	600.0	800.0

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

U 8168 SH-2 One Process Heater: 11 MMBtu/hr Burning NG.

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS3	SH-2 NG	11 MMBTU/Hr Natural Gas Process Heater SH-2	Normal - Steady State	E8168		PT8168	3-01-900-03	0.0	8,760.0	A	2,000.0	10,000.0	600.0	800.0

U 8243 Boiler #7&#8 Boiler #7 and #8 - Natural Gas (97.7 MMBTU/Hr each)

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	Boiler#7-NG	Boiler #7 Firing Natural Gas	Normal - Steady State	E8243		PT8243 PT8261	1-03-006-02	0.0	8,760.0		25,000.0	44,000.0	150.0	530.0
OS3	Boiler#8-NG	Boiler #8 Firing Natural Gas	Normal - Steady State	E8260		PT8260 PT8261	1-03-006-02	0.0	8,760.0		25,000.0	44,000.0	150.0	530.0

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

U 8259 SH-3, SH-4 SH-3 and SH-4, Process Heaters: 12.25 MMBTU/Hr each; Natural Gas

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	SH-3 - NG	SH-3 Firing Natural Gas	Normal - Steady State	E8259		PT8259	3-01-900-99	0.0	8,760.0	A	2,000.0	10,000.0	600.0	760.0
OS2	SH-4 - NG	SH-4 Firing Natural Gas	Normal - Steady State	E8275		PT8275	3-01-900-99	0.0	8,760.0		20,000.0	10,000.0	600.0	760.0

U 8265 Emer.Gen. Pretreatment Plant Emergency Generator; 1.96 MMBTU/HR; No.2 Fuel Oil

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	Emer.Gen.	EPT Emergency Generator on #2 Fuel Oil	Normal - Steady State	E8265		PT8265	2-02-001-02	0.0	500.0		1,840.0	2,640.0	550.0	760.0



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

U 71540   15G Reactor   Pilot Plant Reactor - 15 Gallon

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	E0154	Small scale experimental reactions using mixtures of materials (ref.SDF-E10)	Normal - Steady State	E71540		PT71540	3-01-999-98	0.0	8,760.0	A	0.0	0.2	70.0	110.0

U 71570   40G Reactor   Pilot Plant Reactor - 40 Gallon

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	E0157	Small Scale experimental reactions using mixtures of materials (refer to SDF-E10)	Normal - Steady State	E71570		PT71570	3-01-999-98	0.0	8,760.0	A	0.0	0.5	70.0	110.0

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

U 72040 150/500G PPR Pilot Plant Reactors - 150 and 500 Gallons

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	150G PPR	Small scale experimental reactions using mixtures of materials (ref.SDF-E10)	Normal - Steady State	E72041		PT72040	3-01-999-98	4,380.0	8,760.0	A	0.0	3.0	70.0	110.0
OS2	500G PPR	Small scale experimental reactions using mixtures of materials (ref.SDF-E10)	Normal - Steady State	E72042		PT72040	3-01-999-98	4,380.0	8,760.0	A	0.0	3.0	70.0	110.0

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

**Group NJID:** GR1 Storage Tank

**Members:**

Type	ID	OS	Step
IS	IS1100		
IS	IS1101		
IS	IS1102		
IS	IS1103		
IS	IS1104		
IS	IS1105		
IS	IS1106		
IS	IS1107		
IS	IS1108		
IS	IS1109		
IS	IS1110		
IS	IS1111		
IS	IS1112		
IS	IS1113		
IS	IS1114		
IS	IS1115		
IS	IS1116		
IS	IS1117		
IS	IS1118		
IS	IS1119		
IS	IS1120		
IS	IS1121		
IS	IS1122		
IS	IS1123		
IS	IS1124		
IS	IS1125		

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

**Members:**

<b>Type</b>	<b>ID</b>	<b>OS</b>	<b>Step</b>
IS	IS1126		
IS	IS1127		
IS	IS1128		
IS	IS1129		
IS	IS1130		
IS	IS1131		
IS	IS1132		
IS	IS1133		
IS	IS1134		
IS	IS1138		
IS	IS1139		
IS	IS1142		
IS	IS1145		
IS	IS1146		
IS	IS1148		
IS	IS1149		
IS	IS1151		
IS	IS1152		
IS	IS1153		
IS	IS1154		
IS	IS1201		
IS	IS1202		
IS	IS1203		
IS	IS1204		
IS	IS1205		
IS	IS1206		
IS	IS1207		

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

**Members:**

<b>Type</b>	<b>ID</b>	<b>OS</b>	<b>Step</b>
IS	IS1208		
IS	IS1209		
IS	IS1210		
IS	IS1212		
IS	IS1213		
IS	IS1216		
IS	IS1301		
IS	IS1302		
IS	IS1303		
IS	IS1304		
IS	IS1305		
IS	IS1306		
IS	IS1307		
IS	IS1308		
IS	IS1309		
IS	IS1310		
IS	IS1318		
IS	IS1319		
IS	IS1320		
IS	IS1321		
IS	IS1322		
IS	IS1323		
IS	IS1324		
IS	IS1325		
IS	IS1326		
IS	IS1327		
IS	IS1328		

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

**Members:**

Type	ID	OS	Step
IS	IS1329		
IS	IS1330		
IS	IS1331		
IS	IS1332		
IS	IS1333		
IS	IS1334		
IS	IS1335		
IS	IS1336		
IS	IS1401		
IS	IS1402		
IS	IS1403		
IS	IS2016		
IS	IS2023		
IS	IS2024		
IS	IS2025		
IS	IS2026		
IS	IS2028		
IS	IS2105		
IS	IS3001		
IS	IS3086		
IS	IS9004		
IS	IS9005		
IS	IS9006		

**Formal Reason(s) for Group/Cap:**☒ Other**Other (explain):** Non-HAP, Non-applicable VOC Storage, Caustic Storage and Sludge Storage Tanks

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

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

Compliance plans are identical.

**Operating Circumstances:**

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

**Group NJID:** GR2 Blend/Mix Tk

**Members:**

Type	ID	OS	Step
IS	IS1017		
IS	IS1018		
IS	IS1157		
IS	IS1158		
IS	IS1159		
IS	IS1160		
IS	IS1161		
IS	IS1162		
IS	IS1163		
IS	IS1164		
IS	IS9001		

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

☒ Other

**Other (explain):** Non-HAP, Non-applicable VOC Blending/Mixing Tanks

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

**Operating Circumstances:**



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

**Group NJID:** GR4 Storage

**Members:**

Type	ID	OS	Step
IS	IS1001		
IS	IS1002		
IS	IS1003		
IS	IS1004		
IS	IS1006		
IS	IS1007		
IS	IS1008		
IS	IS1009		
IS	IS1010		
IS	IS1011		
IS	IS1012		
IS	IS1013		
IS	IS1014		
IS	IS1016		
IS	IS1019		
IS	IS1020		
IS	IS1021		
IS	IS1022		
IS	IS1023		
IS	IS1024		
IS	IS1025		
IS	IS1026		
IS	IS1135		
IS	IS1136		
IS	IS1137		
IS	IS1140		

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

**Members:**

Type	ID	OS	Step
IS	IS1141		
IS	IS1143		
IS	IS1144		
IS	IS1147		
IS	IS1155		
IS	IS1156		
IS	IS1165		
IS	IS1211		
IS	IS1214		
IS	IS1215		
IS	IS1311		
IS	IS1312		
IS	IS1313		
IS	IS1314		
IS	IS1315		
IS	IS2101		
IS	IS9002		
IS	IS9003		

**Formal Reason(s) for Group/Cap:**☒ Other**Other (explain):** Storage tanks less than 10,000 Gallons.

**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:** GR6 Fuel Oil

**Members:**

Type	ID	OS	Step
IS	IS8002		
IS	IS8004		
IS	IS8005		
IS	IS8006		

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

☒ Other

**Other (explain):** Fuel Oil Tanks <2,000 Gallons

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

**Operating Circumstances:**

**18050 LANXESS CORPORATION**  
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Date: 3/11/2025

**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS0 Summary  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					tons/yr	No
PM-10 (Total)	D	2.10000000	2.10000000	2.10000000	tons/yr	No
PM-2.5 (Total)			2.10000000	2.10000000	tons/yr	No
TSP	D	2.10000000	2.10000000	2.10000000	tons/yr	No
VOC (Total)	D	7.60000000	7.60000000	7.60000000	tons/yr	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS1 HTL-H2983  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO					lb/step	No
HAPs (Total)					lb/step	No
HAPs (Total)					lb/batch	No
NOx (Total)					lb/step	No
PM-10 (Total)					lb/step	No
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/batch	No
Pb					lb/step	No
SO2					lb/step	No
TSP					lb/step	No
TSP			0.05000000	0.05000000	lb/hr	
TSP		0.10000000	0.10000000	0.10000000	lb/batch	No
VOC (Total)					lb/step	No
VOC (Total)			0.70000000	0.70000000	lb/hr	

**18050 LANXESS CORPORATION**  
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**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS1 HTL-H2983  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		8.30900000	8.30900000	8.30900000	lb/batch	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS1 HTL-H2983  
**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO					lb/step	No
HAPs (Total)					lb/step	No
NOx (Total)					lb/step	No
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/step	No
Pb					lb/step	No
SO2					lb/step	No
TSP		0.10000000	0.10000000	0.10000000	lb/step	No
VOC (Total)		0.10000000	0.10000000	0.10000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS1 HTL-H2983  
**Step:** ST2 Reacting

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	1.00000000	1.00000000	1.00000000	lb/step	No

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**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS1 HTL-H2983  
**Step:** ST3 Stripping

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	7.00000000	7.00000000	7.00000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS1 HTL-H2983  
**Step:** ST4 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS1 HTL-H2983  
**Step:** ST5 Refining

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00300000	0.00300000	0.00300000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS1 HTL-H2983  
**Step:** ST6 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

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**Potential to Emit**

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS1 HTL-H2983  
**Step:** ST7 Drying

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.20000000	0.20000000	0.20000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS1 HTL-H2983  
**Step:** ST8 Filtering

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS2 HTL-H5195  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO					lb/step	No
HAPs (Total)					lb/step	No
HAPs (Total)					lb/batch	No
NOx (Total)					lb/step	No
PM-10 (Total)			0.10000000	0.10000000	lb/hr	
PM-10 (Total)					lb/step	No
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/batch	No
PM-2.5 (Total)			0.10000000	0.10000000	lb/hr	
PM-2.5 (Total)			0.10000000	0.10000000	lb/batch	

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**Potential to Emit**

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS2 HTL-H5195  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Pb					lb/step	No
SO2					lb/step	No
TSP			0.10000000	0.10000000	lb/hr	
TSP		0.10000000	0.10000000	0.10000000	lb/batch	No
TSP					lb/step	No
VOC (Total)		38.00000000	38.00000000	38.00000000	lb/batch	No
VOC (Total)			2.80000000	2.80000000	lb/hr	
VOC (Total)					lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS2 HTL-H5195  
**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO					lb/step	No
HAPs (Total)					lb/step	No
NOx (Total)					lb/step	No
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/step	No
Pb					lb/step	No
SO2					lb/step	No
TSP		0.10000000	0.10000000	0.10000000	lb/step	No
VOC (Total)		0.04400000	0.04400000	0.04400000	lb/step	No



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**Potential to Emit**

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS2 HTL-H5195  
**Step:** ST2 Reacting

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	8.50000000	8.50000000	8.50000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS2 HTL-H5195  
**Step:** ST3 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS2 HTL-H5195  
**Step:** ST4 Refining

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	1.10000000	1.10000000	1.10000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS2 HTL-H5195  
**Step:** ST5 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS2 HTL-H5195  
**Step:** ST6 Strip/Drying

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	28.00000000	28.00000000	28.00000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS2 HTL-H5195  
**Step:** ST7 Filtering

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS3 HTL-C5/6  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO					lb/step	No
HAPs (Total)					lb/batch	No
HAPs (Total)					lb/step	No
NOx (Total)					lb/step	No
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/batch	No
PM-10 (Total)					lb/step	No
PM-10 (Total)			0.10000000	0.10000000	lb/hr	
PM-2.5 (Total)			0.10000000	0.10000000	lb/hr	
PM-2.5 (Total)			0.10000000	0.10000000	lb/batch	

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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS3 HTL-C5/6  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Pb					lb/step	No
SO2					lb/step	No
TSP					lb/step	No
TSP			0.10000000	0.10000000	lb/hr	
TSP		0.10000000	0.10000000	0.10000000	lb/batch	No
VOC (Total)		4.19800000	4.19800000	4.19800000	lb/batch	No
VOC (Total)					lb/step	No
VOC (Total)			0.31250000	0.31250000	lb/hr	

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS3 HTL-C5/6  
**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/step	No
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/step	No
TSP		0.10000000	0.10000000	0.10000000	lb/step	No
VOC (Total)		0.03000000	0.03000000	0.03000000	lb/step	No

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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS3 HTL-C5/6  
**Step:** ST2 Reacting

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	2.00000000	2.00000000	2.00000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS3 HTL-C5/6  
**Step:** ST3 Stripping

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	2.50000000	2.50000000	2.50000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS3 HTL-C5/6  
**Step:** ST4 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS3 HTL-C5/6  
**Step:** ST5 Refining

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00300000	0.00300000	0.00300000	lb/step	No

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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS3 HTL-C5/6  
**Step:** ST6 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS3 HTL-C5/6  
**Step:** ST7 Drying

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.20000000	0.20000000	0.20000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS3 HTL-C5/6  
**Step:** ST8 Filtering

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS4 HTL-C7plus  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO					lb/step	No
HAPs (Total)					lb/batch	No

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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS4 HTL-C7plus  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/step	No
NOx (Total)					lb/step	No
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/batch	No
PM-10 (Total)					lb/step	No
PM-10 (Total)			0.10000000	0.10000000	lb/hr	
PM-2.5 (Total)			0.10000000	0.10000000	lb/batch	
PM-2.5 (Total)			0.10000000	0.10000000	lb/hr	
Pb					lb/step	No
SO2					lb/step	No
TSP					lb/step	No
TSP			0.10000000	0.10000000	lb/hr	
TSP		0.10000000	0.10000000	0.10000000	lb/batch	No
VOC (Total)		2.49800000	2.49800000	2.49800000	lb/batch	No
VOC (Total)			0.25000000	0.25000000	lb/hr	
VOC (Total)					lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS4 HTL-C7plus  
**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/step	No
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/step	No
TSP		0.10000000	0.10000000	0.10000000	lb/step	No

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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS4 HTL-C7plus  
**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS4 HTL-C7plus  
**Step:** ST2 Reacting

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.50000000	0.50000000	0.50000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS4 HTL-C7plus  
**Step:** ST3 Stripping

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	2.00000000	2.00000000	2.00000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS4 HTL-C7plus  
**Step:** ST4 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS4 HTL-C7plus  
**Step:** ST5 Refining

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00300000	0.00300000	0.00300000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS4 HTL-C7plus  
**Step:** ST6 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS4 HTL-C7plus  
**Step:** ST7 Drying

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.20000000	0.20000000	0.20000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS4 HTL-C7plus  
**Step:** ST8 Filtering

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No



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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS5 LTP-2EH,610  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO					lb/step	No
HAPs (Total)					lb/step	No
HAPs (Total)					lb/batch	No
NOx (Total)					lb/step	No
PM-10 (Total)			0.10000000	0.10000000	lb/hr	
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/batch	No
PM-10 (Total)					lb/step	No
PM-2.5 (Total)			0.10000000	0.10000000	lb/batch	
PM-2.5 (Total)			0.10000000	0.10000000	lb/hr	
Pb					lb/step	No
SO2					lb/step	No
TSP			0.10000000	0.10000000	lb/hr	
TSP		0.10000000	0.10000000	0.10000000	lb/batch	No
TSP					lb/step	No
VOC (Total)		45.00000000	45.00000000	45.00000000	lb/batch	No
VOC (Total)			0.25000000	0.25000000	lb/hr	
VOC (Total)					lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS5 LTP-2EH,610  
**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/step	No

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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS5 LTP-2EH,610  
**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/step	No
TSP		0.10000000	0.10000000	0.10000000	lb/step	No
VOC (Total)		0.03000000	0.03000000	0.03000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS5 LTP-2EH,610  
**Step:** ST2 Reacting

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	2.00000000	2.00000000	2.00000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS5 LTP-2EH,610  
**Step:** ST3 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS5 LTP-2EH,610  
**Step:** ST4 Refining

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.33000000	0.33000000	0.33000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS5 LTP-2EH,610  
**Step:** ST5 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS5 LTP-2EH,610  
**Step:** ST6 Strip/Drying

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	43.00000000	43.00000000	43.00000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS5 LTP-2EH,610  
**Step:** ST7 Filtering

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS6 LTP-C8/10  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO					lb/step	No
HAPs (Total)					lb/step	No
HAPs (Total)					lb/batch	No
NOx (Total)					lb/step	No
PM-10 (Total)					lb/step	No
PM-10 (Total)			0.10000000	0.10000000	lb/hr	
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/batch	No
PM-2.5 (Total)			0.10000000	0.10000000	lb/batch	
PM-2.5 (Total)			0.10000000	0.10000000	lb/hr	
Pb					lb/step	No
SO2					lb/step	No
TSP		0.10000000	0.10000000	0.10000000	lb/batch	No
TSP			0.10000000	0.10000000	lb/hr	
TSP					lb/step	No
VOC (Total)		12.00000000	12.00000000	12.00000000	lb/batch	No
VOC (Total)			1.37500000	1.37500000	lb/hr	
VOC (Total)					lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS6 LTP-C8/10  
**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/step	No

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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS6 LTP-C8/10  
**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/step	No
TSP		0.10000000	0.10000000	0.10000000	lb/step	No
VOC (Total)		0.02000000	0.02000000	0.02000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS6 LTP-C8/10  
**Step:** ST2 Reacting

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	1.00000000	1.00000000	1.00000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS6 LTP-C8/10  
**Step:** ST3 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS6 LTP-C8/10  
**Step:** ST4 Refining

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.33000000	0.33000000	0.33000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS6 LTP-C8/10  
**Step:** ST5 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS6 LTP-C8/10  
**Step:** ST6 Strip/Drying

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	11.00000000	11.00000000	11.00000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS6 LTP-C8/10  
**Step:** ST7 Filtering

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS7 LTP-C13plus  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO					lb/step	No
HAPs (Total)					lb/step	No
HAPs (Total)					lb/batch	No
NOx (Total)					lb/step	No
PM-10 (Total)					lb/step	No
PM-10 (Total)			0.10000000	0.10000000	lb/hr	
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/batch	No
PM-2.5 (Total)			0.10000000	0.10000000	lb/batch	
PM-2.5 (Total)			0.10000000	0.10000000	lb/hr	
Pb					lb/step	No
SO2					lb/step	No
TSP		0.10000000	0.10000000	0.10000000	lb/batch	No
TSP			0.10000000	0.10000000	lb/hr	
TSP					lb/step	No
VOC (Total)		4.20000000	4.20000000	4.20000000	lb/batch	No
VOC (Total)			0.51300000	0.51300000	lb/hr	
VOC (Total)					lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS7 LTP-C13plus  
**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/step	No

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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS7 LTP-C13plus  
**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/step	No
TSP		0.10000000	0.10000000	0.10000000	lb/step	No
VOC (Total)		0.00020000	0.00020000	0.00020000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS7 LTP-C13plus  
**Step:** ST2 Reacting

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.10000000	0.10000000	0.10000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS7 LTP-C13plus  
**Step:** ST3 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No



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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS7 LTP-C13plus  
**Step:** ST4 Refining

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00300000	0.00300000	0.00300000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS7 LTP-C13plus  
**Step:** ST5 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS7 LTP-C13plus  
**Step:** ST6 Strip/Drying

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	4.10000000	4.10000000	4.10000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS7 LTP-C13plus  
**Step:** ST7 Filtering

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS8 LTP-H5145  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO					lb/step	No
HAPs (Total)					lb/step	No
HAPs (Total)					lb/batch	No
NOx (Total)					lb/step	No
PM-10 (Total)			0.10000000	0.10000000	lb/hr	
PM-10 (Total)					lb/step	No
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/batch	No
PM-2.5 (Total)			0.10000000	0.10000000	lb/batch	
PM-2.5 (Total)			0.10000000	0.10000000	lb/hr	
Pb					lb/step	No
SO2					lb/step	No
TSP					lb/step	No
TSP		0.10000000	0.10000000	0.10000000	lb/batch	No
TSP			0.10000000	0.10000000	lb/hr	
VOC (Total)		0.52000000	0.52000000	0.52000000	lb/batch	No
VOC (Total)			0.05000000	0.05000000	lb/hr	
VOC (Total)					lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS8 LTP-H5145  
**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/step	No

**18050 LANXESS CORPORATION**  
**BOP220001**

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**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS8 LTP-H5145  
**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/step	No
TSP		0.10000000	0.10000000	0.10000000	lb/step	No
VOC (Total)		0.01000000	0.01000000	0.01000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS8 LTP-H5145  
**Step:** ST2 Reacting

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.10000000	0.10000000	0.10000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS8 LTP-H5145  
**Step:** ST3 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

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Date: 3/11/2025

**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS8 LTP-H5145  
**Step:** ST4 Refining

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00300000	0.00300000	0.00300000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS8 LTP-H5145  
**Step:** ST5 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS8 LTP-H5145  
**Step:** ST6 Strip/Dry

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.40000000	0.40000000	0.40000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS8 LTP-H5145  
**Step:** ST7 Filtering

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

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**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS9 LTP-H5147  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/batch	No
PM-10 (Total)			0.10000000	0.10000000	lb/hr	
PM-2.5 (Total)			0.10000000	0.10000000	lb/hr	
PM-2.5 (Total)			0.10000000	0.10000000	lb/batch	
TSP			0.10000000	0.10000000	lb/hr	
TSP		0.10000000	0.10000000	0.10000000	lb/batch	No
VOC (Total)		4.19800000	4.19800000	4.19800000	lb/batch	No
VOC (Total)			0.67000000	0.67000000	lb/hr	

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS9 LTP-H5147  
**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/step	No
TSP		0.10000000	0.10000000	0.10000000	lb/step	No
VOC (Total)		0.00200000	0.00200000	0.00200000	lb/step	No

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**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS9 LTP-H5147  
**Step:** ST2 Reacting

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	2.50000000	2.50000000	2.50000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS9 LTP-H5147  
**Step:** ST3 Stripping

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	2.00000000	2.00000000	2.00000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS9 LTP-H5147  
**Step:** ST4 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS9 LTP-H5147  
**Step:** ST5 Refining

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00300000	0.00300000	0.00300000	lb/step	No

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**Potential to Emit**

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS9 LTP-H5147  
**Step:** ST6 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS9 LTP-H5147  
**Step:** ST7 Drying

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.20000000	0.20000000	0.20000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS9 LTP-H5147  
**Step:** ST8 Filtering

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS10 RPS  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO					lb/step	No
HAPs (Total)					lb/batch	No

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Date: 3/11/2025

**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** BP1 Ester I

**Operating Scenario:** OS10 RPS

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/step	No
NOx (Total)					lb/step	No
PM-10 (Total)					lb/step	No
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/batch	No
PM-10 (Total)			0.10000000	0.10000000	lb/hr	
PM-2.5 (Total)			0.10000000	0.10000000	lb/batch	
PM-2.5 (Total)			0.10000000	0.10000000	lb/hr	
Pb					lb/step	No
SO2					lb/step	No
TSP		0.10000000	0.10000000	0.10000000	lb/batch	No
TSP					lb/step	No
TSP			0.10000000	0.10000000	lb/hr	
VOC (Total)		10.24900000	10.24900000	10.24900000	lb/batch	No
VOC (Total)					lb/step	No
VOC (Total)			0.87500000	0.87500000	lb/hr	

**Subject Item:** BP1 Ester I

**Operating Scenario:** OS10 RPS

**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/step	No
PM-10 (Total)		0.10000000	0.10000000	0.10000000	lb/step	No
TSP		0.10000000	0.10000000	0.10000000	lb/step	No



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**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS10 RPS  
**Step:** ST1 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		0.02000000	0.02000000	0.02000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS10 RPS  
**Step:** ST2 Reacting

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	1.00000000	1.00000000	1.00000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS10 RPS  
**Step:** ST3 Charging

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.02000000	0.02000000	0.02000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS10 RPS  
**Step:** ST4 Reacting

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	2.00000000	2.00000000	2.00000000	lb/step	No

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**Potential to Emit**

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS10 RPS  
**Step:** ST5 Stripping

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	7.00000000	7.00000000	7.00000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS10 RPS  
**Step:** ST6 Transfer

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS10 RPS  
**Step:** ST7 Drying

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.20000000	0.20000000	0.20000000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS10 RPS  
**Step:** ST8 Transfer

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

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**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS10 RPS  
**Step:** ST9 Refining

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00300000	0.00300000	0.00300000	lb/step	No

**Subject Item:** BP1 Ester I  
**Operating Scenario:** OS10 RPS  
**Step:** ST10 Filtering

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00200000	0.00200000	0.00200000	lb/step	No

**Subject Item:** FC  
**Operating Scenario:**  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			57.20000000	57.20000000	tons/yr	No
HAPs (Total)					tons/yr	No
NOx (Total)			70.90000000	70.90000000	tons/yr	No
PM-10 (Total)			12.50000000	12.50000000	tons/yr	No
Pb					tons/yr	No
SO2			9.83000000	9.83000000	tons/yr	No
TSP			17.90000000	17.90000000	tons/yr	No
VOC (Total)			35.90000000	35.90000000	tons/yr	No

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**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** U1 WH4 Drumming

**Operating Scenario:** OS0 Summary

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)					tons/yr	No
VOC (Total)			0.05000000	0.05000000	lb/hr	

**Subject Item:** U1 WH4 Drumming

**Operating Scenario:** OS1 Drumming

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		0.00733000	D	D	lb/hr	No

**Subject Item:** U2 Pilot Plant

**Operating Scenario:** OS0 Summary

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)					tons/yr	No
VOC (Total)			0.05000000	0.05000000	lb/hr	

**18050 LANXESS CORPORATION**  
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**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** U2 Pilot Plant  
**Operating Scenario:** OS1 Drumming  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		0.00100000	D	D	lb/hr	No

**Subject Item:** U2500 BP6 Storage  
**Operating Scenario:** OS0 Summary  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					tons/yr	No
TSP	D	0.00200000			tons/yr	No
VOC (Total)	D	19.18730000	1.15000000	1.15000000	tons/yr	No

**Subject Item:** U2500 BP6 Storage  
**Operating Scenario:** OS8 T-252  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.28600000	0.28600000	0.28600000	tons/yr	No

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Date: 3/11/2025

**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** U2500 BP6 Storage

**Operating Scenario:** OS18 T-290

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.20000000	0.20000000	0.20000000	tons/yr	No

**Subject Item:** U2500 BP6 Storage

**Operating Scenario:** OS21 T-269

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.04400000	0.04400000	0.04400000	tons/yr	No

**Subject Item:** U2500 BP6 Storage

**Operating Scenario:** OS22 T-254

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.22500000	0.22500000	0.22500000	tons/yr	No

**Subject Item:** U8012 Fire Pump

**Operating Scenario:** OS0 Summary

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			0.01880000	0.01880000	tons/yr	No
NOx (Total)			0.05650000	0.05650000	tons/yr	No

**18050 LANXESS CORPORATION**  
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Date: 3/11/2025

**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** U8012 Fire Pump

**Operating Scenario:** OS0 Summary

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)			0.00210000	0.00210000	tons/yr	No
PM-2.5 (Total)			0.00210000	0.00210000	tons/yr	No
TSP			0.00210000	0.00210000	tons/yr	No
VOC (Total)			0.00250000	0.00250000	tons/yr	No

**Subject Item:** U8012 Fire Pump

**Operating Scenario:** OS1 Fire Pump

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			0.37700000	0.37700000	lb/hr	No
CO			0.90000000	0.90000000	grams/brake horsepower-hour	No
NOx (Total)			1.13100000	1.13100000	lb/hr	No
NOx (Total)			2.70000000	2.70000000	grams/brake horsepower-hour	No
PM-10 (Total)			0.04190000	0.04190000	lb/hr	No
PM-10 (Total)			0.10000000	0.10000000	grams/brake horsepower-hour	No
PM-2.5 (Total)			0.10000000	0.10000000	grams/brake horsepower-hour	No
PM-2.5 (Total)			0.04190000	0.04190000	lb/hr	No
TSP			0.10000000	0.10000000	grams/brake horsepower-hour	No
TSP			0.04190000	0.04190000	lb/hr	No
VOC (Total)			0.12000000	0.12000000	grams/brake horsepower-hour	No
VOC (Total)			0.05030000	0.05030000	lb/hr	No

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**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** U8167 SH-1  
**Operating Scenario:** OS0 Summary  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			2.50000000	2.50000000	tons/yr	No
NOx (Total)			3.20000000	3.20000000	tons/yr	No
PM-10 (Total)			0.27000000	0.27000000	tons/yr	No
PM-2.5 (Total)			0.27000000	0.27000000	tons/yr	
SO2					tons/yr	No
TSP			0.27000000	0.27000000	tons/yr	No
VOC (Total)			0.19000000	0.19000000	tons/yr	No

**Subject Item:** U8167 SH-1  
**Operating Scenario:** OS3 SH-1 NG  
**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO		0.57000000	0.57500000	0.57500000	lb/hr	No
HAPs (Total)					lb/hr	No
NOx (Total)		0.74000000	0.74000000	0.74000000	lb/hr	No
PM-10 (Total)		0.06100000	0.06100000	0.06100000	lb/hr	No
PM-2.5 (Total)			0.06100000	0.06100000	lb/hr	
Pb		D	D	D	lb/hr	No
SO2		D	D	D	lb/hr	No
TSP		0.06100000	0.06100000	0.06100000	lb/hr	No
VOC (Total)		0.04400000	D	D	lb/hr	No



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**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** U8168 SH-2

**Operating Scenario:** OS0 Summary

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO		3.02000000	2.40000000	2.40000000	tons/yr	No
NOx (Total)		12.10000000	9.50000000	9.50000000	tons/yr	No
PM-10 (Total)		26.30000000	1.27000000	1.27000000	tons/yr	No
PM-2.5 (Total)			1.27000000	1.27000000	tons/yr	
SO2		14.50000000	9.12000000	9.12000000	tons/yr	No
TSP		26.30000000	1.27000000	1.27000000	tons/yr	No
VOC (Total)		0.12000000	0.19000000	0.19000000	tons/yr	No

**Subject Item:** U8168 SH-2

**Operating Scenario:** OS3 SH-2 NG

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			1.00000000	1.00000000	lb/hr	
NOx (Total)			1.30000000	1.30000000	lb/hr	
PM-10 (Total)			0.11000000	0.11000000	lb/hr	
PM-2.5 (Total)			0.11000000	0.11000000	lb/hr	
TSP			0.11000000	0.11000000	lb/hr	
VOC (Total)			0.07700000	0.07700000	lb/hr	

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**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** U8243 Boiler #7&#8

**Operating Scenario:** OS0 Summary

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO	D	42.80000000	42.80000000	42.80000000	tons/yr	No
NOx (Total)	D	42.80000000	42.80000000	42.80000000	tons/yr	No
PM-10 (Total)	D	34.42000000	4.29000000	4.29000000	tons/yr	No
PM-2.5 (Total)			4.29000000	4.29000000	tons/yr	
Pb	D	D	D	D	tons/yr	No
SO2	D	66.01000000	0.53000000	0.53000000	tons/yr	No
TSP	D	34.42000000	4.29000000	4.29000000	tons/yr	No
VOC (Total)	D	7.65000000	5.17000000	5.17000000	tons/yr	No

**Subject Item:** U8243 Boiler #7&#8

**Operating Scenario:** OS1 Boiler#7-NG

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO	D	4.89000000	4.89000000	4.89000000	lb/hr	No
CO			0.05000000	0.05000000	lb/MMBTU	
NOx (Total)	D	5.86000000	4.89000000	4.89000000	lb/hr	No
PM-10 (Total)	D	0.49000000	0.49000000	0.49000000	lb/hr	No
PM-10 (Total)			0.00500000	0.00500000	lb/MMBTU	
PM-2.5 (Total)			0.49000000	0.49000000	lb/hr	
Pb	D	D	D	D	lb/hr	No
SO2			0.00058800	0.00058800	lb/MMBTU	
SO2	D	0.06000000	0.06000000	0.06000000	lb/hr	No
TSP	D	0.49000000	0.49000000	0.49000000	lb/hr	No

**18050 LANXESS CORPORATION**  
**BOP220001**

Date: 3/11/2025

**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** U8243 Boiler #7&#8

**Operating Scenario:** OS1 Boiler#7-NG

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
TSP			0.00500000	0.00500000	lb/MMBTU	
VOC (Total)	D	0.59000000	0.59000000	0.59000000	lb/hr	No
VOC (Total)			0.00600000	0.00600000	lb/MMBTU	

**Subject Item:** U8243 Boiler #7&#8

**Operating Scenario:** OS3 Boiler#8-NG

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			4.89000000	4.89000000	lb/hr	
CO			0.05000000	0.05000000	lb/MMBTU	
NOx (Total)			4.89000000	4.89000000	lb/hr	
PM-10 (Total)			0.49000000	0.49000000	lb/hr	
PM-10 (Total)			0.00500000	0.00500000	lb/MMBTU	
PM-2.5 (Total)			0.49000000	0.49000000	lb/hr	
SO2			0.06000000	0.06000000	lb/hr	
SO2			0.00058800	0.00058800	lb/MMBTU	
TSP			0.49000000	0.49000000	lb/hr	
TSP			0.00500000	0.00500000	lb/MMBTU	
VOC (Total)			0.00600000	0.00600000	lb/MMBTU	
VOC (Total)			0.59000000	0.59000000	lb/hr	

**18050 LANXESS CORPORATION**  
**BOP220001**

Date: 3/11/2025

**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** U8259 SH-3, SH-4

**Operating Scenario:** OS0 Summary

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO	D		6.73000000	6.73000000	tons/yr	No
NOx (Total)	D		8.02000000	8.02000000	tons/yr	No
PM-10 (Total)	D		0.61000000	0.61000000	tons/yr	No
PM-2.5 (Total)			0.61000000	0.61000000	tons/yr	
Pb	D	D	D	D	tons/yr	No
SO2	D		0.05000000	0.05000000	tons/yr	No
TSP	D		0.61000000	0.61000000	tons/yr	No
VOC (Total)	D		0.44000000	0.44000000	tons/yr	No

**Subject Item:** U8259 SH-3, SH-4

**Operating Scenario:** OS1 SH-3 - NG

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			1.01000000	1.01000000	lb/hr	No
HAPs (Total)					lb/hr	No
NOx (Total)			1.20000000	1.20000000	lb/hr	No
PM-10 (Total)			0.09000000	0.09000000	lb/hr	No
PM-2.5 (Total)			0.09000000	0.09000000	lb/hr	
Pb					lb/hr	No
SO2			0.01000000	0.01000000	lb/hr	No
TSP			0.09000000	0.09000000	lb/hr	No
VOC (Total)			0.07000000	0.07000000	lb/hr	No

**18050 LANXESS CORPORATION**  
**BOP220001**

Date: 3/11/2025

**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** U8259 SH-3, SH-4

**Operating Scenario:** OS2 SH-4 - NG

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			1.01000000	1.01000000	lb/hr	No
NOx (Total)			1.20000000	1.20000000	lb/hr	No
PM-10 (Total)			0.09000000	0.09000000	lb/hr	No
PM-2.5 (Total)			0.09000000	0.09000000	lb/hr	
SO2			0.01000000	0.01000000	lb/hr	No
TSP			0.09000000	0.09000000	lb/hr	No
VOC (Total)			0.07000000	0.07000000	lb/hr	No

**Subject Item:** U8265 Emer.Gen.

**Operating Scenario:** OS0 Summary

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO	D	0.47000000	0.09400000	0.09400000	tons/yr	No
NOx (Total)	D	2.18250000	0.43600000	0.43600000	tons/yr	No
PM-10 (Total)	D	0.15450000	0.03000000	0.03000000	tons/yr	No
PM-2.5 (Total)			0.03000000	0.03000000	tons/yr	
Pb	D	D	D	D	tons/yr	No
SO2	D	0.14250000	0.02900000	0.02900000	tons/yr	No
TSP	D	0.15450000	0.03000000	0.03000000	tons/yr	No
VOC (Total)	D	0.17250000	0.03500000	0.03500000	tons/yr	No

**18050 LANXESS CORPORATION**  
**BOP220001**

Date: 3/11/2025

**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** U8265 Emer.Gen.

**Operating Scenario:** OS1 Emer.Gen.

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO	D	1.88000000	1.88000000	1.88000000	lb/hr	No
NOx (Total)	D	8.73000000	8.73000000	8.73000000	lb/hr	No
PM-10 (Total)	D	0.61800000	0.61800000	0.61800000	lb/hr	No
PM-2.5 (Total)			0.61800000	0.61800000	lb/hr	
Pb	D	D	D	D	lb/hr	No
SO2	D	0.57000000	0.57000000	0.57000000	lb/hr	No
TSP	D	0.61800000	0.61800000	0.61800000	lb/hr	No
VOC (Total)	D	0.69000000	0.69000000	0.69000000	lb/hr	No

**Subject Item:** U71540 15G Reactor

**Operating Scenario:** OS0 Summary

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					tons/yr	No
TSP	D	0.00900000			tons/yr	No
TSP			0.05000000	0.05000000	lb/hr	
VOC (Total)			0.05000000	0.05000000	lb/hr	
VOC (Total)	D	0.00900000			tons/yr	No

**18050 LANXESS CORPORATION**  
**BOP220001**

Date: 3/11/2025

**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** U71540 15G Reactor

**Operating Scenario:** OS1 E0154

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/hr	No
TSP	D	0.00200000	D	D	lb/hr	No
VOC (Total)	D	0.00200000	D	D	lb/hr	No

**Subject Item:** U71570 40G Reactor

**Operating Scenario:** OS0 Summary

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO					tons/yr	No
HAPs (Total)					tons/yr	No
TSP			0.05000000	0.05000000	lb/hr	
TSP	D	0.03500000			tons/yr	No
VOC (Total)	D	0.03500000			tons/yr	No
VOC (Total)			0.05000000	0.05000000	lb/hr	

**Subject Item:** U71570 40G Reactor

**Operating Scenario:** OS1 E0157

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/hr	No
TSP	D	0.00800000	D	D	lb/hr	No

**18050 LANXESS CORPORATION**  
**BOP220001**

Date: 3/11/2025

**New Jersey Department of Environmental Protection**  
**Potential to Emit**

**Subject Item:** U71570 40G Reactor

**Operating Scenario:** OS1 E0157

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)	D	0.00800000	D	D	lb/hr	No

**Subject Item:** U72040 150/500G PPR

**Operating Scenario:** OS0 Summary

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					tons/yr	No
TSP	D	D			tons/yr	No
TSP			0.05000000	0.05000000	lb/hr	
VOC (Total)	D	0.17000000			tons/yr	No
VOC (Total)			0.05000000	0.05000000	lb/hr	

**Subject Item:** U72040 150/500G PPR

**Operating Scenario:** OS1 150G PPR

**Step:**

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO					lb/hr	No
HAPs (Total)					lb/hr	No
TSP	D	D	D	D	lb/hr	No
VOC (Total)	D	0.03900000	D	D	lb/hr	No