



## State of New Jersey

Department of Environmental Protection

Air Quality, Energy and Sustainability

Division of Air Quality

Bureau of Stationary Sources

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

Trenton, NJ 08625-0420

PHILIP D. MURPHY

Governor

SHEILA Y. OLIVER

Lt. Governor

SHAWN M. LATOURETTE

COMMISSIONER

### Air Pollution Control Operating Permit Significant Modification

**Permit Activity Number: BOP210001**

**Program Interest Number: 75505**

Mailing Address	Plant Location
GODFREY ASCHMANN MANUFACTURING DIRECTOR NIPRO PHARMAPACKAGING AMERICAS CORP 1633 WHEATON AVE Millville, NJ 08332	NIPRO PHARMAPACKAGING AMERICAS 1633 Wheaton Ave Millville Cumberland County

**Initial Operating Permit Approval Date:**

**December 6, 2004**

**Operating Permit Approval Date:**

**DRAFT**

**Operating Permit Expiration Date:**

**December 5, 2024**

#### **AUTHORITY AND APPLICABILITY**

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

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

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

#### **PERMIT SHIELD**

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

#### **COMPLIANCE SCHEDULES**

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

#### **COMPLIANCE CERTIFICATIONS AND DEVIATION REPORTS**

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

### **ACCESSING PERMITS**

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

### **HELPLINE**

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

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

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

### **COMPLIANCE ASSURANCE MONITORING**

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

### **ADMINISTRATIVE HEARING REQUEST**

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

If you have any questions regarding this permit approval, please call Michael Mankbadi at (609)-633-2675.

Approved by:

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

Enclosure

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

**Facility Name: NIPRO PHARMAPACKAGING AMERICAS**  
**Program Interest Number: 75505**  
**Permit Activity Number: BOP210001**

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## Section A

**Facility Name: NIPRO PHARMAPACKAGING AMERICAS**  
**Program Interest Number: 75505**  
**Permit Activity Number: BOP210001**

### **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	7.80	84.5	19.3	61.3	32.1	18.5	18.5	N/A	0.0000430	
Batch Process Summary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Group Summary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Emissions	7.80	84.5	19.3	61.3	32.1	18.5	18.5	N/A	0.0000430	46,934

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> (total)	Pb	HAPs (total)
Insignificant Source Operations	1.13	18.7	6.29	0.180	2.17	2.17	2.17	N/A	0.0300
Non-Source Fugitive Emissions <sup>3</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

VOC: Volatile Organic Compounds

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

CO: Carbon Monoxide

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

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

TSP: Total Suspended Particulates

Other: Any other air contaminant

regulated under the Federal CAA

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

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

Pb: Lead

HAPs: Hazardous Air Pollutants

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

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

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

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

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

<sup>3</sup> Non-Source Fugitive Emissions are included if the facility falls into one or more categories listed at N.J.A.C. 7:27-22.2(a)2.

## Section A

**Facility Name: NIPRO PHARMAPACKAGING AMERICAS**

**Program Interest Number: 75505**

**Permit Activity Number: BOP210001**

### **POLLUTANT EMISSIONS SUMMARY**

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

HAP	TPY
Cadmium	0.0000430

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

Other Air Contaminant	TPY
n/a	

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

## Section B

**Facility Name: NIPRO PHARMAPACKAGING AMERICAS**  
**Program Interest Number: 75505**  
**Permit Activity Number: BOP210001**

### **GENERAL PROVISIONS AND AUTHORITIES**

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

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

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

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



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

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

## Section C

**Facility Name: NIPRO PHARMAPACKAGING AMERICAS**

**Program Interest Number: 75505**

**Permit Activity Number: BOP210001**

### **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>
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## Section D

**Facility Name: NIPRO PHARMAPACKAGING AMERICAS**

**Program Interest Number: 75505**

**Permit Activity Number: BOP210001**

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

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#### **Page Number**

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IS28	Vial Cutting Lines (12) < 1 MMBtu/hr heat input	8

##### **Groups (GR):**

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GR5	Mixing	Mixing	10
GR7	Mixed Bins	Mixed Bins	11

##### **Emission Units (U):**

U NJID	U Designation	U Description	
U100	Furnace X	Electric Melt Glass Furnace X, natural gas-boosted	12
U106	TPB Boiler	6.3 MMBTU/hr Natural Gas-fired Tubing Products Heating Boiler	20
U107	1.1 MMBtu/hr	1.1 MMBtu/hr Space Heater	23
U143	L Furnace	Electric Melt Glass Furnace L, natural gas-boosted	25
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**New Jersey Department of Environmental Protection**  
**Reason for Application**

**Permit Being Modified**

**Permit Class:** BOP      **Number:** 180001

**Description**      Significant Modification BOP210001  
**of Modifications:**

1. The glass pull rate for U151 Electric Melt Glass Furnace R (U151) was increased from 20.9 tons of glass per day to 38.9 tons of glass per day.

Natural gas fuel usage limits for U151:OS1 & 2 were increased from 24.2 to 44.4 MMscf per consecutive 12 month period; fuel monitoring requirements were added.

A natural gas fired burner for glass conditioner 2, forming bowl 2, and overflow weir 2 (E517) was added to Furnace R in new operating scenario U151:OS4. PTE emission limits for U151:OS4 were established as follows: NO<sub>x</sub> at 0.150 lb/hr, CO at 0.130 lb/hr, cadmium at 0.00000170 lb/hr.

One new baghouse (CD153) was added to control particulate emissions from Furnace R.

Energy input from electric boost for Furnace R (E131) was increased by an additional 105 kW resulting in a maximum gross heat input increase from 2.75 to 5.10 MMBtu/hr.

Combustion process adjustment requirements were added in U151:OS0.

PTE emission limits for U151:OS3 were revised: CO corrected from 0.0620 to 0.130 lb/hr based on AP-42 and Cadmium was added at 0.00000170 lb/hr.

Emission limits for U151:OS1 and U151:OS2 were updated based on stack test results for furnace R (TST170003 and TST190001) and furnace L (TST170005) and the new pull rate. In U151:OS1 PTE emission limit changes: VOC increased from 0.310 to 0.420 lb/hr, NO<sub>x</sub> increased from 2.26 to 4.21 lb/hr, CO decreased from 1.00 to 0.110 lb/hr, SO<sub>2</sub> decreased from 2.00 to 0.140 lb/hr, TSP increased from 0.250 to 0.770 lb/hr, PM<sub>10</sub> and PM<sub>2.5</sub> increased from 0.500 to 1.54 lb/hr, cadmium was added at 0.00000253 lb/hr. In U151:OS2, VOC decreased from 0.310 to 0.080 lb/hr, NO<sub>x</sub> increased from 2.26 to 4.21 lb/hr, CO decreased from 1.00 to 0.020 lb/hr, SO<sub>2</sub> increased from 2.00 to 4.40 lb/hr, TSP decreased from 1.70 to 0.120 lb/hr, PM<sub>10</sub> and PM<sub>2.5</sub> were added at 0.199 lb/hr, cadmium was added at 0.00000253 lb/hr. Annual emissions limits for U151 were updated: VOC from 1.40 to 1.85 tons/year, NO<sub>x</sub> emissions from 10.5 to 19.8 tons/year, CO from 4.65 to 1.85 tons/year, SO<sub>2</sub> from 8.76 to 3.5 tons/year, TSP emissions from 1.15 to 3.39 tons/year, PM<sub>10</sub> and PM<sub>2.5</sub> from 2.10 to 6.74 tons/year, and HAPs and cadmium were added at 0.0000430 tons/year.

2. A SOTA limit of 2.60 lb NO<sub>x</sub>/ton of glass removed was established for Furnace R in U151:OS Summary. A SOTA limit of 99% control or 0.01 gr/dcsf of PM-10 was established for the control devices of Furnace R in CD148, CD150 and CD153. Stack test requirements were added for CD148, CD150 and CD153.

3. Two new cold end crushers (E518 and E519) were added to the Production Line Cullet Crushers at 162:OS17 and OS18. No changes were made to annual emissions.

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**Reason for Application**

4. One new batch conveyer (E520) was added to convey raw material from the existing S Elevator to the existing Q/R Conveyor at U147:OS10. No changes were made to annual emissions.

5. One alley burner was added to existing IS5; Two conveyor trim (ribbon) burners and two glaze burners were added to existing IS27. Cold end application sprays to support the Furnace R expansion were added to existing IS29. Total insignificant source emissions were updated: NOx from 17.4 to 18.7 tons/year, VOC from 1.05 to 1.13 tons/year, CO from 5.19 to 6.29 tons/year, SO2 from 0.172 to 0.180 tons/year, TSP and PM-10 from 2.07 to 2.17 tons/year.

6. Operating Permit Section A Pollutant Emissions Summary for Significant and Insignificant Sources PTE emissions were updated accordingly.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Compliance Certification: The permittee shall submit an annual Compliance Certification for each applicable requirement, pursuant to N.J.A.C. 7:27-22.19(f). [N.J.A.C. 7:27-22]	None.	None.	<p>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.</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 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]</p>
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)].	<p>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)]</p>
10	Prevention of Significant Deterioration: The permittee shall comply with all applicable provisions of Prevention of Significant Deterioration (PSD). [40 CFR 52.21]	None.	None.	None.



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

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

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

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

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

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

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

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

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

**Subject Item:** IS5 Alley Burners (<1 MMBtu/hr heat input), IS15 Small "Modine" Plant Natural Gas Heaters (< 1 MM Btu/hr heat input), IS25 Natural gas fired Lehrs (12) (<= 0.15 MMBTU/hr heat input), IS27 NG-fired Ribbon Burners & Glazers (85) (<1.0 MMBtu/hr heat input)

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)] &. [N.J.A.C. 7:27- 3.2(c)]	None.	None.	None.

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

**Subject Item:** IS28 Vial Cutting Lines (12) (< 1 MMBtu/hr heat input)

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)] &. [N.J.A.C. 7:27- 3.2(c)]	None.	None.	None.

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

**Subject Item:** GR1 Bins/Silos

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	TSP <= 0.09 tons/yr. Annual emission limit from the storage silos and bins. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	PM-10 (Total) <= 0.09 tons/yr. Annual emission limit from the storage silos and bins. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	PM-2.5 (Total) <= 0.09 tons/yr. Annual emission limit from the storage silos and bins. [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:**            **GR5 Mixing**

<b>Ref.#</b>	<b>Applicable Requirement</b>	<b>Monitoring Requirement</b>	<b>Recordkeeping Requirement</b>	<b>Submittal/Action Requirement</b>
1	TSP <= 0.13 tons/yr. Annual emission limit from the mixers. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	PM-10 (Total) <= 0.13 tons/yr. Annual emission limit from the mixers. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	PM-2.5 (Total) <= 0.13 tons/yr. Annual emission limit from the mixers. [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:** GR7 Mixed Bins

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	TSP <= 0.09 tons/yr. Annual emission limit from the mixed batch storage silos and bins. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	PM-10 (Total) <= 0.09 tons/yr. Annual emission limit from the mixed batch storage silos and bins. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	PM-2.5 (Total) <= 0.09 tons/yr. Annual emission limit from the mixed batch storage silos and bins. [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:** U100 Electric Melt Glass Furnace X, natural gas-boosted

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p><b>STACK TESTING SUMMARY</b> If soda lime glass is produced, the permittee shall conduct a stack test for soda lime glass production using a protocol approved by the Department to demonstrate compliance with the emission limits for VOC, NOx, CO, SO2 and TSP and to establish emissions limits for PM-10 as specified in the compliance plan for U100:OS1. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: The stack test must be conducted within 60 days of approval of a timely submitted protocol.  [N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario(s).  [N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 and obtain approval before restarting the idled source (U100, Furnace X). The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date. A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]</p>

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<p><b>STACK TESTING SUMMARY</b> If specialty glass is produced, the permittee shall conduct a stack test for borosilicate glass production using a protocol approved by the Department to demonstrate compliance with the emission limits for VOC, NO<sub>x</sub>, CO, SO<sub>2</sub>, TSP and PM-10 as specified in the compliance plan for U100:OS2. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: The stack test must be conducted within 60 days of approval of a timely submitted protocol.  [N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario(s).  [N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 and obtain approval before restarting the idled source (U100, Furnace X). The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date. A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]</p>
3	<p>This furnace is permitted to produce soda lime or specialty glass. [N.J.A.C. 7:27-22.16(a)]</p>	<p>None.</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The permittee shall record the type of glass produced during each calendar month. [N.J.A.C. 7:27-22.16(o)]</p>	<p>None.</p>
4	<p>The daily glass pull rate for furnace X shall not exceed 1.8 tons/day. [N.J.A.C. 7:27-22.16(e)]</p>	<p>Monitored by material feed/flow monitoring daily. [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 daily. [N.J.A.C. 7:27-22.16(o)]</p>	<p>None.</p>

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.
6	Hours of Operation <= 4,080 hr/yr combined between U100:OS1 and U100:OS2. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by production records daily.[N.J.A.C. 7:27-22.16(a)].	Hours of Operation: Recordkeeping by manual logging of parameter or storing data in a computer data system daily and for every month and for every consecutive 12-month period. [N.J.A.C. 7:27-22.16(o)]	None.
7	VOC (Total) <= 0.121 tons/yr based on 4,080 hours per year operation combined for U100:OS1 and U100:OS2. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	NOx (Total) <= 2.31 tons/yr based on 4,080 hours per year operation combined for U100:OS1 and U100:OS2. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
9	CO <= 0.857 tons/yr based on 4,080 hours per year operation combined for U100:OS1 and U100:OS2. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
10	SO2 <= 4.66 tons/yr. The annual SO2 emissions is calculated as follows:  SO2 TPY = ((32)(X) + (7)(Y)) / 2000  where: X : annual tonnage of Borosilicate Recipe Y : annual tonnage of Soda Lime Recipe [N.J.A.C. 7:27-22.16(a)]	None.	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system annually in a log book or readily accessible computer memory. The Permittee shall use production records (by tracking and maintaining data regarding batch input to the furnace, indicating both the total quantity charged as well as the type of glass being produced) to calculate the annual SO2 emissions. [N.J.A.C. 7:27-22.16(e)]	None.
11	TSP <= 2 tons/yr based on 4,080 hours per year operation combined for U100:OS1 and U100:OS2. [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**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	PM-10 (Total) <= 0.512 tons/yr based on 4,080 hours per year operation while producing borosilicate glass. A limit while producing soda lime glass shall be determined by stack testing (see elsewhere in this OS Summary) and the higher value included in the requirement. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Obtain an approved permit: Upon occurrence of event. Within 90 days of approval by the Emission Measurement Section (EMS) of the stack test report for soda lime glass production, submit an application for a permit modification to establish PM-10 limits in tons per year and lb/hr. [N.J.A.C. 7:27-22.19(d)]
13	PM-2.5 (Total) <= 0.512 tons/yr based on the emissions limit of PM-10 while producing borosilicate glass. A limit while producing soda lime glass shall be determined by stack testing (see elsewhere in this OS Summary) and the higher value included in the requirement. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Obtain an approved permit: Upon occurrence of event. Within 90 days of approval by the Emission Measurement Section (EMS) of the stack test report for soda lime glass production, submit an application for a permit modification to establish PM-2.5 limits in tons per year and lb/hr. [N.J.A.C. 7:27-22.19(d)]

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

**Emission Unit:** U100 Electric Melt Glass Furnace X, natural gas-boosted

**Operating Scenario:** OS1 Soda Lime Specialty Tubing Production

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	SO <sub>2</sub> ≤ 2,000 ppmdv. [N.J.A.C. 7:27-7.2(b)1]	None.	None.	None.
2	SO <sub>2</sub> ≤ 19 lb per any 60-minute period. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
3	SO <sub>2</sub> ≤ 38 lb/hr at any instant. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
4	Particulate Emissions ≤ 0.98 lb/hr. [N.J.A.C. 7:27- 6.2(b)]	None.	None.	None.
5	Maximum Gross Heat Input ≤ 4.1 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.
6	Natural gas shall be the only fossil fuel permitted for this unit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Natural Gas Usage ≤ 16.4 MMft <sup>3</sup> per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously. [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. Fuel use for any 12 consecutive months is computed by adding the fuel consumed in a given month to that consumed in the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.
8	VOC (Total) ≤ 0.06 lb/hr. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
9	NO <sub>x</sub> (Total) ≤ 1.13 lb/hr. [N.J.A.C. 7:27-22.16(e)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	CO <= 0.42 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
11	SO2 <= 1.37 lb/hr. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	TSP <= 0.98 lb/hr. [N.J.A.C. 7:27-22.16(e)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	PM-10 (Total): Maximum emission rate shall be determined by stack testing. See OS Summary. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary.  Within 90 days of approval of stack tests required after resumption of this operating scenario by the Emission Measurement Section (EMS) a permit modification shall be submitted to establish allowable PM-10 limits in tons per year and lb/hr. [N.J.A.C. 7:27-22.16(o)]
14	PM-2.5 (Total): Maximum emission rate shall be determined by stack testing of PM-10. See OS Summary. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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**Emission Unit:** U100 Electric Melt Glass Furnace X, natural gas-boosted

**Operating Scenario:** OS2 Specialty Glass Tubing Production

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	SO <sub>2</sub> ≤ 2,000 ppmdv. [N.J.A.C. 7:27-7.2(b)1]	None.	None.	None.
2	SO <sub>2</sub> ≤ 19 lb per any 60-minute period. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
3	SO <sub>2</sub> ≤ 38 lb/hr at any instant. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
4	Particulate Emissions ≤ 0.98 lb/hr. [N.J.A.C. 7:27- 6.2(b)]	None.	None.	None.
5	Maximum Gross Heat Input ≤ 4.1 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.
6	Natural gas shall be the only fossil fuel permitted for this unit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Natural Gas Usage ≤ 16.4 MMft <sup>3</sup> per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously. [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. Fuel use for any 12 consecutive months is computed by adding the fuel consumed in a given month to that consumed in the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.
8	VOC (Total) ≤ 0.06 lb/hr. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
9	NO <sub>x</sub> (Total) ≤ 1.13 lb/hr. [N.J.A.C. 7:27-22.16(e)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	CO <= 0.42 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
11	SO2 <= 6.24 lb/hr. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified elsewhere in this permit. [N.J.A.C. 7:27-22.16(e)]
12	TSP <= 0.98 lb/hr. [N.J.A.C. 7:27-22.16(e)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	PM-10 (Total) <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
14	PM-2.5 (Total) <= 0.25 lb/hr (based on the emissions limit of PM-10). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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Facility Specific Requirements**

**Emission Unit:** U106 6.3 MMBTU/hr Natural Gas-fired Tubing Products Heating Boiler

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<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 NO<sub>x</sub> and CO consistent with the manufacturer's specifications; 5. Measure the concentrations in the effluent stream of NO<sub>x</sub> and CO in ppmvd and O<sub>2</sub> in percent, before and after the adjustment is made; and 6. Convert the measured emission values of NO<sub>x</sub>, CO and O<sub>2</sub> concentrations to lb/MMBTU according to the following formula: <math>\text{Lb/MMBTU} = \text{ppmvd} * \text{MW} * \text{F dry factor} * \text{O}_2 \text{ correction factor} / 387,000,000</math>, where: ppmvd is the concentration in parts per million by volume, dry basis, of NO<sub>x</sub> or CO; MW is the Molecular Weight for NO<sub>x</sub>=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; O<sub>2</sub> correction factor: <math>(20.9\%) / (20.9\% - \text{O}_2 \text{ measured})</math>, where O<sub>2</sub> 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 NO<sub>x</sub> and CO concentrations in the effluent stream, in ppmvd, before and after each actual adjustment was made; 4. The concentration of O<sub>2</sub> (in percent dry basis) at which the CO and NO<sub>x</sub> 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="http://www.nj.gov/dep/aqpp/adjustment.htm">http://www.nj.gov/dep/aqpp/adjustment.htm</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
2	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(e)].	Other: The owner or operator shall record the operating parameter settings that are established after the combustion process is adjusted and retain until the next annual adjustment, to be made readily accessible to the Department upon request.[N.J.A.C. 7:27-19.16(e)].	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. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.
4	NO <sub>x</sub> (Total) <= 2.71 tons/yr based on maximum natural gas fuel usage limit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	CO <= 0.568 tons/yr based on maximum natural gas fuel usage limit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	TSP <= 0.325 tons/yr based on maximum natural gas fuel usage limit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	PM-10 (Total) <= 0.325 tons/yr based on maximum natural gas fuel usage limit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	PM-2.5 (Total) <= 0.325 tons/yr (based on the emissions limit of PM-10). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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Facility Specific Requirements**

**Emission Unit:** U106 6.3 MMBTU/hr Natural Gas-fired Tubing Products Heating Boiler

**Operating Scenario:** OS1 Firing Natural Gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 3.78 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.
2	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.
3	Fuel type limited to natural gas only. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Natural Gas Usage <= 54.1 MMft <sup>3</sup> for every consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously. [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. Fuel use for any 12 consecutive months is computed by adding the fuel consumed in a given month to that consumed in the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.
5	NOx (Total) <= 0.618 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	CO <= 0.13 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	TSP <= 0.074 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	PM-10 (Total) <= 0.074 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	PM-2.5 (Total) <= 0.074 lb/hr (based on the emissions limit of PM-10). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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**Emission Unit:** U107 1.1 MMBtu/hr Space Heater**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. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.
2	NO <sub>x</sub> (Total) <= 0.472 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	CO <= 0.396 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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

Emission Unit: U107 1.1 MMBtu/hr Space Heater

Operating Scenario: OS1 1.1 MMBtu/hr Space Heater

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 5.67 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.
2	Maximum Gross Heat Input <= 1.1 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.
3	Fuel type limited to natural gas only. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Natural Gas Usage <= 9.447 MMft <sup>3</sup> for every consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	NOx (Total) <= 0.108 lb/hr based on maximum natural gas fuel usage limit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	CO <= 0.091 lb/hr based on maximum natural gas fuel usage limit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U143 Electric Melt Glass Furnace L, natural gas-boosted

**Subject Item:** CD143 Furnace L N Baghouse

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq$ 1 and Pressure Drop Across the Baghouse $\leq$ 15 inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [N.J.A.C. 7:27-22.16(o)]	None.

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**New Jersey Department of Environmental Protection  
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**Emission Unit:** U143 Electric Melt Glass Furnace L, natural gas-boosted

**Subject Item:** CD144 Furnace L S Baghouse

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq 1$ and Pressure Drop Across the Baghouse $\leq 15$ inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [N.J.A.C. 7:27-22.16(o)]	None.



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**Emission Unit:** U143 Electric Melt Glass Furnace L, natural gas-boosted

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p><b>STACK TESTING SUMMARY</b> The permittee shall conduct a stack test at least 18 months prior to the expiration of the renewed operating permit using an approved protocol to demonstrate compliance with emission limits for VOC, NO<sub>x</sub>, CO, SO<sub>2</sub>, TSP and PM-10 as specified in the compliance plan for U143:OS1 and for the NO<sub>x</sub> RACT limit in U143:OS Summary. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	Other: Monitoring as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 at least 30 months prior to the expiration of the approved operating permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and . [N.J.A.C. 7:27-22.18(h)]</p>

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**New Jersey Department of Environmental Protection  
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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<p><b>STACK TESTING SUMMARY</b> If soda lime glass is produced, the permittee shall conduct a stack test for soda lime glass production using a protocol approved by the Department to demonstrate compliance with the emission limits for VOC, NO<sub>x</sub>, CO, SO<sub>2</sub> as specified in the compliance plan for U143:OS2 and the NO<sub>x</sub> RACT limit in U143 OS Summary. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: The stack test must be conducted within 60 days of approval of a timely submitted protocol.  [N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario(s).  [N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 within 6 months of starting soda lime production. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date. A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]</p>
3	<p>This furnace is permitted to produce soda lime or borosilicate glass. [N.J.A.C. 7:27-22.16(a)]</p>	None.	None.	None.
4	<p>The daily glass pull rate of borosilicate glass for furnace L shall not exceed 19.4 tons/day with a minimum of 20% by weight glass cullet, based on stack tests.</p> <p>The daily glass pull rate of soda lime glass for furnace L shall not exceed 18.5 tons/day with a minimum of 15% by weight glass cullet, based on stack tests.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	None.	<p>Other: The facility shall retain copies of notifications submitted.[N.J.A.C. 7:27-22.16(o)].</p>	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	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.
6	NOx (Total) <= 4 lb/ton of glass removed. The owner or operator shall cause the furnace to emit no more than 4.0 pounds of NOx per ton of glass removed from the furnace.  [N.J.A.C. 7:27-19.10(a)] &. [N.J.A.C. 7:27-19.10(d)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See stack testing requirements elsewhere in this OS Summary. [N.J.A.C. 7:27-19.15(a)] &. [N.J.A.C. 7:27-19.17]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. See stack testing requirements elsewhere in this OS Summary. [N.J.A.C. 7:27-19.15(a)2]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirements elsewhere in this OS Summary. [N.J.A.C. 7:27-19.15(a)2]
7	VOC (Total) <= 0.476 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	NOx (Total) <= 10.5 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	CO <= 0.612 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	SO2 <= 5.69 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
11	TSP <= 7.45 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
12	PM-10 (Total) <= 0.67 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	PM-2.5 (Total) <= 0.67 tons/yr based on emissions limit of PM-10. [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:** U143 Electric Melt Glass Furnace L, natural gas-boosted

**Operating Scenario:** OS1 Production of Borosilicate Specialty Tubing, controlled by Dust collectors CD143 & CD 144

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collectors CD143 and CD144. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	SO <sub>2</sub> ≤ 2,000 ppm <sub>dv</sub> . [N.J.A.C. 7:27-7.2(b)1]	None.	None.	None.
3	SO <sub>2</sub> ≤ 63.7 lb per any 60-minute period. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
4	SO <sub>2</sub> ≤ 127.4 lb/hr at any instant. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
5	Particulate Emissions ≤ 1.7 lb/hr. [N.J.A.C. 7:27-6.2(b)]	None.	None.	None.
6	Maximum Gross Heat Input ≤ 4.1 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.
7	Natural gas shall be the only fossil fuel permitted for this unit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	Natural Gas Usage ≤ 35 MMft <sup>3</sup> per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	VOC (Total) ≤ 0.1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	NO <sub>x</sub> (Total) ≤ 2.26 lb/hr. [N.J.A.C. 7:27-22.16(e)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
11	CO ≤ 0.08 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	SO <sub>2</sub> ≤ 1.3 lb/hr. [N.J.A.C. 7:27-22.16(e)]	SO <sub>2</sub> : Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	SO <sub>2</sub> : Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	TSP ≤ 1.7 lb/hr. [N.J.A.C. 7:27-22.16(e)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified elsewhere in this permit. [N.J.A.C. 7:27-22.16(e)]
14	PM-10 (Total) ≤ 0.15 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
15	PM-2.5 (Total) ≤ 0.15 lb/hr (based on the emissions limit of PM-10). [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:** U143 Electric Melt Glass Furnace L, natural gas-boosted

**Operating Scenario:** OS2 Production of Soda Lime Specialty Tubing

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	SO <sub>2</sub> ≤ 2,000 ppm <sub>dv</sub> . [N.J.A.C. 7:27-7.2(b)1]	None.	None.	None.
2	SO <sub>2</sub> ≤ 63.7 lb per any 60-minute period. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
3	SO <sub>2</sub> ≤ 127.4 lb/hr at any instant. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
4	Particulate Emissions ≤ 5.45 lb/hr without cullet variance. [N.J.A.C. 7:27- 6.2(b)]	None.	None.	None.
5	Maximum Gross Heat Input ≤ 4.1 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.
6	Natural gas shall be the only fossil fuel permitted for this unit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Natural Gas Usage ≤ 35 MMft <sup>3</sup> per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	VOC (Total) ≤ 0.1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
9	NO <sub>x</sub> (Total) ≤ 2.26 lb/hr. [N.J.A.C. 7:27-22.16(e)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
10	CO ≤ 0.08 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	SO <sub>2</sub> ≤ 1.3 lb/hr. [N.J.A.C. 7:27-22.16(e)]	SO <sub>2</sub> : Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	SO <sub>2</sub> : Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	TSP ≤ 1.7 lb/hr. [N.J.A.C. 7:27-22.16(e)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	PM-10 (Total) ≤ 0.06 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
14	PM-2.5 (Total) ≤ 0.06 lb/hr (based on the emissions limit of PM-10). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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Facility Specific Requirements**

**Emission Unit:** U143 Electric Melt Glass Furnace L, natural gas-boosted

**Operating Scenario:** OS3 Natural-Gas Fired Burners on Glass Conditioner, Forming Bowl, and Overflow Weir on L Furnace

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 1.53 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.
2	Fuel type limited to natural gas only. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Natural Gas Usage <= 13.1 MMft <sup>3</sup> per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	NO <sub>x</sub> (Total) <= 0.14 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	CO <= 0.06 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:** U144 Electric Melt Glass Furnace P, natural gas-boosted

**Subject Item:** CD146 Furnace P West Baghouse

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Dust collectors shall be cleaned by pulse jet. Compressed air supply shall be maintained at or above manufacturer's specification (75 psig.) The owner or operator shall maintain the control device in accordance with the manufacturer's recommended procedures. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination once every 2 weeks, based on an instantaneous determination. The owner or operator shall perform a visual inspection of the compressed air jet operation every two weeks and repair or replace any defective or malfunctioning components. Pulse interval shall be in accordance with manufacturer's specifications (every 15 seconds.). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once every 2 weeks. Record pulse jet system air pressure and observation of pulse interval. [N.J.A.C. 7:27-22.16(o)]	None.
3	Pressure Drop Across the Baghouse $\geq 1$ and Pressure Drop Across the Baghouse $\leq 15$ inches w.c.. [N.J.A.C. 7:27-22.16(a)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. If pressure drop on the cartridge is below the minimum value given, the filter shall be checked as soon as practicable and broken filters replaced promptly. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [N.J.A.C. 7:27-22.16(o)]	None.
4	Manufacturer's Design Control Efficiency $\geq 99.5$ % by weight. [N.J.A.C. 7:27-22.16(a)]	Design Control Efficiency: Monitored by documentation of construction once initially, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	Other: Retain construction documentation.[N.J.A.C. 7:27-22.16(o)].	None.

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**Emission Unit:** U144 Electric Melt Glass Furnace P, natural gas-boosted

**Subject Item:** CD147 Furnace P East Baghouse

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Dust collectors shall be cleaned by pulse jet. Compressed air supply shall be maintained at or above manufacturer's specification (75 psig.) The owner or operator shall maintain the control device in accordance with the manufacturer's recommended procedures. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination once every 2 weeks, based on an instantaneous determination. The owner or operator shall perform a visual inspection of the compressed air jet operation every two weeks and repair or replace any defective or malfunctioning components. Pulse interval shall be in accordance with manufacturer's specifications (every 15 seconds.). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once every 2 weeks. Record pulse jet system air pressure and observation of pulse interval. [N.J.A.C. 7:27-22.16(o)]	None.
3	Pressure Drop Across the Baghouse $\geq 1$ and Pressure Drop Across the Baghouse $\leq 15$ inches w.c.. [N.J.A.C. 7:27-22.16(a)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. If pressure drop on the cartridge is below the minimum value given, the filter shall be checked as soon as practicable and broken filters replaced promptly. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [N.J.A.C. 7:27-22.16(o)]	None.
4	Manufacturer's Design Control Efficiency $\geq 99.5$ % by weight. [N.J.A.C. 7:27-22.16(a)]	Design Control Efficiency: Monitored by documentation of construction once initially, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	Other: Retain construction documentation.[N.J.A.C. 7:27-22.16(o)].	None.

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**Emission Unit:** U144 Electric Melt Glass Furnace P, natural gas-boosted

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>STACK TESTING SUMMARY The permittee shall conduct a stack test at least 18 months prior to the expiration of the renewed operating permit using an approved protocol to demonstrate compliance with emission limits for VOC, NO<sub>x</sub>, CO, SO<sub>2</sub>, TSP and PM-10 as specified in the compliance plan for U144:OS1 and the NO<sub>x</sub> RACT limit in U144 OS Summary. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	Other: Monitoring as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 at least 30 months prior to the expiration of the approved operating permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and . [N.J.A.C. 7:27-22.18(h)]</p>

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<p><b>STACK TESTING SUMMARY</b></p> <p>If soda lime glass is produced, the permittee shall conduct a stack test for soda lime glass production using a protocol approved by the Department to demonstrate compliance with the emission limits for VOC, NO<sub>x</sub>, CO, SO<sub>2</sub> as specified in the compliance plan for U144:OS2 and the NO<sub>x</sub> RACT limit in U144 OS Summary and to establish emissions limits for TSP and PM-10 as specified in the compliance plan for U144:OS2. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: The stack test must be conducted within 60 days of approval of a timely submitted protocol.</p> <p>[N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario(s).</p> <p>[N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 within 6 months of starting soda lime production. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]</p>
3	This furnace is permitted to produce soda lime or borosilicate glass. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	The daily glass pull rate for furnace P shall not exceed 19.2 tons/day with a minimum of 20% by weight glass cullet, based on stack tests. [N.J.A.C. 7:27-22.16(a)]	Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system daily. [N.J.A.C. 7:27-22.16(o)]	None.
5	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	NOx (Total) <= 4 lb/ton of glass removed. [N.J.A.C. 7:27-19.10(d)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs See stack testing requirements elsewhere in this OS Summary. [N.J.A.C. 7:27-19.15(a)] & [N.J.A.C. 7:27-19.17]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. See stack testing requirements elsewhere in this OS Summary. [N.J.A.C. 7:27-19.15(a)2]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirements elsewhere in this OS Summary. [N.J.A.C. 7:27-19.15(a)2]
7	VOC (Total) <= 0.96 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	NOx (Total) <= 11.1 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	CO <= 4.64 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	SO2 <= 8.76 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
11	TSP <= 0.876 tons/yr based on 8,760 hours per year operation while producing Borosilicate Glass or 1030 hours per year operation while producing Soda Lime glass. The maximum annual emission rate while producing soda lime glass shall be determined from stack testing as required elsewhere in this OS Summary. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	PM-10 (Total) <= 1.11 tons/yr based on 8,760 hours per year operation while producing Borosilicate Glass. The maximum annual emission rate while producing soda lime glass shall be determined from stack testing as required elsewhere in this OS Summary. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	PM-2.5 (Total) <= 1.11 tons/yr based on emissions limit of PM-10 while producing Borosilicate Glass. The maximum annual emission rate while producing soda lime glass shall be determined from stack testing of PM-10 as required elsewhere in this OS Summary. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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Facility Specific Requirements**

**Emission Unit:** U144 Electric Melt Glass Furnace P, natural gas-boosted

**Operating Scenario:** OS1 Production of Borosilicate Specialty Tubing, controlled by Dust collectors CD146 & CD 147

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collectors CD146 and CD147. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	SO <sub>2</sub> ≤ 2,000 ppm <sub>dv</sub> . [N.J.A.C. 7:27-7.2(b)1]	None.	None.	None.
3	SO <sub>2</sub> ≤ 63.8 lb per any 60-minute period. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
4	SO <sub>2</sub> ≤ 127.6 lb/hr at any instant. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
5	Particulate Emissions ≤ 1.7 lb/hr. [N.J.A.C. 7:27-6.2(b)]	None.	None.	None.
6	Maximum Gross Heat Input ≤ 4.1 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.
7	Natural gas shall be the only fossil fuel permitted for this unit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	Natural Gas Usage ≤ 35 MMft <sup>3</sup> per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	VOC (Total) ≤ 0.21 lb/hr. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	NO <sub>x</sub> (Total) <= 2.4 lb/hr. [N.J.A.C. 7:27-22.16(e)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
11	CO <= 1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	SO <sub>2</sub> <= 2 lb/hr. [N.J.A.C. 7:27-22.16(e)]	SO <sub>2</sub> : Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	SO <sub>2</sub> : Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	TSP <= 0.2 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
14	PM-10 (Total) <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
15	PM-2.5 (Total) <= 0.25 lb/hr (based on the emissions limit of PM-10). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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Facility Specific Requirements**

**Emission Unit:** U144 Electric Melt Glass Furnace P, natural gas-boosted

**Operating Scenario:** OS2 Production of Soda Lime Specialty Tubing

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	SO <sub>2</sub> ≤ 2,000 ppmdv. [N.J.A.C. 7:27-7.2(b)1]	None.	None.	None.
2	SO <sub>2</sub> ≤ 63.8 lb per any 60-minute period. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
3	SO <sub>2</sub> ≤ 127.6 lb/hr at any instant. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
4	Particulate Emissions ≤ 1.7 lb/hr. [N.J.A.C. 7:27- 6.2(b)]	None.	None.	None.
5	Maximum Gross Heat Input ≤ 4.1 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.
6	Natural gas shall be the only fossil fuel permitted for this unit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Natural Gas Usage ≤ 35 MMft <sup>3</sup> per any every consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	VOC (Total) ≤ 0.21 lb/hr. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
9	NO <sub>x</sub> (Total) ≤ 2.4 lb/hr. [N.J.A.C. 7:27-22.16(e)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
10	CO ≤ 1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	SO <sub>2</sub> ≤ 2 lb/hr. [N.J.A.C. 7:27-22.16(e)]	SO <sub>2</sub> : Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	SO <sub>2</sub> : Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	TSP ≤ 1.7 lb/hr Maximum emission rate shall be determined by stack testing. See OS Summary. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary.  Within 90 days of approval of the stack tests required after resumption of this operating scenario by the Emission Measurement Section (EMS), a permit modification shall be submitted to establish allowable TSP limits in tons per year and lb/hr. [N.J.A.C. 7:27-22.16(o)]
13	PM-10 (Total): Maximum emission rate shall be determined by stack testing. See OS Summary. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary.  Within 90 days of approval of the stack tests required after resumption of this operating scenario by the Emission Measurement Section (EMS), a permit modification shall be submitted to establish allowable PM-10 limits in tons per year and lb/hr. [N.J.A.C. 7:27-22.16(o)]
14	PM-2.5 (Total): Maximum emission rate shall be determined by stack testing of PM-10. See OS Summary. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary.  Within 90 days of approval of stack tests required after resumption of this operating scenario by the Emission Measurement Section (EMS) a permit modification shall be submitted to establish allowable PM-2.5 limits in tons per year and lb/hr based on the stack test results of PM-10.. [N.J.A.C. 7:27-22.16(o)]

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Facility Specific Requirements**

**Emission Unit:** U144 Electric Melt Glass Furnace P, natural gas-boosted

**Operating Scenario:** OS3 Natural-Gas Fired Burners on Glass Conditioner, Forming Bowl, and Overflow Weir on P Furnace

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 1.53 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.
2	Fuel type limited to natural gas only. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Natural Gas Usage <= 13.1 MMft <sup>3</sup> per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	NO <sub>x</sub> (Total) <= 0.14 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	CO <= 0.06 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:** U147 Furnace S Batch House Operations, controlled by Dust Collectors CD13, CD14, and CD28

**Subject Item:** CD13 BH Mixing & S Conveyance

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency and at least annually. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq 0.2$ and Pressure Drop Across the Baghouse $\leq 6$ inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation during operation. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and that they are functioning. [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:** U147 Furnace S Batch House Operations, controlled by Dust Collectors CD13, CD14, and CD28

**Subject Item:** CD14 BH N Belt, scales/hoppers & Can Fill

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency and at least annually. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq 0.75$ and Pressure Drop Across the Baghouse $\leq 6$ inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. The operator shall conduct weekly inspections to verify that sufficient air pressure is available to fire the pulse jets, that the pulse jets are functioning and to observe the pressure differential. If pressure drop on the baghouse is below the minimum value given, the baghouse shall be checked as soon as practicable and broken filters replaced promptly. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and that they are functioning. [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:** U147 Furnace S Batch House Operations, controlled by Dust Collectors CD13, CD14, and CD28

**Subject Item:** CD26 R Hopper Cartridge Fliter

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the bags as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency and at least annually. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq$ 0.5 and Pressure Drop Across the Baghouse $\leq$ 6 inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. The operator shall conduct weekly inspections to verify that sufficient air pressure is available to fire the pulse jets, that the pulse jets are functioning and to observe the pressure differential. If pressure drop on the baghouse is below the minimum value given, the baghouse shall be checked as soon as practicable and broken filters replaced promptly. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements**

**Emission Unit:** U147 Furnace S Batch House Operations, controlled by Dust Collectors CD13, CD14, and CD28

**Subject Item:** CD28 S Hopper Dust Collector

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency and at least annually. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq 0.2$ and Pressure Drop Across the Baghouse $\leq 6$ inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. The operator shall conduct weekly inspections to verify that sufficient air pressure is available to fire the pulse jets, that the pulse jets are functioning and to observe the pressure differential. If pressure drop on the baghouse is below the minimum value given, the baghouse shall be checked as soon as practicable and broken filters replaced promptly. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements**

**Emission Unit:** U147 Furnace S Batch House Operations, controlled by Dust Collectors CD13, CD14, and CD28

**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	Total Material Transferred <= 86,110 tons/yr for the combined operation under U147-OS8, U158-OS4, 7, 8, 9, 10 and 11. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and for every consecutive 12-month period. [N.J.A.C. 7:27-22.16(o)]	None.
3	Total Material Transferred <= 86,110 tons/yr for the combined operation of conveyors under U147-OS4, OS5, OS6 and OS9. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and for every consecutive 12-month period. [N.J.A.C. 7:27-22.16(o)]	None.
4	Total Material Transferred <= 86,110 tons/yr , for the combined mixing operations under U147-OS2,3,7 and U158-OS3. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and for every consecutive 12-month period. [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:** U147 Furnace S Batch House Operations, controlled by Dust Collectors CD13, CD14, and CD28

**Operating Scenario:** OS2 Munsen Mixer (E117), OS3 Munsen Mixer (E118), OS4 S Conveyer (E149), OS5 S Elevator (E150), OS7 Munsen Mixer (E152), OS9 Screw Conveyor

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD13. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions <= 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U147 Furnace S Batch House Operations, controlled by Dust Collectors CD13, CD14, and CD28

**Operating Scenario:** OS6 Conveyor (E151)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD14. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP $<$ 0.05 lb/hr (below permit reporting threshold). [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:** U147 Furnace S Batch House Operations, controlled by Dust Collectors CD13, CD14, and CD28

**Operating Scenario:** OS8 S Furnace Hopper

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD28. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U147 Furnace S Batch House Operations, controlled by Dust Collectors CD13, CD14, and CD28

**Operating Scenario:** OS10 S to Q/R Conveyor

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD26. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP $<$ 0.05 lb/hr (below permit reporting threshold). [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:** U148 Batch House Bins store raw materials (South Operations), controlled by Dust Collectors CD15 and CD23

**Subject Item:** CD15 Bins 1A, 2 & S Elevator

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the bags as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency and at least annually. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq$ 0.4 and Pressure Drop Across the Baghouse $\leq$ 6 inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. The operator shall conduct weekly inspections to verify that sufficient air pressure is available to fire the pulse jets, that the pulse jets are functioning and to observe the pressure differential. If pressure drop on the baghouse is below the minimum value given, the baghouse shall be checked as soon as practicable and broken filters replaced promptly. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and that they are functioning. [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:** U148 Batch House Bins store raw materials (South Operations), controlled by Dust Collectors CD15 and CD23

**Subject Item:** CD23 South Ops Bin 1B Dust Collector

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency and at least annually. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq 0.2$ and Pressure Drop Across the Baghouse $\leq 6$ inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. The operator shall conduct weekly inspections to verify that sufficient air pressure is available to fire the pulse jets, that the pulse jets are functioning and to observe the pressure differential. If pressure drop on the baghouse is below the minimum value given, the baghouse shall be checked as soon as practicable and broken filters replaced promptly. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [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:** U148 Batch House Bins store raw materials (South Operations), controlled by Dust Collectors CD15 and CD23

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
2	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Total Material Transferred <= 86,110 tons/yr for the combined operation of material conveyance to storage bins/silos under U148, U149, U152, U153 and U157. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and for every consecutive 12-month period. [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:** U148 Batch House Bins store raw materials (South Operations), controlled by Dust Collectors CD15 and CD23

**Operating Scenario:** OS1 Filling of Bin 1A, OS3 Filling of Bin 2

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD15. See CD23 for operating and maintenance requirements. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions <= 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U148 Batch House Bins store raw materials (South Operations), controlled by Dust Collectors CD15 and CD23

**Operating Scenario:** OS2 Filling of Bin 1B (E120), controlled by Dust Collector CD23

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD23. See CD23 for operating and maintenance requirements. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions <= 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U149 Batch House Bins store raw materials (North Operations), controlled by Dust Collectors CD16

**Subject Item:** CD16 Bins 3A, 3B, 4-9 & N Elevator

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the bags as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency and at least annually. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq 0.4$ and Pressure Drop Across the Baghouse $\leq 6$ inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation during operation. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and that they are functioning. [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:** U149 Batch House Bins store raw materials (North Operations), controlled by Dust Collectors CD16

**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	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
3	Emissions from these operating scenarios are controlled by dust collector CD16. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Total Material Transferred <= 86,110 tons/yr for the combined operation of material conveyance to storage bins/silos under U148, U149, U152, U153 and U157. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and for every consecutive 12-month period. [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:** U149 Batch House Bins store raw materials (North Operations), controlled by Dust Collectors CD16

**Operating Scenario:** OS1 Filling of Bin 4, OS2 Filling of Bin 5, OS3 Filling of Bin 6, OS4 Filling of Bin 7, OS5 Filling of Bin 8, OS6 Filling of Bin 9, OS7 Filling of Batch House Bin, OS8 Filling of Bin 3A, OS9 Filling of Bin 3B

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
2	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U150 Electric Melt Glass Furnace Q, natural gas-boosted & controlled by CD148 or CD150

**Subject Item:** CD148 Furnace R Baghouse

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq 2$ and Pressure Drop Across the Baghouse $\leq 8$ inches w.c.. [N.J.A.C. 7:27-22.16(a)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. If pressure drop is below the minimum value given, the filter shall be checked as soon as practicable and broken filters replaced promptly. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [N.J.A.C. 7:27-22.16(o)]	None.
3	Manufacturer's Design Control Efficiency $\geq 99.5$ % by weight. [N.J.A.C. 7:27-22.16(a)]	Design Control Efficiency: Monitored by documentation of construction once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Retain construction documentation.[N.J.A.C. 7:27-22.16(o)].	None.
4	Operating Control Efficiency $\geq 99$ % by weight of PM-10. Minimum control efficiency based on case-by-case State of the Art (SOTA) analysis. Stack test shall demonstrate compliance with either particulate removal efficiency of PM-10 or manufacturer's guaranteed outlet grain loading limit.  [N.J.A.C. 7:27-22.16(a)] &. [N.J.A.C. 7:27-22.35]	Operating Control Efficiency: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	Operating Control Efficiency: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	PM-10 (Total) $\leq$ 0.01 gr/dscf. Maximum emission rate based on case-by-case State of the Art (SOTA) analysis. Stack test shall demonstrate compliance with either particulate removal efficiency of PM-10 or manufacturer's guaranteed outlet grain loading limit.  [N.J.A.C. 7:27-22.16(a)] & [N.J.A.C. 7:27-22.35]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]
6	PM-2.5 (Total) $\leq$ 0.01 gr/dscf. Maximum emission rate based on case-by-case State of the Art (SOTA) analysis. Stack test shall demonstrate compliance with either particulate removal efficiency of PM-2.5 or manufacturer's guaranteed outlet grain loading limit.  [N.J.A.C. 7:27-22.16(a)] & [N.J.A.C. 7:27-22.35]	PM-2.5 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]

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

**Emission Unit:** U150 Electric Melt Glass Furnace Q, natural gas-boosted & controlled by CD148 or CD150

**Subject Item:** CD150 Furnace R Backup Baghouse

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq 2$ and Pressure Drop Across the Baghouse $\leq 8$ inches w.c.. [N.J.A.C. 7:27-22.16(a)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. If pressure drop is below the minimum value given, the filter shall be checked as soon as practicable and broken filters replaced promptly. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [N.J.A.C. 7:27-22.16(o)]	None.
3	Manufacturer's Design Control Efficiency $\geq 99.5$ % by weight. [N.J.A.C. 7:27-22.16(a)]	Design Control Efficiency: Monitored by documentation of construction once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Retain construction documentation.[N.J.A.C. 7:27-22.16(o)].	None.
4	Operating Control Efficiency $\geq 99$ % by weight of PM-10. Minimum control efficiency based on case-by-case State of the Art (SOTA) analysis. Stack test shall demonstrate compliance with either particulate removal efficiency of PM-10 or manufacturer's guaranteed outlet grain loading limit.  [N.J.A.C. 7:27-22.16(a)] & [N.J.A.C. 7:27-22.35]	Operating Control Efficiency: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	Operating Control Efficiency: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	PM-10 (Total) $\leq$ 0.01 gr/dscf. Maximum emission rate based on case-by-case State of the Art (SOTA) analysis. Stack test shall demonstrate compliance with either particulate removal efficiency of PM-10 or manufacturer's guaranteed outlet grain loading limit.  [N.J.A.C. 7:27-22.16(a)] & [N.J.A.C. 7:27-22.35]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]
6	PM-2.5 (Total) $\leq$ 0.01 gr/dscf. Maximum emission rate based on case-by-case State of the Art (SOTA) analysis. Stack test shall demonstrate compliance with either particulate removal efficiency of PM-2.5 or manufacturer's guaranteed outlet grain loading limit.  [N.J.A.C. 7:27-22.16(a)] & [N.J.A.C. 7:27-22.35]	PM-2.5 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]

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

**Emission Unit:** U150 Electric Melt Glass Furnace Q, natural gas-boosted & controlled by CD148 or CD150

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>STACK TESTING SUMMARY The permittee shall conduct a stack test at least 18 months prior to the expiration of the renewed operating permit using an approved protocol to demonstrate compliance with emission limits for VOC, NO<sub>x</sub>, CO, SO<sub>2</sub>, TSP and PM-10 as specified in the compliance plan for U150:OS1 and the NO<sub>x</sub> RACT limit in U150:OS Summary. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	Other: Monitoring as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 at least 30 months prior to the expiration of the approved operating permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and . [N.J.A.C. 7:27-22.18(h)]</p>



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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<p><b>STACK TESTING SUMMARY</b></p> <p>If soda lime glass is produced, the permittee shall conduct a stack test for soda lime glass production using a protocol approved by the Department to demonstrate compliance with the emission limits for VOC, NO<sub>x</sub>, CO, SO<sub>2</sub> as specified in the compliance plan for U150:OS2 and the NO<sub>x</sub> RACT limit in U150 OS Summary and to establish emissions limits for TSP and PM-10 as specified in the compliance plan for U150:OS2. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: The stack test must be conducted within 60 days of approval of a timely submitted protocol.</p> <p>[N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario(s).</p> <p>[N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 within 6 months of starting soda lime production. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]</p>
3	This furnace is permitted to produce soda lime or borosilicate glass. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	The daily glass pull rate for furnace Q shall not exceed 20.5 tons/day with a minimum of 20% by weight glass cullet based on stack tests. [N.J.A.C. 7:27-22.16(a)]	Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system daily. [N.J.A.C. 7:27-22.16(o)]	None.
5	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	NOx (Total) <= 4 lb/ton of glass removed. The owner or operator shall cause the furnace to emit no more than 4.0 pounds of NOx per ton of glass removed from the furnace.  The furnace shall have complied with this requirement above since December of 2013 (after rebricking of the furnace was completed.) [N.J.A.C. 7:27-19-10(a)] & [N.J.A.C. 7:27-19.10(d)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See stack testing requirements elsewhere in this OS Summary. [N.J.A.C. 7:27-19.15(a)] & [N.J.A.C. 7:27-19.17]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. See stack testing requirements elsewhere in this OS Summary. [N.J.A.C. 7:27-19.15(a)2]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirements elsewhere in this OS Summary. [N.J.A.C. 7:27-19.15(a)2]
7	VOC (Total) <= 1.4 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	NOx (Total) <= 10.5 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	CO <= 4.65 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	SO2 <= 8.76 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
11	TSP <= 0.926 tons/yr based on 8,760 hours per year operation while producing Borosilicate Glass or 1089 hours per year operation while producing Soda Lime Glass. The maximum annual emission rate while producing soda lime glass shall be determined from stack testing as required elsewhere in this OS Summary. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	PM-10 (Total) <= 3.04 tons/yr based on 8,760 hours per year operation while producing Borosilicate Glass. The maximum annual emission rate while producing soda lime glass shall be determined from stack testing as required elsewhere in this OS Summary. [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
13	PM-2.5 (Total) <= 3.04 tons/yr based on 8,760 hours per year operation while producing Borosilicate Glass or 1089 hours per year operation while producing Soda Lime Glass. The maximum annual emission rate while producing soda lime glass shall be determined from stack testing of PM-10 as required elsewhere in this OS Summary. [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:** U150 Electric Melt Glass Furnace Q, natural gas-boosted & controlled by CD148 or CD150

**Operating Scenario:** OS1 Production of Borosilicate Specialty Tubing, controlled by CD148 or CD150

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collectors CD148 or CD150. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	SO <sub>2</sub> ≤ 2,000 ppm <sub>dv</sub> . [N.J.A.C. 7:27-7.2(b)1]	None.	None.	None.
3	SO <sub>2</sub> ≤ 63.7 lb per any 60-minute period. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
4	SO <sub>2</sub> ≤ 127.4 lb/hr at any instant. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
5	Particulate Emissions ≤ 5.53 lb/hr while producing Borosilicate Glass. [N.J.A.C. 7:27-6.2(b)]	None.	None.	None.
6	Maximum Gross Heat Input ≤ 2.5 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.
7	Natural gas shall be the only fossil fuel permitted for this unit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	Natural Gas Usage ≤ 24.2 MMft <sup>3</sup> per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	VOC (Total) ≤ 0.31 lb/hr. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	NO <sub>x</sub> (Total) <= 2.26 lb/hr. [N.J.A.C. 7:27-22.16(e)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
11	CO <= 1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	SO <sub>2</sub> <= 2 lb/hr. [N.J.A.C. 7:27-22.16(e)]	SO <sub>2</sub> : Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	SO <sub>2</sub> : Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	TSP <= 0.2 lb/hr. [N.J.A.C. 7:27-22.16(e)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
14	PM-10 (Total) <= 0.69 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
15	PM-2.5 (Total) <= 0.69 lb/hr based on the emissions limit of PM-10. [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:** U150 Electric Melt Glass Furnace Q, natural gas-boosted & controlled by CD148 or CD150

**Operating Scenario:** OS2 Production of Soda Lime Specialty Tubing, controlled by CD148 or CD150

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collectors CD148 or CD150. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	SO <sub>2</sub> ≤ 2,000 ppm <sub>dv</sub> . [N.J.A.C. 7:27-7.2(b)1]	None.	None.	None.
3	SO <sub>2</sub> ≤ 63.7 lb per any 60-minute period. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
4	SO <sub>2</sub> ≤ 127.4 lb/hr at any instant. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
5	Particulate Emissions ≤ 5.58 lb/hr while producing Soda Lime Glass. [N.J.A.C. 7:27-6.2(b)]	None.	None.	None.
6	Maximum Gross Heat Input ≤ 2.5 MMBTU/hr (LHV). [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.
7	Natural gas shall be the only fossil fuel permitted for this unit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	Natural Gas Usage ≤ 24.2 MMft <sup>3</sup> per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	VOC (Total) ≤ 0.31 lb/hr. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	NO <sub>x</sub> (Total) ≤ 2.26 lb/hr. [N.J.A.C. 7:27-22.16(e)]	NO <sub>x</sub> (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
11	CO ≤ 1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	SO <sub>2</sub> ≤ 2 lb/hr. [N.J.A.C. 7:27-22.16(e)]	SO <sub>2</sub> : Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	SO <sub>2</sub> : Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	TSP ≤ 1.7 lb/hr Maximum emission rate shall be determined by stack testing. See OS Summary. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary.  Within 90 days of approval of stack tests required after resumption of this operating scenario by the Emission Measurement Section (EMS) a permit modification shall be submitted to establish allowable TSP limits in tons per year and lb/hr. [N.J.A.C. 7:27-22.16(o)]
14	PM-10 (Total): Maximum emission rate shall be determined by stack testing. See OS Summary. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary.  Within 90 days of approval of stack tests required after resumption of this operating scenario by the Emission Measurement Section (EMS) a permit modification shall be submitted to establish allowable PM-10 limits in tons per year and lb/hr. [N.J.A.C. 7:27-22.16(o)]

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	PM-2.5 (Total): Maximum emission rate shall be determined by stack testing of PM-10. See OS Summary. [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:** U150 Electric Melt Glass Furnace Q, natural gas-boosted & controlled by CD148 or CD150

**Operating Scenario:** OS3 Natural-Gas Fired Burners on Glass Conditioner, Forming Bowl, and Overflow Weir on Q Furnace

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input $\leq$ 1.58 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.
2	Fuel type limited to natural gas only. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Natural Gas Usage $\leq$ 13.6 MMft <sup>3</sup> per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	NO <sub>x</sub> (Total) $\leq$ 0.146 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	CO $\leq$ 0.062 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:** U151 Electric Melt Glass Furnace R, natural gas-boosted & controlled by CD148, CD150, or CD153

**Subject Item:** CD148 Furnace R Baghouse

The requirements for this item are identical to those for: U150 CD148

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

**Emission Unit:** U151 Electric Melt Glass Furnace R, natural gas-boosted & controlled by CD148, CD150, or CD153

**Subject Item:** CD150 Furnace R Backup Baghouse

The requirements for this item are identical to those for: U150 CD150

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

**Emission Unit:** U151 Electric Melt Glass Furnace R, natural gas-boosted & controlled by CD148, CD150, or CD153

**Subject Item:** CD153 Furnace R Baghouse

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq 2$ and Pressure Drop Across the Baghouse $\leq 8$ inches w.c.. [N.J.A.C. 7:27-22.16(a)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. If pressure drop is below the minimum value given, the filter shall be checked as soon as practicable and broken filters replaced promptly. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [N.J.A.C. 7:27-22.16(o)]	None.
3	Manufacturer's Design Control Efficiency $\geq 99\%$ by weight. [N.J.A.C. 7:27-22.16(a)]	Design Control Efficiency: Monitored by documentation of construction once initially. [N.J.A.C. 7:27-22.16(o)]	Other: Retain construction documentation. [N.J.A.C. 7:27-22.16(o)].	None.
4	Operating Control Efficiency $\geq 99\%$ by weight of PM-10. Minimum control efficiency based on case-by-case State of the Art (SOTA) analysis. Stack test shall demonstrate compliance with either particulate removal efficiency of PM-10 or manufacturer's guaranteed outlet grain loading limit.  [N.J.A.C. 7:27-22.16(a)] & [N.J.A.C. 7:27-22.35]	Operating Control Efficiency: Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	Operating Control Efficiency: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	PM-10 (Total) $\leq$ 0.01 gr/dscf. Maximum emission rate based on case-by-case State of the Art (SOTA) analysis. Stack test shall demonstrate compliance with either particulate removal efficiency of PM-10 or manufacturer's guaranteed outlet grain loading limit.  [N.J.A.C. 7:27-22.16(a)] & [N.J.A.C. 7:27-22.35]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]
6	PM-2.5 (Total) $\leq$ 0.01 gr/dscf. Maximum emission rate based on case-by-case State of the Art (SOTA) analysis. Stack test shall demonstrate compliance with either particulate removal efficiency of PM-2.5 or manufacturer's guaranteed outlet grain loading limit.  [N.J.A.C. 7:27-22.16(a)] & [N.J.A.C. 7:27-22.35]	PM-2.5 (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in U151: OS Summary. [N.J.A.C. 7:27-22.16(o)]

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

**Emission Unit:** U151 Electric Melt Glass Furnace R, natural gas-boosted & controlled by CD148, CD150, or CD153

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>Summary of Applicable Federal Requirements:</p> <p>40 CFR 60 Subpart A 40 CFR 60 Subpart CC</p> <p>[40 CFR Federal Rules Summary]</p>	None.	None.	None.
2	<p><b>STACK TESTING SUMMARY</b> The permittee shall conduct a stack test using a protocol approved by the Department to demonstrate compliance with emission limits for VOC, NOx, CO, SO2, TSP, PM-10 and PM-2.5 as specified in the compliance plan for U151:OS1, OS2, OS3, OS4, OS5 and OS6 and for the NOx RACT limit and the NOx SOTA limit in U151:OS Summary and the PM-10 control efficiency and outlet grain loading limit in CD148, CD150 and CD153.</p> <p>Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p><b>THIS STACK TEST IS SUBJECT TO THE SIGNIFICANT MODIFICATION SUPPLEMENTAL FEES PURSUANT TO N.J.A.C. 7:27-22.31. [N.J.A.C. 7:27-22.16(a)]</b></p>	<p>Other: The stack test must be conducted within 180 days after initial startup of the new or modified source or within 60 days of approval of a timely submitted protocol, whichever comes later.</p> <p>Pursuant to N.J.A.C. 7:27-16.23(c) and 19.15(c), the initial stack test to demonstrate compliance with VOC/NOx RACT standards shall be conducted within 180 days from the date on which source operation commences operation.</p> <p>If a source is subject to NSPS, extending the testing date beyond 180 days after the source's initial startup requires prior approval from US EPA. [N.J.A.C. 7:27-22.18] and [N.J.A.C. 7:27-22.16(o)].</p>	Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 within 60 days from the date of the approved modified operating permit BOP210001. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<p>STACK TESTING SUMMARY The permittee shall conduct a stack test at least 18 months prior to the expiration of the renewed operating permit using an approved protocol to demonstrate compliance with emission limits for VOC, NO<sub>x</sub>, CO, SO<sub>2</sub>, TSP, PM-10 and PM-2.5 as specified in the compliance plan for U151:OS1, OS2, OS3, OS4, OS5 and OS6 and for the NO<sub>x</sub> RACT limit and the NO<sub>x</sub> SOTA limit in U151:OS Summary and the PM-10 control efficiency and outlet grain loading limit in CD148, CD150 and CD153. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>[This requirement becomes effective for permit term beginning December 6, 2024 and ending December 5, 2029] [N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitoring as required under the applicable operating scenario(s). PERMITTEES OPERATING AFTER EXPIRATION DATE OF THE OPERATING PERMIT SHALL FOLLOW THE STACK TESTING SCHEDULE SPECIFIED IN THE REF.# LINE ITEM BELOW.[N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 at least 30 months prior to the expiration of the approved operating permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date. A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and . [N.J.A.C. 7:27-22.18(h)]</p>

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	<p><b>STACK TESTING SCHEDULE FOR EXPIRED PERMIT</b> The permittee shall conduct a stack test no later than 42 months after the date of expiration of the operating permit using an approved protocol to demonstrate compliance with emission limits for VOC, NO<sub>x</sub>, CO, SO<sub>2</sub>, TSP, PM-10 and PM-2.5 as specified in the compliance plan for U151:OS1 and U151:OS2 and for the NO<sub>x</sub> RACT limit and the NO<sub>x</sub> SOTA limit in U151:OS Summary and the PM-10 control efficiency and outlet grain loading limit in CD148, CD150 and CD153.</p> <p>Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>[N.J.A.C. 7:27-22.16(a)]</p>	<p>Other: Monitoring as required under the applicable operating scenario(s).</p> <p>[N.J.A.C. 7:27-22.16(o)].</p>	<p>Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. If an operating permit has expired, the permittee shall submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 no later than 30 months after the date of expiration of the operating permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and [N.J.A.C. 7:27-22.18(h)]</p>



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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	The permittee shall adjust the combustion process of the furnace in accordance with N.J.A.C. 7:27-19.16 before May 1 of each calendar year. [N.J.A.C. 7:27-19.10(e)]	Other: The owner or operator shall: (1) Inspect the burner, and clean or replace any components of the burner necessary to minimize total emissions of NOx and CO; (2) Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and (3) Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly. As indicated in N.J.A.C. 7:27-19.16(b), an exceedance of an emission limit which occurs during an adjustment of the combustion process under (2) or (3) above is not a violation.[N.J.A.C. 7:27-19.16(a)].	Recordkeeping by manual logging of parameter or storing data in a computer data system annually. The permittee shall record the date and times of the adjustment; the name, title and affiliation of the person who made the adjustment; the concentration of NOx and CO in the effluent stream in ppm after each adjustment was made; and the concentration of O2 at which the NOx and CO concentrations were measured. [N.J.A.C. 7:27-19.16(c)]	None.
6	This furnace is permitted to produce soda lime or borosilicate glass. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	The daily glass pull rate for furnace R shall not exceed 38.9 tons/day.  [N.J.A.C. 7:27-22.16(a)]	Monitored by material feed/flow monitoring each quarter hour during operation. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system each quarter hour during operation. [N.J.A.C. 7:27-22.16(o)]	None.
8	The charge to the furnace shall contain no less than 20% cullet (based on stack tests). [N.J.A.C. 7:27-22.16(a)]	Monitored by material feed/flow monitoring continuously during operation. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system continuously in a log book or DAS. [N.J.A.C. 7:27-22.16(o)]	None.
9	Electric Usage: Electric melt shall be in operation at all times the furnace is in operation. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by production records daily. Monitor total melter power (KW) and individual electrode zone percentages (%).[N.J.A.C. 7:27-22.16(o)].	Electric Usage: Recordkeeping by manual logging of parameter or storing data in a computer data system daily. Maintain production logs showing total melter power (KW) input into the electrode zones and individual electrode zone percentage (%) setpoints, daily. Maintain record of electric and natural gas usage percentage, monthly. [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	NOx (Total) <= 4 lb/ton of glass removed. [N.J.A.C. 7:27-19.10(a)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See stack testing requirements elsewhere in this OS Summary. [N.J.A.C. 7:27-19.15(a)] &. [N.J.A.C. 7:27-19.17]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. See stack testing requirements elsewhere in this OS Summary. [N.J.A.C. 7:27-19.15(a)2]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See stack testing requirements elsewhere in this OS Summary. [N.J.A.C. 7:27-19.15(a)2]
11	NOx (Total) <= 2.6 lb/ton of glass removed. Maximum emission rate based on case-by-case State of the Art (SOTA) analysis. [N.J.A.C. 7:27-22.35]	NOx (Total): Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	VOC (Total) <= 1.85 tons/yr based on the fuel usage limits and glass pull rates. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	NOx (Total) <= 19.8 tons/yr based on the fuel usage limits and glass pull rates. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	CO <= 1.85 tons/yr based on the fuel usage limits and glass pull rates. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	SO2 <= 3.5 tons/yr based on the fuel usage limits and glass pull rates. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	TSP <= 3.39 tons/yr based on the fuel usage limits and glass pull rates. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
17	PM-10 (Total) <= 6.74 tons/yr based on the fuel usage limits and glass pull rates. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
18	PM-2.5 (Total) <= 6.74 tons/yr based on the emissions limit of PM-10. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
19	HAPs (Total) <= 0.000043 tons/yr based on the fuel usage limits and glass pull rates. [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
20	Cadmium compounds <= 0.000043 tons/yr based on the fuel usage limits and glass pull rates. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
21	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)]
22	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)]
23	The owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, of the date of construction or reconstruction of an affected facility as defined under 40 CFR Part 60 Subpart A. Notification shall be postmarked no later than 30 days after such date. (NSPS Subpart A). [40 CFR 60.7(a)(1)]	None.	None.	Submit notification: Upon occurrence of event to EPA Region 2 and the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60.7 [40 CFR 60.7(a)(1)]
24	The owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (NSPS Subpart A). [40 CFR 60.7(a)(3)]	None.	None.	Submit notification: Upon occurrence of event to EPA Region 2 and the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60.7 [40 CFR 60.7(a)(3)]

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

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
27	The owner or operator shall maintain a file, suitable for inspection, of all monitoring measurements as indicated in Recordkeeping Requirement column. (NSPS Subpart A). [40 CFR 60.7(f)]	None.	Other: The file shall include all measurements (including continuous monitoring system, monitoring device, and performance testing measurements), all continuous monitoring system performance evaluations, all continuous monitoring system or monitoring device calibration checks, all adjustments/maintenance performed on these systems or devices, and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the dates of the record, except as prescribed in 40 CFR 60.7(f)(1) through (3). Sources subject to 40 CFR 70, are required to retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application, per 40 CFR 70.6(a)(3)(ii)(B). [40 CFR 60.7(f)].	None.
28	Within 60 days after achieving the maximum production rate at which the affected facility will operate, but not later than 180 days after initial startup of the facility, the owner or operator shall conduct performance test(s) and shall furnish the Administrator a written report of the results. (NSPS Subpart A). [40 CFR 60.8(a)]	None.	None.	Submit a report: At a common schedule agreed upon by the operator and the Administrator. The owner or operator shall submit results of the performance test(s) to the Administrator. [40 CFR 60.8(a)]
29	The owner or operator shall conduct performance tests and data reduced in accordance with the test methods and procedures contained in each applicable subpart, unless otherwise specified and approved by the Administrator. (NSPS Subpart A). [40 CFR 60.8(b)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
30	Performance tests shall be conducted under conditions the Administrator specifies to the plant operator based on representative performance of the affected facility. Operations during periods of startup, shutdown and malfunction shall not constitute representative conditions for the purpose of the performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. (NSPS Subpart A). [40 CFR 60.8(c)]	None.	None.	None.
31	The owner or operator shall provide the Administrator at least 30 days prior notice of any performance test and shall provide adequate performance testing facilities as specified in 40 CFR Part 60.8(e). (NSPS Subpart A). [40 CFR 60.8(d)]	None.	None.	None.
32	Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. (NSPS Subpart A). [40 CFR 60.8(f)]	None.	None.	None.
33	Compliance with NSPS standards specified in this permit, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in NSPS. (NSPS Subpart A). [40 CFR 60.11(a)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
34	At all times, including periods of start-up, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operation and maintenance procedures, and inspection of the source. (NSPS Subpart A). [40 CFR 60.11(d)]	None.	None.	None.
35	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.
36	Upon modifications, emission rates for an affected facility shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard applies. (NSPS Subpart A). [40 CFR 60.14(b)]	None.	None.	None.
37	The provisions set forth under an applicable subparts of 40 CFR Part 60 supersede conflicting provisions listed under Modification in 40 CFR Part 60.14. (NSPS Subpart A). [40 CFR 60.14(f)]	None.	None.	None.

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<b>Ref.#</b>	<b>Applicable Requirement</b>	<b>Monitoring Requirement</b>	<b>Recordkeeping Requirement</b>	<b>Submittal/Action Requirement</b>
38	Compliance with all applicable standards must be achieved within 180 days of completion of any physical or operational change subject to the control measures specified in 40 CFR Part 60.14(a). (NSPS Subpart A). [40 CFR 60.14(g)]	None.	None.	None.
39	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.



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**Emission Unit:** U151 Electric Melt Glass Furnace R, natural gas-boosted & controlled by CD148, CD150, or CD153

**Operating Scenario:** OS1 Production of Borosilicate Specialty Tubing, controlled by CD148, OS2 Production of Borosilicate Specialty Tubing, controlled by CD150, OS3 Production of Borosilicate Specialty Tubing, controlled by CD153, OS8 Natural-Gas Fired Burner on Glass Conditioner 2, Forming Bowl 2, and Overflow Weir 2 on R Furnace

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collectors CD148, CD150 or CD153. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	SO <sub>2</sub> ≤ 2,000 ppm <sub>dv</sub> . [N.J.A.C. 7:27-7.2(b)1]	None.	None.	None.
3	SO <sub>2</sub> ≤ 63.7 lb per any 60-minute period. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
4	SO <sub>2</sub> ≤ 127.4 lb/hr at any instant. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
5	Particulate Emissions ≤ 0.5 lb/hr based on the process weight per hour. [N.J.A.C. 7:27-6.2(b)]	None.	None.	None.
6	Opacity ≤ 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	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.
8	Maximum Gross Heat Input $\leq$ 5.1 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.
9	Furnace R fossil fuel limited to natural gas only. [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
10	Natural Gas Usage $\leq 44.4$ MMft <sup>3</sup> per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Fuel use for any 12 consecutive months is computed by adding the fuel consumed in a given month to that consumed in the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.
11	VOC (Total) $\leq 0.42$ lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	NOx (Total) $\leq 4.21$ lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	CO $\leq 0.11$ lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
14	SO2 $\leq 0.14$ lb/hr. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
15	TSP $\leq 0.77$ lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	PM-10 (Total) <= 1.54 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(e)]
17	PM-2.5 (Total) <= 1.54 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
18	Cadmium compounds <= 0.00000253 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
19	Particulate Emissions <= 0.5 g/kg of glass for borosilicate recipes. (NSPS Subpart CC). [40 CFR 60.292(a)(1)]	Particulate Emissions: Monitored by stack emission testing once initially, based on the average of three 1-hour tests. Performance tests shall be conducted as specified at 40 CFR Part 60.8. Compliance with the emission limit using the procedures specified at 40 CFR Part 60.296(d). [40 CFR 60.296(c)]	Particulate Emissions: Recordkeeping by stack test results once initially. [40 CFR 60.296(c)]	Submit a stack test report: Within 60 days of stack testing. The report shall be submitted to the Administrator for review. [40 CFR 60.296(c)]

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

**Emission Unit:** U151 Electric Melt Glass Furnace R, natural gas-boosted & controlled by CD148, CD150, or CD153

**Operating Scenario:** OS4 Production of Soda Lime Specialty Tubing, controlled by CD148, OS5 Production of Soda Lime Specialty Tubing, controlled by CD150, OS6 Production of Soda Lime Specialty Tubing, controlled by CD153

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collectors CD148, CD150 or CD153. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	SO <sub>2</sub> ≤ 2,000 ppm <sub>dv</sub> . [N.J.A.C. 7:27-7.2(b)1]	None.	None.	None.
3	SO <sub>2</sub> ≤ 63.7 lb per any 60-minute period. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
4	SO <sub>2</sub> ≤ 127.4 lb/hr at any instant. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
5	Particulate Emissions ≤ 1.81 lb/hr based on the process weight per hour. [N.J.A.C. 7:27-6.2(b)]	None.	None.	None.
6	Maximum Gross Heat Input ≤ 5.1 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.
7	Furnace R fossil fuel limited to natural gas only. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	Natural Gas Usage ≤ 44.4 MMft <sup>3</sup> per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Fuel use for any 12 consecutive months is computed by adding the fuel consumed in a given month to that consumed in the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.
9	VOC (Total) ≤ 0.08 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]

U151 Electric Melt Glass Furnace R, natural gas-boosted &amp; controlled by CD

OS4, OS5, OS6

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	NO <sub>x</sub> (Total) ≤ 4.21 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NO <sub>x</sub> (Total): Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NO <sub>x</sub> (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
11	CO ≤ 0.02 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	SO <sub>2</sub> ≤ 4.4 lb/hr. [N.J.A.C. 7:27-22.16(a)]	SO <sub>2</sub> : Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	SO <sub>2</sub> : Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(e)]
13	TSP ≤ 0.12 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
14	PM-10 (Total) ≤ 0.19 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(e)]
15	PM-2.5 (Total) ≤ 0.19 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by stack emission testing once initially and prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
16	Cadmium compounds ≤ 0.00000253 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
17	Particulate Emissions $\leq 0.1$ g/kg of glass for soda-lime recipes. (NSPS Subpart CC). [40 CFR 60.292(a)(1)]	Particulate Emissions: Monitored by stack emission testing once initially, based on the average of three 1-hour tests. Performance tests shall be conducted as specified at 40 CFR Part 60.8. Compliance with the emission limit using the procedures specified at 40 CFR Part 60.296(d). [40 CFR 60.296(c)]	Particulate Emissions: Recordkeeping by stack test results once initially. [40 CFR 60.296(c)]	Submit a stack test report: Within 60 days of stack testing. The report shall be submitted to the Administrator for review. [40 CFR 60.296(c)]

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

**Emission Unit:** U151 Electric Melt Glass Furnace R, natural gas-boosted & controlled by CD148, CD150, or CD153

**Operating Scenario:** OS7 Natural-Gas Fired Burner on Glass Conditioner, Forming Bowl, and Overflow Weir on R Furnace

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. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.948 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Maximum Gross Heat Input $\leq$ 1.58 MMBTU/hr (HHV) per burner. [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.
4	Fuel type limited to natural gas only. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Natural Gas Usage $\leq$ 13.6 MMft <sup>3</sup> per burner per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	NOx (Total) $\leq$ 0.15 lb/hr per burner. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO $\leq$ 0.13 lb/hr per burner. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	Cadmium compounds $\leq$ 0.0000017 lb/hr per burner. [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:** U152 Batch House Bin 0 storing raw materials, controlled by Dust Collector CD17

**Subject Item:** CD17 Silo #0

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the bags as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency and at least annually. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq 0.4$ and Pressure Drop Across the Baghouse $\leq 6$ inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. The operator shall conduct weekly inspections to verify that sufficient air pressure is available to fire the pulse jets, that the pulse jets are functioning and to observe the pressure differential. If pressure drop on the baghouse is below the minimum value given, the baghouse shall be checked as soon as practicable and broken filters replaced promptly. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and that they are functioning. [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:** U152 Batch House Bin 0 storing raw materials, controlled by Dust Collector CD17

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
2	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Total Material Transferred <= 86,110 tons/yr for the combined operation of material conveyance to storage bins/silos under U148, U149, U152, U153 and U157. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and for every consecutive 12-month period. [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:** U152 Batch House Bin 0 storing raw materials, controlled by Dust Collector CD17

**Operating Scenario:** OS1 BH3 - Bin 0

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD17. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U153 Batch House Bins 10 and 41 storing raw materials, controlled by Dust Collector CD145

**Subject Item:** CD145 Silos #41 & 10

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency and at least annually. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq 0.2$ and Pressure Drop Across the Baghouse $\leq 6$ inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. The operator shall conduct weekly inspections to verify that sufficient air pressure is available to fire the pulse jets, that the pulse jets are functioning and to observe the pressure differential. If pressure drop on the baghouse is below the minimum value given, the baghouse shall be checked as soon as practicable and broken filters replaced promptly. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [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:** U153 Batch House Bins 10 and 41 storing raw materials, controlled by Dust Collector CD145

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
2	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Total Material Transferred <= 86,110 tons/yr for the combined operation of material conveyance to storage bins/silos under U148, U149, U152, U153 and U157. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and for every consecutive 12-month period. [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:** U153 Batch House Bins 10 and 41 storing raw materials, controlled by Dust Collector CD145

**Operating Scenario:** OS1 BH3 - Bin 10, OS2 BH3 - Bin 41

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD145. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U157 Batch House Bin 40 storing raw materials, controlled by Dust Collector CD22

**Subject Item:** CD22 Silo #40

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency and at least annually. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq$ 0.4 and Pressure Drop Across the Baghouse $\leq$ 6 inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. The operator shall conduct weekly inspections to verify that sufficient air pressure is available to fire the pulse jets, that the pulse jets are functioning and to observe the pressure differential. If pressure drop on the baghouse is below the minimum value given, the baghouse shall be checked as soon as practicable and broken filters replaced promptly. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [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:** U157 Batch House Bin 40 storing raw materials, controlled by Dust Collector CD22

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
2	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Total Material Transferred <= 86,110 tons/yr for the combined operation of material conveyance to storage bins/silos under U148, U149, U152, U153 and U157. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and for every consecutive 12-month period. [N.J.A.C. 7:27-22.16(o)]	None.



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Facility Specific Requirements**

**Emission Unit:** U157 Batch House Bin 40 storing raw materials, controlled by Dust Collector CD22

**Operating Scenario:** OS1 BH3 - Bin 40

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD22. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP $<$ 0.05 lb/hr (below permit reporting threshold). [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:** U158 33-X Batch Delivery System, controlled by Dust Collectors CD14, CD24, CD25 and CD26

**Subject Item:** CD14 BH N Belt, scales/hoppers & Can Fill

The requirements for this item are identical to those for: U147 CD14

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

**Emission Unit:** U158 33-X Batch Delivery System, controlled by Dust Collectors CD14, CD24, CD25 and CD26

**Subject Item:** CD24 33 Batch Delivery System

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the bags as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency and at least annually. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq 0.75$ and Pressure Drop Across the Baghouse $\leq 6$ inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. The operator shall conduct weekly inspections to verify that sufficient air pressure is available to fire the pulse jets, that the pulse jets are functioning and to observe the pressure differential. If pressure drop on the baghouse is below the minimum value given, the baghouse shall be checked as soon as practicable and broken filters replaced promptly. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [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:** U158 33-X Batch Delivery System, controlled by Dust Collectors CD14, CD24, CD25 and CD26

**Subject Item:** CD25 Q Hopper Dust Collector

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the bags as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency and at least annually. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq$ 0.5 and Pressure Drop Across the Baghouse $\leq$ 6 inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. The operator shall conduct weekly inspections to verify that sufficient air pressure is available to fire the pulse jets, that the pulse jets are functioning and to observe the pressure differential. If pressure drop on the baghouse is below the minimum value given, the baghouse shall be checked as soon as practicable and broken filters replaced promptly. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [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:** U158 33-X Batch Delivery System, controlled by Dust Collectors CD14, CD24, CD25 and CD26

**Subject Item:** CD26 R Hopper Cartridge Fliter

The requirements for this item are identical to those for: U147 CD26

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

**Emission Unit:** U158 33-X Batch Delivery System, controlled by Dust Collectors CD14, CD24, CD25 and CD26

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
2	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Total Material Transferred <= 86,110 tons/yr for the combined operation under U147-OS8, U158-OS4, 7, 8, 9, 10 and 11. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and for every consecutive 12-month period. [N.J.A.C. 7:27-22.16(o)]	None.
4	Total Material Transferred <= 86,110 tons/yr , for the combined mixing operations under U147-OS2,3,7 and U158-OS3. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and for every consecutive 12-month period. [N.J.A.C. 7:27-22.16(o)]	None.
5	Total Material Transferred <= 86,110 tons/yr for each piece of equipment under U158-OS1, OS2, OS5 & OS6. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and for every consecutive 12-month period. [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:** U158 33-X Batch Delivery System, controlled by Dust Collectors CD14, CD24, CD25 and CD26

**Operating Scenario:** OS1 33-X Conveyor (E145), OS2 33-X Elevator (E146), OS5 33-X Mixed Bucket Elevator (E153), OS6 33-X Mixed Conveyor (E154)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD24. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 1.17 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP $<$ 0.05 lb/hr (below permit reporting threshold). [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:** U158 33-X Batch Delivery System, controlled by Dust Collectors CD14, CD24, CD25 and CD26

**Operating Scenario:** OS3 33-X Mixer (E147), OS4 33-X Can Filling (E148)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD24. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U158 33-X Batch Delivery System, controlled by Dust Collectors CD14, CD24, CD25 and CD26

**Operating Scenario:** OS7 Furnace Q Bin (E155), controlled by Q Bin Dust Collector CD25

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD25. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U158 33-X Batch Delivery System, controlled by Dust Collectors CD14, CD24, CD25 and CD26

**Operating Scenario:** OS8 Furnace R Bin (E156), controlled by R Bin Cartridge Filter CD26

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD26. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U158 33-X Batch Delivery System, controlled by Dust Collectors CD14, CD24, CD25 and CD26

**Operating Scenario:** OS9 Can Loading Station 1, OS10 Can Loading Station 2, OS11 Can Loading Station 3

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD14. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U159 400 HP Diesel-fired, Engine-driven Emergency Electric Generators E157 & 158 (< 5 MMBTU/hr Heat Input)

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of applicable federal regulations:  40 CFR 63 Subpart A 40 CFR 63 Subpart ZZZZ. [None]	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
2	<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://airnow.gov/">http://airnow.gov/</a>, as supplemented or amended and incorporated herein by reference, unless required in writing by a Federal or State law or regulation. Procedures for determining the air quality forecasts for New Jersey are available at the Department's air quality permitting web site at <a href="http://www.state.nj.us/dep/aqpp/aqforecast">http://www.state.nj.us/dep/aqpp/aqforecast</a>; and</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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**New Jersey Department of Environmental Protection  
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<p>Each emergency generator shall be located at the facility and produce mechanical or thermal energy, or electrical power exclusively for use at the facility.</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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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	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.
5	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
6	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.
7	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.
8	VOC (Total) <= 0.126 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	NOx (Total) <= 1.98 tons/yr. Annual emission limit based on the permitted hours per year of operation. [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
10	CO <= 0.34 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	SO2 <= 0.1 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	TSP <= 0.109 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	PM-10 (Total) <= 0.109 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	PM-2.5 (Total) <= 0.109 tons/yr (based on the emissions limit of PM-10). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	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(i). The owner or operator must develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with Table 6 item 9 to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6640(a)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator must keep records of the oil and filter change. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)(2)]	None.



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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	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.
17	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.
18	At all times the owner or operator must operate and maintain a RICE including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.6605(b)]	None.	None.	None.
19	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.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	The owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]	Other: Monitored according to the manufacturer's emission-related operation and maintenance instructions; or the maintenance plan developed by the owner or operator which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with Table 6 item 9 to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6640(a)].	Other: The owner or operator must keep records of the maintenance procedures and replacements events. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)].	None.
21	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.
22	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**

**Emission Unit:** U159 400 HP Diesel-fired, Engine-driven Emergency Electric Generators E157 & 158 (< 5 MMBTU/hr Heat Input)

**Operating Scenario:** OS1 Emergency Generator No. 1, OS2 Emergency Generator No. 2

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 2.1 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.
2	Maximum Gross Heat Input <= 3.5 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.
3	Generator fuel limited to diesel fuel, biodiesel fuel or a mixture of diesel and biodiesel. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	VOC (Total) <= 1.26 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	NOx (Total) <= 19.8 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	CO <= 3.33 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	SO2 <= 1.02 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	TSP <= 1.09 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
9	PM-10 (Total) <= 1.09 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	PM-2.5 (Total) <= 1.09 lb/hr (based on the emissions limit of PM-10). [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: U162 Production line cullet crushers

Subject Item: CD10 TORIT Model DFT-4-80 dust collector

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the design particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq 0.75$ and Pressure Drop Across the Baghouse $\leq 6$ inches w.c.. [N.J.A.C. 7:27-22.16(e)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week 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**

**Emission Unit:** U162 Production line cullet crushers**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
2	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Maximum allowable particulate emission rate from PT80 based on 99% efficiency of collection as determined in the Table at Particulate Emissions <= 2.46 lb/hr. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.

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

**Emission Unit:** U162 Production line cullet crushers

**Operating Scenario:** OS1 Cullet crusher associated with production line S1, OS2 Cullet crusher associated with production line S2, OS3 Cullet crusher #2 associated with production line S1, OS4 Cullet crusher #2 associated with production line S2, OS6 Cullet crusher associated with production line L, OS7 Cullet crusher associated with production line P1, OS8 Cullet crusher associated with production line P2, OS9 Cullet crusher associated with production line Q1, OS10 Cullet crusher associated with production line Q2, OS11 Cullet crusher associated with production line R1, OS12 Cullet crusher associated with production line R2, OS13 Cullet crusher associated with production line M1, OS14 Cullet crusher associated with production line M2, OS15 Cullet crusher associated with production line L #2, OS16 Cullet Crusher, OS17 Cullet crusher #1 associated with production line R2, OS18 Cullet crusher #2 associated with production line R2

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD10. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U163 Diesel-fired, Engine-driven Emergency Electric Generator E513 (< 5 MMBTU/hr Heat Input)

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of applicable federal regulations:  40 CFR 63 Subpart A 40 CFR 63 Subpart ZZZZ. [None]	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
2	<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://airnow.gov/">http://airnow.gov/</a>, as supplemented or amended and incorporated herein by reference, unless required in writing by a Federal or State law or regulation. Procedures for determining the air quality forecasts for New Jersey are available at the Department's air quality permitting web site at <a href="http://www.state.nj.us/dep/aqpp/aqforecast">http://www.state.nj.us/dep/aqpp/aqforecast</a>; and</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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**New Jersey Department of Environmental Protection  
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<p>Each emergency generator shall be located at the facility and produce mechanical or thermal energy, or electrical power exclusively for use at the facility.</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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**New Jersey Department of Environmental Protection  
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	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.
5	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
6	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. [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.
7	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.
8	Particulate Emissions <= 2.52 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.
9	VOC (Total) <= 0.08 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U163 Diesel-fired, Engine-driven Emergency Electric Generator E513 (&lt; 5 M

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	NOx (Total) <= 1.19 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	CO <= 0.2 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	SO2 <= 0.06 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	TSP <= 0.07 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	PM-10 (Total) <= 0.07 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	PM-2.5 (Total) <= 0.07 tons/yr. Annual emission limit based on the emissions limit of PM-10. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	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(i). The owner or operator must develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with Table 6 item 9 to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6640(a)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator must keep records of the oil and filter change. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)(2)]	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	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.
18	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.
19	At all times the owner or operator must operate and maintain a RICE including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.6605(b)]	None.	None.	None.
20	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.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	The owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]	Other: Monitored according to the manufacturer's emission-related operation and maintenance instructions; or the maintenance plan developed by the owner or operator which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with Table 6 item 9 to Subpart ZZZZ of 40 CFR 63. [40 CFR 63.6640(a)].	Other: The owner or operator must keep records of the maintenance procedures and replacements events. Each record must be readily accessible for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.6660(c) and 40 CFR 63.10(b)(1). [40 CFR 63.6655(e)].	None.
22	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.
23	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:** U163 Diesel-fired, Engine-driven Emergency Electric Generator E513 (< 5 MMBTU/hr Heat Input)

**Operating Scenario:** OS1 Emergency Generator No. 3

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 2.52 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.
2	Maximum Gross Heat Input <= 4.2 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.
3	Generator fuel limited to diesel fuel, biodiesel fuel or a mixture of diesel and biodiesel. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	VOC (Total) <= 1.51 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	NOx (Total) <= 23.7 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	CO <= 3.99 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	SO2 <= 1.22 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	TSP <= 1.3 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	PM-10 (Total) <= 1.3 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	PM-2.5 (Total) <= 1.3 lb/hr (based on the emissions limit of PM-10). [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:** U164 Double Roller Crusher for Glass Vials with Associated Vibratory Feeder and Elevator

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
2	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	<p>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:</p> <p>(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)]</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record and retain the following:</p> <p>(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)]</p>	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	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate from PT95, 96 & 97 based on 0.02 grains per SCF. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
4	Total Throughput $\leq$ 21,900 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	TSP $\leq$ 0.33 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations each month during operation. The permitted hourly emissions rate should be used in the calculations. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and for every consecutive 12-month period. [N.J.A.C. 7:27-22.16(o)]	None.
6	PM-10 (Total) $\leq$ 0.33 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations each month during operation. The permitted hourly emissions rate should be used in the calculations. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and for every consecutive 12-month period. [N.J.A.C. 7:27-22.16(o)]	None.
7	PM-2.5 (Total) $\leq$ 0.33 tons/yr based on the emissions limit of PM-10. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations each month during operation. The permitted hourly emissions rate should be used in the calculations. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and for every consecutive 12-month period. [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:** U164 Double Roller Crusher for Glass Vials with Associated Vibratory Feeder and Elevator

**Operating Scenario:** OS1 Glass Vial Crusher, OS2 Vibratory Feeder with Elevator (2 discharge chutes)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Total Throughput <= 5,000 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	TSP <= 0.038 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	PM-10 (Total) <= 0.038 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-2.5 (Total) <= 0.038 lb/hr (based on the emissions limit of PM-10). [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:** U165 500 KW Diesel-fired, Engine-driven Emergency Electric Generator E516 (< 5 MMBTU/hr), Sub to NSPS Sub IIII

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Summary of applicable federal regulations:  40 CFR 60 Subpart A 40 CFR 60 Subpart IIII. [None]	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
2	<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://airnow.gov/">http://airnow.gov/</a>, as supplemented or amended and incorporated herein by reference, unless required in writing by a Federal or State law or regulation. Procedures for determining the air quality forecasts for New Jersey are available at the Department's air quality permitting web site at <a href="http://www.state.nj.us/dep/aqpp/aqforecast">http://www.state.nj.us/dep/aqpp/aqforecast</a>; and</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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**New Jersey Department of Environmental Protection  
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<p>Each emergency generator shall be located at the facility and produce mechanical or thermal energy, or electrical power exclusively for use at the facility.</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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**New Jersey Department of Environmental Protection  
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	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.
5	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
6	Particulate Emissions <= 2.7 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.
7	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.
8	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.
9	VOC (Total) <= 0.081 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

U165 500 KW Diesel-fired, Engine-driven Emergency Electric Generator E5]

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	NO <sub>x</sub> (Total) ≤ 0.99 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	CO ≤ 0.21 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	TSP ≤ 0.07 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	PM-10 (Total) ≤ 0.07 tons/yr. Annual emission limit based on the permitted hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	PM-2.5 (Total) ≤ 0.07 tons/yr (based on the emissions limit of PM-10). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	The owner or operator shall comply with the applicable standards as required in the General Provisions of 40 CFR Part 60, Subpart A, except as exempted in Table 8 to Subpart IIII of Part 60. Specifically, 40 CFR 60.1 to 60.19 (except 60.7, 60.11, 60.13 & 60.18) apply. [40 CFR 60.4218]	Other: The owner or operator shall comply, as applicable, with the monitoring requirements as required in the General Provisions of 40 CFR Part 60, Subpart A, except as exempted in Table 8 to Subpart IIII of Part 60.[40 CFR 60].	Other: The owner or operator shall comply, as applicable, with the recordkeeping requirements as required in the General Provisions of 40 CFR Part 60, Subpart A, except as exempted in Table 8 to Subpart IIII of Part 60.[40 CFR 60].	Other (provide description): As per the approved schedule, the owner or operator shall comply, as applicable, with the submittal requirements as required in the General Provisions of 40 CFR Part 60, Subpart A, except as exempted in Table 8 to Subpart IIII of Part 60. [40 CFR 60]
16	All requests, reports, applications, submittals, and other communications to the Administrator pursuant to Part 60 shall be submitted in duplicate to the Regional Office of US Environmental Protection Agency. Submit information to: Director, Division of Enforcement & Compliance Assistance, US EPA, Region 2, 290 Broadway, New York, NY 10007-1866. [40 CFR 60.4(a)]	None.	None.	Submit a report: As per the approved schedule to EPA Region 2 as required by 40 CFR 60. [40 CFR 60.4(a)]
17	Copies of all information submitted to EPA pursuant to 40 CFR Part 60, must also be submitted to the appropriate Regional Enforcement Office of NJDEP. [40 CFR 60.4(b)]	None.	None.	Submit a report: As per the approved schedule to the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60. [40 CFR 60.4(b)]

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	The owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in section 60.14(e). The notification shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of facility before and after the change and the expected completion date of the change. Notification shall be postmarked within 60 days or as soon as practicable before any change is commenced. The Administrator may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]	None.	None.	Submit notification: Upon occurrence of event to EPA Region 2 and the appropriate Regional Enforcement Office of NJDEP as required by 40 CFR 60.7 [40 CFR 60.7(a)(4)]
19	No owner or operator subject to NSPS standards in Part 60, shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]	None.	None.	None.
20	Upon modifications, emission rates for an affected facility shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard applies. [40 CFR 60.14(b)]	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
21	The provisions set forth under an applicable subparts of 40 CFR Part 60 supersede conflicting provisions listed under Modification in 40 CFR Part 60.14. [40 CFR 60.14(f)]	None.	None.	None.
22	Compliance with all applicable standards must be achieved within 180 days of completion of any physical or operational change subject to the control measures specified in 40 CFR Part 60.14(a). [40 CFR 60.14(g)]	None.	None.	None.
23	Applicable subpart in 40 CFR Part 60 includes specific provisions which refine and delimit reconstruction as defined in 40 CFR Part 60.15. [40 CFR 60.15(g)]	None.	None.	None.
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. [40 CFR 60.19]	None.	None.	None.
25	The owner or operator of a 2007 model year and later emergency generator with a displacement of < 10 liters per cylinder and a maximum engine power $\geq 37$ kW ( $\geq 50$ HP) and no greater than 3,000HP ( $\leq 2,237$ kW) must comply with the certification emissions standards in 40 CFR 89.112 and smoke standards in 40 CFR 89.113 for the same model year and maximum engine power as follows: NMHC + NO <sub>x</sub> $\leq 6.4$ g/kW-hr, CO $\leq 3.5$ g/kW-hr, PM $\leq .2$ g/kW-hr. [40 CFR 60.4205(b)]	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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**New Jersey Department of Environmental Protection  
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. If the manufacturer's emission-related written instructions are not followed, the owner or operator must keep the results of the performance test(s) demonstrating compliance with the applicable emission limits. [40 CFR 60.4206].	None.
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- 8.13(a)]	Recordkeeping by invoices / bills of lading 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- 8.13(a)]	None.

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
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. 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(a)]	None.	Other: The owner or operator shall keep the manufacturer's emission-related written instructions. If not complying with manufacturer's emission-related written instructions or emission-related settings, the owner or operator shall must keep a maintenance plan, records of conducted maintenance, and conduct a performance test(s), as prescribed at 40 CFR 60.4211(g).[40 CFR 60.4211(a)].	None.
29	The owner or operator of a 2007 model year and later stationary CI internal combustion engine complying with the emission standards specified in 40 CFR 60.4204(b) or 40 CFR 60.4205(b), must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b) or 40 CFR 60.4205(b) as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g). [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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**New Jersey Department of Environmental Protection  
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
30	Emergency stationary internal combustion engines 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. [40 CFR 60.4211(f)(2)(i)]	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.

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

**Emission Unit:** U165 500 KW Diesel-fired, Engine-driven Emergency Electric Generator E516 (< 5 MMBTU/hr), Sub to NSPS Sub IIII

**Operating Scenario:** OS1 Emergency Generator No. 4

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 2.7 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.
2	Maximum Gross Heat Input <= 4.5 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.
3	Generator fuel limited to diesel fuel, biodiesel fuel or a mixture of diesel and biodiesel. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	VOC (Total) <= 1.62 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	NOx (Total) <= 19.8 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	CO <= 4.28 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	TSP <= 1.4 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	PM-10 (Total) <= 1.4 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	PM-2.5 (Total) <= 1.4 lb/hr (based on the emissions limit of PM-10). [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: U166 NSV\_SL Crushers

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
2	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	<p>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:</p> <p>(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)]</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record and retain the following:</p> <p>(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)]</p>	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	Total Throughput <= 43,055 tons of glass/year (crushed). [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by production records[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 and for every consecutive 12-month period. [N.J.A.C. 7:27-22.16(o)]	None.
4	Particulate Emissions <= 0.5 lb/hr each crusher. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
5	TSP <= 0.116 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-10 (Total) <= 0.116 tons/yr based on the emissions limit of TSP. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	PM-2.5 (Total) <= 0.116 tons/yr based on the emissions limit of TSP. [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:** U166 NSV\_SL Crushers**Operating Scenario:** OS1 NSV\_SL Cullet Crusher 1, OS2 NSV\_SL Cullet Crusher 2, OS3 NSV\_SL Cullet Crusher 3

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Total Throughput <= 16.7 tons/hr of cullet. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	TSP <= 0.09 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	PM-10 (Total) <= 0.09 lb/hr (based on the emissions limit of TSP). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-2.5 (Total) <= 0.09 lb/hr (based on the emissions limit of TSP). [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:** U167 W-33 Cullet Conveyor**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
2	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Total Throughput <= 43,055 tons of glass/year. [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:** U167 W-33 Cullet Conveyor**Operating Scenario:** OS1 W-33 Cullet Conveyor

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Total Throughput <= 11.1 tons/hr of glass. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U200 Raw Material Conveyance, controlled by Dust Collectors CD14, CD15, CD16, CD17, CD22 and CD145

**Subject Item:** CD14 BH N Belt, scales/hoppers & Can Fill

The requirements for this item are identical to those for: U147 CD14

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

**Emission Unit:** U200 Raw Material Conveyance, controlled by Dust Collectors CD14, CD15, CD16, CD17, CD22 and CD145

**Subject Item:** CD15 Bins 1A, 2 & S Elevator

The requirements for this item are identical to those for: U148 CD15

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

**Emission Unit:** U200 Raw Material Conveyance, controlled by Dust Collectors CD14, CD15, CD16, CD17, CD22 and CD145

**Subject Item:** CD16 Bins 3A, 3B, 4-9 & N Elevator

The requirements for this item are identical to those for: U149 CD16

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

**Emission Unit:** U200 Raw Material Conveyance, controlled by Dust Collectors CD14, CD15, CD16, CD17, CD22 and CD145

**Subject Item:** CD17 Silo #0

The requirements for this item are identical to those for: U152 CD17

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

**Emission Unit:** U200 Raw Material Conveyance, controlled by Dust Collectors CD14, CD15, CD16, CD17, CD22 and CD145

**Subject Item:** CD22 Silo #40

The requirements for this item are identical to those for: U157 CD22

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

**Emission Unit:** U200 Raw Material Conveyance, controlled by Dust Collectors CD14, CD15, CD16, CD17, CD22 and CD145

**Subject Item:** CD145 Silos #41 & 10

The requirements for this item are identical to those for: U153 CD145

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

**Emission Unit:** U200 Raw Material Conveyance, controlled by Dust Collectors CD14, CD15, CD16, CD17, CD22 and CD145

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
2	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Total Material Transferred <= 86,110 tons/yr. Maximum annual throughput for the equipment in this emission unit. Of this amount, no more than 4,306 tons per year of minor ingredients may be processed through equipment in OS4, OS5 and OS6. This is the basis for calculation of the annual emissions above. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Monthly throughput and 12-consecutive month total shall be calculated and recorded at the end of each month. [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:** U200 Raw Material Conveyance, controlled by Dust Collectors CD14, CD15, CD16, CD17, CD22 and CD145

**Operating Scenario:** OS1 North Raw Materials Bucket Elevator, controlled by CD16, OS4 North Minor Ingredients Vacuum Pump Conveyance System, OS6 33-X Minor Ingredients Vacuum Pump Conveyance System

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD16. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U200 Raw Material Conveyance, controlled by Dust Collectors CD14, CD15, CD16, CD17, CD22 and CD145

**Operating Scenario:** OS2 South Raw Materials Bucket Elevator, controlled by CD15

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD15. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U200 Raw Material Conveyance, controlled by Dust Collectors CD14, CD15, CD16, CD17, CD22 and CD145

**Operating Scenario:** OS3 33-X Raw Materials Elevator, controlled by CD17, CD22 & CD145

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD17, CD22 and CD145. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP $<$ 0.05 lb/hr (below permit reporting threshold). [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:** U200 Raw Material Conveyance, controlled by Dust Collectors CD14, CD15, CD16, CD17, CD22 and CD145

**Operating Scenario:** OS5 Minor Ingredients Dump Station, controlled by CD14

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD14. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U201 Raw Material Scales, controlled by Dust Collectors CD14 and CD24

**Subject Item:** CD14 BH N Belt, scales/hoppers & Can Fill

The requirements for this item are identical to those for: U147 CD14

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

**Emission Unit:** U201 Raw Material Scales, controlled by Dust Collectors CD14 and CD24

**Subject Item:** CD24 33 Batch Delivery System

The requirements for this item are identical to those for: U158 CD24

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

**Emission Unit:** U201 Raw Material Scales, controlled by Dust Collectors CD14 and CD24

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
2	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	<p>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:</p> <p>(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)]</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record and retain the following:</p> <p>(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)]</p>	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	Total Material Transferred <= 86,110 tons/yr. Maximum annual throughput for the equipment in this emission unit. Of this amount, no more than 30,000 tons per year may be processed through equipment whose emissions are not controlled by a dust collector. This is the basis for calculation of the annual emissions above. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Monthly throughput and 12-consecutive month total shall be calculated and recorded at the end of each month. [N.J.A.C. 7:27-22.16(o)]	None.
4	TSP <= 4.51 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 4.51 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 4.51 tons/yr (based on the emissions limit of PM-10). [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:** U201 Raw Material Scales, controlled by Dust Collectors CD14 and CD24

**Operating Scenario:** OS1 Weighing Raw Materials on Scale 1, OS6 Weighing Raw Materials on Scale 6, OS10 Weighing Raw Materials on Scale 10

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD14. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions $\leq$ 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U201 Raw Material Scales, controlled by Dust Collectors CD14 and CD24

**Operating Scenario:** OS2 Weighing Raw Materials on Scale 2, OS3 Weighing Raw Materials on Scale 3, OS4 Weighing Raw Materials on Scale 4, OS5 Weighing Raw Materials on Scale 5, OS7 Weighing Raw Materials on Scale 7, OS8 Weighing Raw Materials on Scale 8, OS9 Weighing Raw Materials on Scale 9, all vented uncontrolled through PT70

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions < 0.5 lb/hr. Maximum allowable particulate emission rate from this scale and exhausted from PT70 based on 0.02 grains per SCF. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
2	TSP <= 1.03 lb/hr for all 7 scales (OS2-5 & OS7-9) combined. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	PM-10 (Total) <= 1.03 lb/hr for all 7 scales (OS2-5 & OS7-9) combined. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-2.5 (Total) <= 1.03 lb/hr for all 7 scales (OS2-5 & OS7-9) combined (based on the emissions limit of PM-10). [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:** U201 Raw Material Scales, controlled by Dust Collectors CD14 and CD24

**Operating Scenario:** OS11 Weighing Raw Materials on Scale 33-1, OS12 Weighing Raw Materials on Scale 33-2, OS13 Weighing Raw Materials on Scale 33-3, OS14 Weighing Raw Materials on Scale 33-4, OS15 Weighing Minor Ingredients on Scale 1, OS16 Weighing Minor Ingredients on Scale 2, OS17 Weighing Minor Ingredients on Scale 3, OS18 Weighing Minor Ingredients (33)

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD24. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Particulate Emissions <= 0.5 lb/hr. Maximum allowable particulate emission rate based on 99% efficiency of collection as determined in the Table at. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
3	TSP < 0.05 lb/hr (below permit reporting threshold). [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:** U301 Electric Melt Glass Furnace S, natural gas-boosted & controlled by CD151, or CD152

**Subject Item:** CD151 Furnace S Baghouse

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq 2$ and Pressure Drop Across the Baghouse $\leq 8$ inches w.c.. [N.J.A.C. 7:27-22.16(a)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [N.J.A.C. 7:27-22.16(o)]	None.
3	Manufacturer's Design Control Efficiency $\geq 95$ % by weight. [N.J.A.C. 7:27-22.16(a)]	Design Control Efficiency: Monitored by documentation of construction once initially, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	Other: Retain construction documentation.[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:** U301 Electric Melt Glass Furnace S, natural gas-boosted & controlled by CD151, or CD152

**Subject Item:** CD152 Furnace S Backup Baghouse

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall inspect and maintain the dust collector and replace the filter media as necessary to achieve the required particulate control efficiency. [N.J.A.C. 7:27-22.16(a)]	Monitored by visual determination at the manufacturer's specified frequency. [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. Record and maintain each inspection and maintenance event. Record the date of bag replacement. [N.J.A.C. 7:27-22.16(o)]	None.
2	Pressure Drop Across the Baghouse $\geq 2$ and Pressure Drop Across the Baghouse $\leq 8$ inches w.c.. [N.J.A.C. 7:27-22.16(a)]	Pressure Drop Across the Baghouse: Monitored by pressure drop instrument each week during operation. [N.J.A.C. 7:27-22.16(o)]	Pressure Drop Across the Baghouse: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The operator shall record, on a weekly basis, the pressure differential, the air pressure available to fire the pulse jets, and whether they are functioning. [N.J.A.C. 7:27-22.16(o)]	None.
3	Manufacturer's Design Control Efficiency $\geq 95$ % by weight. [N.J.A.C. 7:27-22.16(a)]	Design Control Efficiency: Monitored by documentation of construction once initially, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	Other: Retain construction documentation.[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:** U301 Electric Melt Glass Furnace S, natural gas-boosted & controlled by CD151, or CD152

**Operating Scenario:** OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>STACK TESTING SUMMARY The permittee shall conduct a stack test at least 18 months prior to the expiration of the renewed operating permit using an approved protocol to demonstrate compliance with emission limits for VOC, NO<sub>x</sub>, CO, SO<sub>2</sub>, TSP and PM-10 as specified in the compliance plan for for U301:OS1 and OS2 as well as the NO<sub>x</sub> RACT limit in U301:OS Summary. Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>The compliance monitoring by stack testing of emissions from the production of either soda lime glass or borosilicate specialty glass, shall be conducted for just the commercial glass in production at the time compliance stack testing is required by the permit. An additional compliance stack test shall be conducted within 12 months of the start of commercial production of the other type glass in this furnace. [N.J.A.C. 7:27-22.16(a)]</p>	Other: Monitoring as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping as required under the applicable operating scenario(s). [N.J.A.C. 7:27-22.16(o)].	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 at least 30 months prior to the expiration of the approved operating permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: <a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>. Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27-22.18(e)] and . [N.J.A.C. 7:27-22.18(h)]</p>
2	This furnace is permitted to produce soda lime or borosilicate glass. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	The daily glass pull rate for furnace S shall not exceed 34.8 tons/day with a minimum of 20% by weight glass cullet, based on stack tests. [N.J.A.C. 7:27-22.16(a)]	Monitored by material feed/flow monitoring daily. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system at no required frequency. [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
4	The permittee shall adjust the combustion process of the furnace in accordance with N.J.A.C. 7:27-19.16 before May 1 of each calendar year. [N.J.A.C. 7:27-19.10(e)]	Other: The owner or operator shall: (1) Inspect the burner, and clean or replace any components of the burner necessary to minimize total emissions of NOx and CO; (2) Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and (3) Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly. As indicated in N.J.A.C. 7:27-19.16(b), an exceedance of an emission limit which occurs during an adjustment of the combustion process under (2) or (3) above is not a violation.[N.J.A.C. 7:27-19.16(a)].	Recordkeeping by manual logging of parameter or storing data in a computer data system annually. The permittee shall record the date and times of the adjustment; the name, title and affiliation of the person who made the adjustment; the concentration of NOx and CO in the effluent stream in ppm after each adjustment was made; and the concentration of O2 at which the NOx and CO concentrations were measured. [N.J.A.C. 7:27-19.16(c)]	None.
5	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.
6	NOx (Total) <= 4 lb/ton of glass removed. Glass Furnace S is a specialty container glass manufacturing furnace. [N.J.A.C. 7:27-19.10(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on the average of three Department validated stack test runs. See the stack testing requirements elsewhere in OS Summary. [N.J.A.C. 7:27-19.17(d)]	NOx (Total): Recordkeeping by stack test results prior to permit expiration date. See the stack testing requirements elsewhere in OS Summary. [N.J.A.C. 7:27-19.19(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements elsewhere in OS Summary. [N.J.A.C. 7:27-22.16(o)]
7	VOC (Total) <= 2.62 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	NOx (Total) <= 22.9 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	CO <= 4.94 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	SO2 <= 29.8 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	TSP <= 11.9 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	PM-10 (Total) <= 0.94 tons/yr based on 8,760 hours per year operation. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	PM-2.5 (Total) <= 0.94 tons/yr based on the emissions limit of PM-10. [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:** U301 Electric Melt Glass Furnace S, natural gas-boasted & controlled by CD151, or CD152

**Operating Scenario:** OS1 Production of Borosilicate Tubing, controlled by dust collector CD151, or CD152.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD151 and CD152. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	SO <sub>2</sub> ≤ 2,000 ppm <sub>dv</sub> . [N.J.A.C. 7:27-7.2(b)1]	None.	None.	None.
3	SO <sub>2</sub> ≤ 60 lb per any 60-minute period. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
4	SO <sub>2</sub> ≤ 120 lb/hr at any instant. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
5	Particulate Emissions ≤ 5.68 lb/hr while producing borosilicate glass. [N.J.A.C. 7:27-6.2(b)]	None.	None.	None.
6	Maximum Gross Heat Input ≤ 5.1 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.
7	Natural gas shall be the only fossil fuel permitted for this unit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	Natural Gas Usage ≤ 43.8 MMft <sup>3</sup> /yr per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by strip chart or data acquisition (DAS) system continuously and for every consecutive 12-month period. Fuel use for any 12 consecutive months is computed by adding the fuel consumed in a given month to that consumed in the preceding 11 months. The permittee will select the time period for accounting, such as fiscal month, calendar month, or production month. Once selected, the period must not be changed without prior approval from NJDEP. [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
9	VOC (Total) <= 0.6 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
10	NOx (Total) <= 5.11 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
11	CO <= 1.13 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	SO2 <= 6.8 lb/hr. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	TSP <= 2.72 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
14	PM-10 (Total) <= 0.21 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
15	PM-2.5 (Total) <= 0.21 lb/hr (based on the emissions limit of PM-10). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP210001

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

**Emission Unit:** U301 Electric Melt Glass Furnace S, natural gas-boosted & controlled by CD151, or CD152

**Operating Scenario:** OS2 Production of Soda Lime Tubing, controlled by dust collector CD151, or CD152.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Emissions from this operating scenario are controlled by dust collector CD151 and CD152. Dust collector fan need operate only while raw material is being processed (e.g., received, transferred or weighed.) [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	SO <sub>2</sub> ≤ 2,000 ppm <sub>dv</sub> . [N.J.A.C. 7:27-7.2(b)1]	None.	None.	None.
3	SO <sub>2</sub> ≤ 60 lb per any 60-minute period. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
4	SO <sub>2</sub> ≤ 120 lb/hr at any instant. [N.J.A.C. 7:27-7.2(b)2]	None.	None.	None.
5	Particulate Emissions ≤ 5.68 lb/hr while producing borosilicate glass. [N.J.A.C. 7:27-6.2(b)]	None.	None.	None.
6	Maximum Gross Heat Input ≤ 5.1 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.
7	Natural gas shall be the only fossil fuel permitted for this unit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	Natural Gas Usage ≤ 43.8 MMft <sup>3</sup> per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by strip chart or data acquisition (DAS) system continuously and for every consecutive 12-month period. Fuel use for any 12 consecutive months is computed by adding the fuel consumed in a given month to that consumed in the preceding 11 months. The permittee will select the time period for accounting, such as fiscal month, calendar month, or production month. Once selected, the period must not be changed without prior approval from NJDEP. [N.J.A.C. 7:27-22.16(o)]	None.

BOP210001

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

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	VOC (Total) <= 0.6 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
10	NOx (Total) <= 5.11 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
11	CO <= 1.13 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
12	SO2 <= 6.8 lb/hr. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
13	TSP <= 2.72 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
14	PM-10 (Total) <= 3.19 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]
15	PM-2.5 (Total) <= 3.19 lb/hr (based on the emissions limit of PM-10). [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by stack emission testing prior to permit expiration date, based on each of three Department validated stack test runs. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by stack test results upon occurrence of event. See the stack testing requirements in OS Summary. [N.J.A.C. 7:27-22.16(o)]	None.

BOP210001

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

**Emission Unit:** U301 Electric Melt Glass Furnace S, natural gas-boosted & controlled by CD151, or CD152

**Operating Scenario:** OS3 Natural Gas-Fired Burners on S1 Forehearth and Forming Bowl on S Furnace

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum Gross Heat Input <= 0.6 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.
2	Natural gas shall be the only fossil fuel permitted for this unit. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Natural Gas Usage <= 5.2 MMft <sup>3</sup> per any consecutive 12-month period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	NOx (Total) <= 0.06 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

**BOP210001**

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

**Emission Unit:** U301 Electric Melt Glass Furnace S, natural gas-boosted & controlled by CD151, or CD152

**Operating Scenario:** OS4 Natural Gas-Fired Burners on S2 Forehearth and Forming Bowl on S Furnace

The requirements for this item are identical to those for: U301 OS3

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

**Facility Name (AIMS):** Nipro PharmaPackaging Americas Corp.

**Facility ID (AIMS):** 75505

**Street** 1633 WHEATON AVE  
**Address:** MILLVILLE, NJ 08332

**Mailing** 1633 WHEATON AVE  
**Address:** MILLVILLE, NJ 08332

**County:** Cumberland

**Location** Manufacturer of speciality glass - soda lime  
**Description:** and borosilicate recipes. Pressed and blown  
glass and glassware. Tube Draw facility  
located at 1633 Wheaton Ave. and Tubing  
Products (vial) facility located at 1200 N. 10th  
St.

<b>State Plane Coordinates:</b>	
<b>X-Coordinate:</b>	342,290
<b>Y-Coordinate:</b>	211,045
<b>Units:</b>	New Jersey State Plane 8
<b>Datum:</b>	NAD83
<b>Source Org.:</b>	DEP-GIS
<b>Source Type:</b>	DEP Program Database

<b>Industry:</b>	
<b>Primary SIC:</b>	3229
<b>Secondary SIC:</b>	
<b>NAICS:</b>	327212

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

**Contact Type: Air Permit Information Contact**

**Organization:** Nipro PharmaPackaging Americas Corp.      **Org. Type:** Corporation  
**Name:** Craig Gauthier      **NJ EIN:** 80598700002  
**Title:** EHS Engineer  
**Phone:** (856) 825-1400 x3061      **Mailing Address:** 1633 Wheaton Ave  
**Fax:** ( ) - x      Millville, NJ 08332  
**Other:** (856) 777-2863 x  
**Type:** Mobile  
**Email:** craig.gauthier@nipro-group.com

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**Contact Type: Consultant**

**Organization:** Ramboll US Consulting Inc.      **Org. Type:** Corporation  
**Name:** Mikhil Shetty      **NJ EIN:**  
**Title:** Senior Managing Consultant  
**Phone:** (314) 590-2975 x      **Mailing Address:** 1807 Park 270 Drive  
**Fax:** ( ) - x      Suite 450  
**Other:** (573) 368-9816 x      St Louis, MO 63146  
**Type:**  
**Email:** mshetty@ramboll.com

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**Contact Type: Environmental Officer**

**Organization:** Nipro PharmaPackaging Americas Corp.      **Org. Type:** Corporation  
**Name:** Craig Gauthier      **NJ EIN:** 80598700002  
**Title:** EHS Engineer  
**Phone:** (856) 825-1400 x3061      **Mailing Address:** 1633 Wheaton Ave  
**Fax:** ( ) - x      Millville, NJ 08332  
**Other:** (856) 777-2863 x  
**Type:** Mobile  
**Email:** craig.gauthier@nipro-group.com



**Contact Type: Fees/Billing Contact**

**Org. Type:** Corporation

NJ EIN: 80598700002

**Mailing Address:** 1633 Wheaton Ave  
Millville, NJ 08332

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Millville, NJ 08332

**Org. Type:** Corporation

NJ EIN: 80598700002

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**Org. Type:** Corporation

NJ EIN: 80598700002

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Millville, NJ 08332

**Mailing Address:** 1633 Wheaton Ave  
Millville, NJ 08332

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

**Contact Type: Operator**

**Organization:** Nipro PharmaPackaging Americas Corp.

**Org. Type:** Corporation

**Name:**

**NJ EIN:** 80598700002

**Title:**

**Phone:** (856) 825-1400 x

**Mailing** 1633 Wheaton Avenue

**Fax:** (856) 293-8114 x

**Address:** Millville, NJ 08332

**Other:** ( ) - x

**Type:**

**Email:**

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

**Organization:** Nipro PharmaPackaging Americas Corp.

**Org. Type:** Corporation

**Name:**

**NJ EIN:** 80598700002

**Title:**

**Phone:** (856) 825-1400 x

**Mailing** Millville Tube Draw

**Fax:** (856) 293-8114 x

**Address:** 1633 Wheaton Avenue

**Other:** ( ) - x

Millville, NJ 08332

**Type:**

**Email:**

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**Contact Type: Responsible Official**

**Organization:** Nipro PharmaPackaging Americas Corp.

**Org. Type:** Corporation

**Name:** Godfrey Aschmann

**NJ EIN:** 80598700002

**Title:** General Manager

**Phone:** (856) 825-1400 x

**Mailing** 1633 Wheaton Ave

**Fax:** ( ) - x

**Address:** Millville, NJ 08332

**Other:** (609) 319-4931 x

**Type:**

**Email:** godfrey.aschmann@nipro-group.com

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

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS5	Alley Burners (<1 MMBtu/hr heat input)	Fuel Combustion Equipment (Other)	Plant Draw Building	0.370	6.430	1.610	0.103	0.530	0.530	0.000	0.01000000	0.000
IS8	Electric arc welding machines (uses welding rod/wire <=12 lbs/day)	Other Equipment	Plant wide	0.000	0.000	0.000	0.000	0.100	0.100	0.000	0.00000000	0.000
IS9	Miscellaneous machining parts: lathes, buffers, drill presses	Other Equipment	Plant wide	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.00000000	0.000
IS14	Diesel storage tanks (integral w/ Em Gens) (< 2,000 gallons)	Storage Vessel	Plant wide	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
IS15	Small "Modine" Plant Natural Gas Heaters (< 1 MM Btu/hr heat input)	Fuel Combustion Equipment (Other)	Plant wide	0.200	5.000	1.200	0.030	0.700	0.700	0.000	0.00000000	0.000
IS25	Natural gas fired Lehrs (12) (<= 0.15 MMBTU/hr heat input)	Fuel Combustion Equipment (Other)	Plant Vial Building	0.043	0.727	0.309	0.005	0.059	0.059	0.000	0.00000000	0.000
IS26	Ammonium Sulfate Solution sprays (12) (raw material used <= 50 lbs/hr)	Other Equipment	Plant Vial Building	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.870
IS27	NG-fired Ribbon Burners & Glazers (85) (<1.0 MMBtu/hr heat input)	Fuel Combustion Equipment (Other)	Plant Draw Building	0.341	5.860	2.860	0.037	0.472	0.472	0.000	0.02000000	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)
IS28	Vial Cutting Lines (12) (< 1 MMBtu/hr heat input)	Fuel Combustion Equipment (Other)	Tube Vial Building	0.040	0.730	0.310	0.005	0.060	0.060	0.000	0.00000000	0.000
IS29	Cold End Application Sprays (10) (raw material used <= 50 lbs/hr)	Other Equipment	Plant wide	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000
Total				1.129	18.747	6.289	0.180	2.171	2.171	0.000	0.03000000	0.870

**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>
E61	1.1MMBtu SH	1.1 MMBtu/hr space heater	Fuel Combustion Equipment (Other)			No		
E62	100-01	Furnace X (NG boost: 4.1 MMBTU/hr)	Glass Manufacturing Furnace	PCP030018	9/1/1988	No	10/1/2001	
E70	L Bowl	Natural-Gas Fired Burners on Glass Conditioner, Forming Bowl, and Overflow Weir on L Furnace	Fuel Combustion Equipment (Other)	PCP040001	1/1/2003	No		
E72	P Bowl	Natural-Gas Fired Burners on Glass Conditioner, Forming Bowl, and Overflow Weir on P Furnace	Fuel Combustion Equipment (Other)		6/1/1998	No		
E73	Q Bowl	Natural-Gas Fired Burners on Glass Conditioner, Forming Bowl, and Overflow Weir on Q Furnace	Fuel Combustion Equipment (Other)	PCP030013	8/1/2001	No		
E74	R1 Bowl	Natural-Gas Fired Burner on Glass Conditioner 1, Forming Bowl 1, and Overflow Weir 1 on R Furnace	Fuel Combustion Equipment (Other)	PCP030012	8/1/2001	No		
E80	S1-Crusher	Cullet Crusher	Manufacturing and Materials Handling Equipment		3/1/1996	No		
E81	S2-Crusher	Cullet Crusher	Manufacturing and Materials Handling Equipment		3/1/1996	No		

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

<b>Equip. NJID</b>	<b>Facility's Designation</b>	<b>Equipment Description</b>	<b>Equipment Type</b>	<b>Certificate Number</b>	<b>Install Date</b>	<b>Grand- Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>Equip. Set ID</b>
E82	S1-Crusher#2	Cullet Crusher #2 on Line S1	Manufacturing and Materials Handling Equipment	BOP140003	9/1/2014	No		
E83	S2-Crusher#2	Cullet Crusher #2 on Line S2	Manufacturing and Materials Handling Equipment	BOP140003	9/1/2014	No		
E85	L-Crusher	Cullet Crusher	Manufacturing and Materials Handling Equipment		3/1/1996	No		
E86	Q-Crusher1	Cullet Crusher	Manufacturing and Materials Handling Equipment		3/1/1996	No		
E87	Q-Crusher2	Cullet Crusher	Manufacturing and Materials Handling Equipment		3/1/1996	No		
E88	R1-Crusher1	Cullet Crusher #1 associated with production line R1	Manufacturing and Materials Handling Equipment		3/1/1996	No		
E89	R1-Crusher2	Cullet Crusher #2 associated with production line R1	Manufacturing and Materials Handling Equipment		3/1/1996	No		
E90	P-Crusher1	Cullet Crusher	Manufacturing and Materials Handling Equipment		3/1/1996	No		
E91	P-Vision	Cullet Crusher	Manufacturing and Materials Handling Equipment		1/1/2005	No		

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

<b>Equip. NJID</b>	<b>Facility's Designation</b>	<b>Equipment Description</b>	<b>Equipment Type</b>	<b>Certificate Number</b>	<b>Install Date</b>	<b>Grand- Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>Equip. Set ID</b>
E92	M-Crusher1	Cullet Crusher	Manufacturing and Materials Handling Equipment		7/15/2006	No		
E93	M-Vision	Cullet Crusher	Manufacturing and Materials Handling Equipment		7/15/2006	No		
E94	L-CRUSHER2	Cullet Crusher	Manufacturing and Materials Handling Equipment	BOP160003	10/30/2016	No		
E95	NSVSL Crush2	NSV/SL Crusher 2	Manufacturing and Materials Handling Equipment			No		
E96	NSVSL Crush3	NSV/SL Crusher 3	Manufacturing and Materials Handling Equipment			No		
E97	W33 Conv	W-33 Conveyor	Manufacturing and Materials Handling Equipment			No		
E98	Cullet Crush	Cullet Crusher	Manufacturing and Materials Handling Equipment			No		
E99	NSVSL Crush1	NSV/SL Crusher 1	Manufacturing and Materials Handling Equipment			No		
E112	LFurnace	L Furnace (NG boost: 4.1 MMBTU/hr)	Glass Manufacturing Furnace	095773/ PCP040001		No	1/1/2003	

**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>
E113	PFurnace	P Furnace (NG boost: 4.1 MMBTU/hr)	Glass Manufacturing Furnace	095774/ PCP030010		No	6/1/1998	
E117	008-02	Mixer #1 Bag Filter	Manufacturing and Materials Handling Equipment	110587/ PCP030004		No	10/1/1997	
E118	008-03	Mixer #2 with Torret TD-1620B	Manufacturing and Materials Handling Equipment	110587/ PCP030004		No	10/1/1997	
E119	009-01	Bin #1A Plant #3 Batch House	Storage Vessel	110588/ PCP030005		No		
E120	009-02	Bin #1B Plant #3 Batch House	Storage Vessel	01-97-3438/ PCP030008		No	10/1/1997	
E121	009-03	Bin #2 Plant #3 Batch House	Storage Vessel	110588/ PCP030005		No		
E122	009-04	Bin #3A Plant #3 Batch House	Storage Vessel	110588/ PCP030005		No		
E123	009-05	Bin #3B Plant #3 Batch House	Storage Vessel	110588/ PCP030005		No		
E124	010-01	Bin #4 Plant #3 Batch House	Storage Vessel	105694/ PCP030006		No		
E125	010-02	Bin #5 Plant #3 Batch House	Storage Vessel	105694/ PCP030006		No		
E126	010-03	Bin #6 Plant #3 Batch House	Storage Vessel	105694/ PCP030006		No		
E127	010-04	Bin #7 Plant #3 Batch House	Storage Vessel	105694/ PCP030006		No		
E128	010-05	Bin #8 Plant #3 Batch House	Storage Vessel	105694/ PCP030006		No		
E129	010-06	Bin #9 Plant #3 Batch House	Storage Vessel	105694/ PCP030006		No		
E130	011-01	Q Furnace (NG boost: 2.5 MMBTU/hr)	Glass Manufacturing Furnace	114360/ PCP030013		No	8/1/2001	



**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>
E131	012-01	R Furnace (NG Boost: 5.1 MMBTU/hr	Glass Manufacturing Furnace	114361/ PCP030012		No	8/1/2001	
E132	013-01	Bin 0 Batch House #3	Storage Vessel	115767/ PCP030007	12/1/1993	No	1/1/2003	
E133	014-01	Bin 10 Batch House #3	Storage Vessel	121320/ PCP030016	12/1/1993	No	1/1/2003	
E134	BH bin	Batch House Bin	Storage Vessel	BOP130004	12/1/2013	No		
E143	156-1	Bin 41	Storage Vessel	01-97-3436/ PCP030016	10/1/1997	No	1/1/2003	
E144	157-1	Bin 40	Storage Vessel	01-97-3435/ PCP030016	10/1/1997	No	1/1/2003	
E145	158-1	33 Gathering Conveyor	Manufacturing and Materials Handling Equipment	01-97-3437/ PCP030011	10/1/1997	No		
E146	158-2	33 Mixer Elevator	Manufacturing and Materials Handling Equipment	01-97-3437/ PCP030011	10/1/1997	No		
E147	158-3	33 Mixer #5	Manufacturing and Materials Handling Equipment	01-97-3437/ PCP030011	10/1/1997	No		
E148	158-4	33 Batch Can Filling	Manufacturing and Materials Handling Equipment	01-97-3437/ PCP030011	10/1/1997	No		
E149	008-04	S Conveyor	Manufacturing and Materials Handling Equipment	01-97-3439/ PCP030009	10/1/1997	No	9/1/2013	

**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>
E150	008-05	S Elevator	Manufacturing and Materials Handling Equipment	01-97-3439/ PCP030009	10/1/1997	No	9/1/2013	
E151	008-06	Gathering Conveyor	Manufacturing and Materials Handling Equipment	110587/ PCP030004	1/1/1982	No		
E152	008-07	Mixer #3	Manufacturing and Materials Handling Equipment	110587/ PCP030004	1/1/1982	No		
E153	158-5	33 Batch Elevator	Manufacturing and Materials Handling Equipment	PCP030011	1/1/2000	No		
E154	158-6	33 Batch Conveyor	Manufacturing and Materials Handling Equipment	PCP030011	1/1/2000	No		
E155	158-7	33-X Furnace Q Bin	Manufacturing and Materials Handling Equipment	PCP030011	1/1/2000	No		
E156	158-8	33-X Furnace R Bin	Manufacturing and Materials Handling Equipment	PCP030011	1/1/2000	No		
E157	EG-1	400 HP Emergency Generator No. 1	Emergency Generator	GEN040003	2/6/2003	No		
E158	EG-2	400 HP Emergency Generator No. 2	Emergency Generator	GEN040004	2/6/2003	No		

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

<b>Equip. NJID</b>	<b>Facility's Designation</b>	<b>Equipment Description</b>	<b>Equipment Type</b>	<b>Certificate Number</b>	<b>Install Date</b>	<b>Grand- Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>Equip. Set ID</b>
E159	S Hopper	Hopper for the S Furnace	Manufacturing and Materials Handling Equipment		1/1/1997	No		
E200		North Bucket Elevator	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E201		South Bucket Elevator	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E202		33-X Raw Elevator	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E203		North Minors Vacuum Conveyance System	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E204		Manual Dump Station A and B	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E205		Scale 1	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E206		Scale 2	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E207		Scale 3	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		

**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>
E208		Scale 4	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E209		Scale 5	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E210		Scale 6	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E211		Scale 7	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E212		Scale 8	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E213		Scale 9	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E214		Scale 10	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E215		33 Scale 40	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E216		33 Scale 41	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		

**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>
E217		33 Scale O	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E218		33 Scale 10	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E219		Minors Scale 1	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E220		Minors Scale 2	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E221		Minors Scale 3	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E222		Scale 33 M5	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E223	SC	Screw Conveyor	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E224	CLS1	Can Loading Station 1	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E225	CLS2	Can Loading Station 2	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		

**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>
E226	CLS3	Can Loading Station 3	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E227		33-X Minors Vacuum Conveyance Systemr	Manufacturing and Materials Handling Equipment	BOP050002	7/14/2006	Yes		
E301	Furnace S	Electric Melt Furnace	Glass Manufacturing Furnace	BOP130002	9/1/2013	No		
E302	S1-Fore	Electric and Gas combined heating on Furnace S Forehearth	Fuel Combustion Equipment (Other)	BOP130002	9/1/2013	No		
E303	S2-Fore	Electric and Gas combined heating on Furnace S Forehearth	Fuel Combustion Equipment (Other)	BOP130002	9/1/2013	No		
E402	TPB	Tubing Products Boiler	Boiler			Yes		
E513	EG-3	300 HP Emergency Generator No. 3	Emergency Generator	BOP060001	5/1/2006	No		
E514	VialCrusher	Glass Vial Crusher	Manufacturing and Materials Handling Equipment	BOP060001	5/1/2006	No		
E515	VialFeedElev	Vibratory Feeder/Elevator Associated with Vial Crusher	Manufacturing and Materials Handling Equipment	BOP060001	5/1/2006	No		
E516	EG-4	500 KW Emergency Generator No. 4	Emergency Generator	BOP140003	9/1/2013	No	9/1/2014	

**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>
E517	R2 Bowl	Natural-Gas Fired Burner on Glass Conditioner 2, Forming Bowl 2, and Overflow Weir 2 on R Furnace	Fuel Combustion Equipment (Other)		3/1/2022	No		
E518	R2-Crusher1	Cullet crusher #1 associated with production line R2	Manufacturing and Materials Handling Equipment		3/1/2022	No		
E519	R2-Crusher2	Cullet crusher#2 associated with production line R2	Manufacturing and Materials Handling Equipment		3/1/2022	No		
E520	S-Q/R Convyer	S to Q/R Conveyor connecting the S day bin to the Q and R conveyors	Manufacturing and Materials Handling Equipment		3/1/2022	No		

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E61 (Fuel Combustion Equipment (Other))  
Print Date: 4/5/2022

Make:	Nutemp Direct-Fired Gas Make-up Air Heater
Manufacturer:	Nutemp
Model:	NTMH1100
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1.10
Type of Heat Exchange:	Direct
Equipment Type Description:	Serial No. 12557

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

Comments:

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



75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E70 (Fuel Combustion Equipment (Other))  
Print Date: 4/5/2022

Make:	
Manufacturer:	Custom
Model:	Custom
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1.53
Type of Heat Exchange:	Direct
Equipment Type Description:	Natural-Gas Fired Burners on Glass Conditioner, Forming Bowl, and Overflow Weir

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

Comments:

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

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E72 (Fuel Combustion Equipment (Other))  
Print Date: 4/5/2022

Make:	
Manufacturer:	Custom
Model:	Custom
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1.53
Type of Heat Exchange:	Direct
Equipment Type Description:	Natural-Gas Fired Burners on Glass Conditioner, Forming Bowl, and Overflow Weir

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

Comments:

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

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E73 (Fuel Combustion Equipment (Other))  
Print Date: 4/5/2022

Make:	
Manufacturer:	Custom
Model:	Custom
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1.58
Type of Heat Exchange:	Direct
Equipment Type Description:	Natural-Gas Fired Burners on Glass Conditioner, Forming Bowl, and Overflow Weir

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

Comments:

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

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E74 (Fuel Combustion Equipment (Other))  
Print Date: 4/5/2022

Make:	
Manufacturer:	Custom
Model:	Custom
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1.58
Type of Heat Exchange:	Direct
Equipment Type Description:	Natural-Gas Fired Burners on Glass Conditioner, Forming Bowl, and Overflow Weir

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

Comments:

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

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E80 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	
Manufacturer:	Martin Sprocket & Gear, Inc.
Model:	M12
Type of Manufacturing and Materials Handling Equipment:	Cullet Crusher
Capacity:	3.35E+01
Units:	other units
Description (if other):	tons per day
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:	

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E81 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	
Manufacturer:	Martin Sprocket & Gear, Inc.
Model:	M12
Type of Manufacturing and Materials Handling Equipment:	Cullet Crusher
Capacity:	3.35E+01
Units:	other units
Description (if other):	tons per day
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:	

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E62 (Glass Manufacturing Furnace)  
Print Date: 4/5/2022

Make:	<input type="text"/>		
Manufacturer:	<input type="text"/>		
Model:	<input type="text"/>		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	<input type="text" value="4.10"/>		
Type of Heat Exchange:	<input type="text" value="Direct"/>		
Have you attached a diagram showing the location and/or the configuration of this equipment?	<div><input type="radio"/> Yes <input checked="" type="radio"/> No</div>		
	<div>Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? <div><input type="radio"/> Yes <input checked="" type="radio"/> No</div></div>		
Comments:	<input type="text" value="Furnace X"/>		

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

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E82 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	
Manufacturer:	Martin Sprocket & Gear, Inc.
Model:	M12
Type of Manufacturing and Materials Handling Equipment:	Cullet Crusher
Capacity:	3.35E+01
Units:	other units
Description (if other):	tons per day
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:	



75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E83 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	
Manufacturer:	Martin Sprocket & Gear, Inc.
Model:	M12
Type of Manufacturing and Materials Handling Equipment:	Cullet Crusher
Capacity:	3.35E+01
Units:	other units
Description (if other):	tons per day
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:	

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E85 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	<input type="text"/>
Manufacturer:	<input type="text" value="Martin Sprocket &amp; Gear, Inc."/>
Model:	<input type="text" value="M12"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Cullet Crusher"/>
Capacity:	<input type="text"/>
Units:	<input type="text" value=""/>
Description (if other):	<input type="text"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text" value="No"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text" value="No"/>
Comments:	

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E86 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	<input type="text"/>
Manufacturer:	<input type="text" value="Martin Sprocket &amp; Gear, Inc."/>
Model:	<input type="text" value="M12"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Cullet Crusher"/>
Capacity:	<input type="text"/>
Units:	<input type="text" value=""/>
Description (if other):	<input type="text"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text" value="No"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text" value="No"/>
Comments:	

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E90 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	<input type="text"/>
Manufacturer:	<input type="text" value="Martin Sprocket &amp; Gear, Inc."/>
Model:	<input type="text" value="M12"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Cullet Crusher"/>
Capacity:	<input type="text"/>
Units:	<input type="text" value=""/>
Description (if other):	<input type="text"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text" value="No"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text" value="No"/>
Comments:	

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E87 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	<input type="text"/>
Manufacturer:	<input type="text" value="Martin Sprocket &amp; Gear, Inc."/>
Model:	<input type="text" value="M12"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Cullet Crusher"/>
Capacity:	<input type="text"/>
Units:	<input type="text" value=""/>
Description (if other):	<input type="text"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text" value="No"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text" value="No"/>
Comments:	

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E88 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	
Manufacturer:	Martin Sprocket & Gear, Inc.
Model:	M12
Type of Manufacturing and Materials Handling Equipment:	Cullet Crusher
Capacity:	
Units:	
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:	The facility requests that the Facility's designation and Equip Description for this unit be updated. No other changes are requested.

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E89 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	
Manufacturer:	Martin Sprocket & Gear, Inc.
Model:	M12
Type of Manufacturing and Materials Handling Equipment:	Cullet Crusher
Capacity:	
Units:	
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:	The facility requests that the Facility's designation and Equip Description for this unit be updated. No other changes are requested.

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E91 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	<input type="text"/>
Manufacturer:	<input type="text" value="Martin Sprocket &amp; Gear, Inc."/>
Model:	<input type="text" value="M12"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Cullet Crusher"/>
Capacity:	<input type="text"/>
Units:	<input type="text" value=""/>
Description (if other):	<input type="text"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text" value="No"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text" value="No"/>
Comments:	



**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E92 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	<input type="text"/>
Manufacturer:	<input type="text" value="Martin Sprocket &amp; Gear, Inc."/>
Model:	<input type="text" value="M12"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Cullet Crusher"/>
Capacity:	<input type="text"/>
Units:	<input type="text" value=""/>
Description (if other):	<input type="text"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text" value="No"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text" value="No"/>
Comments:	

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E93 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	<input type="text"/>
Manufacturer:	<input type="text" value="Martin Sprocket &amp; Gear, Inc."/>
Model:	<input type="text" value="M12"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Cullet Crusher"/>
Capacity:	<input type="text"/>
Units:	<input type="text" value=""/>
Description (if other):	<input type="text"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text" value="No"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text" value="No"/>
Comments:	

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E94 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	
Manufacturer:	Martin Sprocket & Gear, Inc.
Model:	M12
Type of Manufacturing and Materials Handling Equipment:	Cullet Crusher
Capacity:	3.35E+01
Units:	other units
Description (if other):	tons per day
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:	

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E95 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	
Manufacturer:	Lancaster/Kercher
Model:	
Type of Manufacturing and Materials Handling Equipment:	Crusher
Capacity:	1.67E+01
Units:	other units
Description (if other):	tons/hr
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:	

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E96 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	
Manufacturer:	Unknown
Model:	
Type of Manufacturing and Materials Handling Equipment:	Crusher
Capacity:	1.67E+01
Units:	other units
Description (if other):	tons/hr
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:	

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E97 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	
Manufacturer:	Eriez Magnetics
Model:	
Type of Manufacturing and Materials Handling Equipment:	Conveyor, Serial No. 97538
Capacity:	1.11E+01
Units:	other units
Description (if other):	tons/hr
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:	

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E98 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	
Manufacturer:	Martin Sprocket & Gear, Inc.
Model:	M12
Type of Manufacturing and Materials Handling Equipment:	Cullet Crusher
Capacity:	6.00E+00
Units:	other units
Description (if other):	tons/hr
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:	

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E99 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	
Manufacturer:	Lancaster/Kercher
Model:	
Type of Manufacturing and Materials Handling Equipment:	Crusher
Capacity:	1.67E+01
Units:	other units
Description (if other):	tons/hr
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:	



75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E112 (Glass Manufacturing Furnace)  
Print Date: 4/5/2022

Make:		
Manufacturer:		
Model:		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	<input type="text" value="4.10"/>	
Type of Heat Exchange:	<input type="text" value="Direct"/>	
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:	<input type="text" value="LFurnace - Unit 143"/>	

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

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E113 (Glass Manufacturing Furnace)  
Print Date: 4/5/2022

Make:	<input type="text"/>	
Manufacturer:	<input type="text"/>	
Model:	<input type="text"/>	
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	<input type="text" value="4.10"/>	
Type of Heat Exchange:	<input type="text" value="Direct"/>	
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:	<input type="text" value="Furnace P - U144"/>	

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

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E117 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	
Manufacturer:	Voelller
Model:	CM650
Type of Manufacturing and Materials Handling Equipment:	Munsen Mixer
Capacity:	2.00E+03
Units:	other units
Description (if other):	lbs/batch
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:	U147

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E118 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	
Manufacturer:	Mixer System
Model:	
Type of Manufacturing and Materials Handling Equipment:	Munsen Mixer
Capacity:	2.00E+03
Units:	other units
Description (if other):	lbs/batch
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:	U147

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E119 (Storage Vessel)  
Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Bin

Design Capacity:

10,600

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

25.00

Length (ft):

Width (ft):

Diameter (ft):

23.20

Other Dimension

Description:

Value:

Units:

Fill Method:

Top Pipe

Description (if other):

Maximum Design Fill Rate:

9.00

Units:

ft^3/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E119 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E120 (Storage Vessel)

Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Silo

Design Capacity:

3,220

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

25.00

Length (ft):

Width (ft):

Diameter (ft):

12.80

Other Dimension

Description:

Value:

Units:

Fill Method:

Top Pipe

Description (if other):

Maximum Design Fill Rate:

9.00

Units:

ft^3/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E120 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:



## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E121 (Storage Vessel)

Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Bin

Design Capacity:

7,360

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

25.00

Length (ft):

Width (ft):

Diameter (ft):

19.40

Other Dimension

Description:

Value:

Units:

Fill Method:

Top Pipe

Description (if other):

Maximum Design Fill Rate:

9.00

Units:

ft^3/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E121 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E122 (Storage Vessel)  
Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Bin

Design Capacity:

3,220

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Yes

Exposed to Sunlight?

Shell Color:

White

Description (if other):

Shell Condition:

Paint Condition:

Good

Shell Construction:

Is the Shell Insulated?

No

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

25.00

Length (ft):

Width (ft):

Diameter (ft):

12.80

Other Dimension

Description:

Value:

Units:

Fill Method:

Top Pipe

Description (if other):

Maximum Design Fill Rate:

9.00

Units:

ft^3/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E122 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E123 (Storage Vessel)

Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Bin

Design Capacity:

3,220

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Yes

Exposed to Sunlight?

Shell Color:

White

Description (if other):

Shell Condition:

Paint Condition:

Good

Shell Construction:

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):

25.00

Length (ft):

Width (ft):

Diameter (ft):

12.80

Other Dimension

Description:

Value:

Units:

Fill Method:

Top Pipe

Description (if other):

Maximum Design Fill Rate:

9.00

Units:

ft^3/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E123 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E124 (Storage Vessel)

Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Bin

Design Capacity:

2,550

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

25.00

Length (ft):

Width (ft):

Diameter (ft):

11.40

Other Dimension

Description:

Value:

Units:

Fill Method:

Top Pipe

Description (if other):

Maximum Design Fill Rate:

9.00

Units:

ft^3/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E124 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:



## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E125 (Storage Vessel)

Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Bin

Design Capacity:

2,550

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

25.00

Length (ft):

Width (ft):

Diameter (ft):

11.40

Other Dimension

Description:

Value:

Units:

Fill Method:

Top Pipe

Description (if other):

Maximum Design Fill Rate:

9.00

Units:

ft^3/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E125 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E126 (Storage Vessel)

Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Bin

Design Capacity:

5,100

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

25.00

Length (ft):

Width (ft):

Diameter (ft):

16.00

Other Dimension

Description:

Value:

Units:

Fill Method:

Top Pipe

Description (if other):

Maximum Design Fill Rate:

9.00

Units:

ft^3/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E126 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E127 (Storage Vessel)

Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Bin

Design Capacity:

6,700

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

25.00

Length (ft):

Width (ft):

Diameter (ft):

18.50

Other Dimension

Description:

Value:

Units:

Fill Method:

Top Pipe

Description (if other):

Maximum Design Fill Rate:

9.00

Units:

ft^3/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E127 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E128 (Storage Vessel)

Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Bin

Design Capacity:

2,350

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

25.00

Length (ft):

Width (ft):

Diameter (ft):

11.00

Other Dimension

Description:

Value:

Units:

Fill Method:

Top Pipe

Description (if other):

Maximum Design Fill Rate:

9.00

Units:

ft^3/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E128 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:



## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E129 (Storage Vessel)

Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Bin

Design Capacity:

940

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

25.00

Length (ft):

Width (ft):

Diameter (ft):

7.00

Other Dimension

Description:

Value:

Units:

Fill Method:

Top Pipe

Description (if other):

Maximum Design Fill Rate:

9.00

Units:

ft^3/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E129 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E130 (Glass Manufacturing Furnace)  
Print Date: 4/5/2022

Make:		
Manufacturer:		
Model:		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	<input type="text" value="2.50"/>	
Type of Heat Exchange:	<input type="text" value="Direct"/>	
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:	<input type="text" value="Q Furnace - Unit 150"/>	

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

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E131 (Glass Manufacturing Furnace)  
Print Date: 4/5/2022

Make:	<input type="text"/>	
Manufacturer:	<input type="text"/>	
Model:	<input type="text"/>	
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	<input type="text" value="5.10"/>	
Type of Heat Exchange:	<input type="text" value="Direct"/>	
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.

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E132 (Storage Vessel)

Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Bin

Design Capacity:

2,000

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

40.00

Length (ft):

Width (ft):

Diameter (ft):

8.00

Other Dimension

Description:

Value:

Units:

Fill Method:

Top Pipe

Description (if other):

Maximum Design Fill Rate:

5.00

Units:

ft^3/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E132 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E133 (Storage Vessel)

Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Bin

Design Capacity:

2,000

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

40.00

Length (ft):

Width (ft):

Diameter (ft):

8.00

Other Dimension

Description:

Value:

Units:

Fill Method:

Top Pipe

Description (if other):

Maximum Design Fill Rate:

5.00

Units:

ft^3/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E133 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:



## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E134 (Storage Vessel)

Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Bin

Design Capacity:

54

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Rectangular

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

Length (ft):

5.00

Width (ft):

4.00

Diameter (ft):

3.00

Other Dimension

Description:

Value:

Units:

Fill Method:

Description (if other):

Maximum Design Fill Rate:

Units:

ft^3/min

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

Open Top

Roof Type:

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E134 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E143 (Storage Vessel)

Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Silo

Design Capacity:

2,200

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

47.00

Length (ft):

Width (ft):

Diameter (ft):

8.00

Other Dimension

Description:

Value:

Units:

Fill Method:

Top Pipe

Description (if other):

Maximum Design Fill Rate:

5.00

Units:

ft^3/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E143 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E144 (Storage Vessel)

Print Date: 4/5/2022

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

Solids Only

Storage Vessel Type:

Silo

Design Capacity:

2,200

Units:

ft^3

Ground Location:

Above Ground

Is the Shell of the Equipment

Exposed to Sunlight?

Shell Color:

Description (if other):

Shell Condition:

Paint Condition:

Shell Construction:

Is the Shell Insulated?

Type of Insulation:

Insulation Thickness (in):

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

Shape of Storage Vessel:

Cylindrical

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

47.00

Length (ft):

Width (ft):

Diameter (ft):

8.00

Other Dimension

Description:

Value:

Units:

Fill Method:

Top Pipe

Description (if other):

Maximum Design Fill Rate:

5.00

Units:

ft^3/min

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

Roof

Roof Type:

Horizontal fixed roof tank

Roof Height (From Roof  
Bottom

to Roof Top) (ft):

Roof Construction:

Primary Seal Type:

Secondary Seal Type:

Total Number of Seals:

Roof Support:

Does the storage vessel  
have a Vapor Return Loop?

Does the storage vessel

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E144 (Storage Vessel)**

**Print Date: 4/5/2022**

Does the storage vessel  
have a Conservation Vent?

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

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

Comments:

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E145 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	NA
Manufacturer:	NA
Model:	NA
Type of Manufacturing and Materials Handling Equipment:	conveyor
Capacity:	5.00E+00
Units:	other units
Description (if other):	tons per hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	33-X Conveyor

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E146 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	NA
Manufacturer:	NA
Model:	NA
Type of Manufacturing and Materials Handling Equipment:	elevator
Capacity:	5.00E+00
Units:	other units
Description (if other):	tons per hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	33-X Elevator



75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E147 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	NA
Manufacturer:	NA
Model:	NA
Type of Manufacturing and Materials Handling Equipment:	mixer
Capacity:	5.00E+00
Units:	other units
Description (if other):	tons per hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	33-X mixer

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E148 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	NA
Manufacturer:	NA
Model:	NA
Type of Manufacturing and Materials Handling Equipment:	can filling
Capacity:	5.00E+00
Units:	other units
Description (if other):	tons per hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	33-X can filling

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E149 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	NA
Manufacturer:	NA
Model:	NA
Type of Manufacturing and Materials Handling Equipment:	conveyor
Capacity:	5.00E+00
Units:	other units
Description (if other):	tons per hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	008 K Conveyor

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E150 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	NA
Manufacturer:	NA
Model:	NA
Type of Manufacturing and Materials Handling Equipment:	elevator
Capacity:	5.00E+00
Units:	other units
Description (if other):	tons per hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	008 Elevator

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E151 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	NA
Manufacturer:	NA
Model:	NA
Type of Manufacturing and Materials Handling Equipment:	008 Conveyor
Capacity:	5.00E+00
Units:	other units
Description (if other):	tons per hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	008 Conveyor

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E152 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	NA
Manufacturer:	Mixer System
Model:	NA
Type of Manufacturing and Materials Handling Equipment:	Munsen Mixer
Capacity:	2.00E+03
Units:	other units
Description (if other):	lbs/batch
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:	U147

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E153 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	NA
Manufacturer:	NA
Model:	NA
Type of Manufacturing and Materials Handling Equipment:	elevator
Capacity:	5.00E+00
Units:	other units
Description (if other):	tons per hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	33-X Mixed Bucket Elevator

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E154 (Manufacturing and Materials Handling Equipment)**  
**Print Date: 4/5/2022**

Make:	NA
Manufacturer:	NA
Model:	NA
Type of Manufacturing and Materials Handling Equipment:	conveyor
Capacity:	5.00E+00
Units:	other units
Description (if other):	tons per hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	33-X Mixed Conveyor



75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E155 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	<input type="text"/>
Manufacturer:	<input type="text"/>
Model:	<input type="text"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Bin"/>
Capacity:	<input type="text" value="2.07E+02"/>
Units:	<input type="text" value="ft^3"/>
Description (if other):	<input type="text"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text"/>
Comments:	<input type="text" value="33-X: Q Bin - 4' wide, 9' long, 5.75' high containing mixed batch solids only - closed while operating and controlled by CD25."/>

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E156 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	<input type="text"/>
Manufacturer:	<input type="text"/>
Model:	<input type="text"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Bin"/>
Capacity:	<input type="text" value="1.71E+02"/>
Units:	<input type="text" value="ft^3"/>
Description (if other):	<input type="text"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text"/>
Comments:	<input type="text" value="33-X: R Bin - 4' wide, 9' long, 4.75' high containing mixed batch solids only - closed while operating and controlled by CD26."/>

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E157 (Emergency Generator)  
Print Date: 4/5/2022

Make:

Manufacturer:

Model:

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

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

Comments:

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E158 (Emergency Generator)  
Print Date: 4/5/2022

Make:

Manufacturer:

Model:

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

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

Comments:

Make:	
Manufacturer:	Millville Iron
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Hopper Bin
Capacity:	
Units:	
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:	<input type="text"/>
Manufacturer:	<input type="text"/>
Model:	<input type="text"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Conveyance"/>
Capacity:	<input type="text" value="5.00E+00"/>
Units:	<input type="text" value="other units"/>
Description (if other):	<input type="text" value="tons/hr processed"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text"/>
Comments:	

Make:	<input type="text"/>
Manufacturer:	<input type="text"/>
Model:	<input type="text"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Conveyance"/>
Capacity:	<input type="text" value="5.00E+00"/>
Units:	<input type="text" value="other units"/>
Description (if other):	<input type="text" value="tons/hr processed"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text"/>
Comments:	

Make:

Manufacturer:

Model:

Type of Manufacturing and Materials Handling Equipment:

Conveyance

Capacity:

5.00E+00

Units:

other units

Description (if other):

tons/hr processed

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

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

Comments:



Make:

Manufacturer:

Model:

Type of Manufacturing and Materials Handling Equipment:

Conveyance

Capacity:

5.00E-01

Units:

other units

Description (if other):

tons/hr processed

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

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

Comments:

Make:

Manufacturer:

Model:

Type of Manufacturing and Materials Handling Equipment:

Conveyance

Capacity:

5.00E+00

Units:

other units

Description (if other):

tons/hr processed

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

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

Comments:

Make:	<input type="text"/>
Manufacturer:	<input type="text"/>
Model:	<input type="text"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Weighing"/>
Capacity:	<input type="text" value="5.00E+00"/>
Units:	<input type="text" value="other units"/>
Description (if other):	<input type="text" value="tons/hour processed"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text"/>
Comments:	

Make:	<input type="text"/>
Manufacturer:	<input type="text"/>
Model:	<input type="text"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Weighing"/>
Capacity:	<input type="text" value="1.67E+00"/>
Units:	<input type="text" value="other units"/>
Description (if other):	<input type="text" value="tons/hour processed"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text"/>
Comments:	

Make:	
Manufacturer:	
Model:	
Type of Manufacturing and Materials Handling Equipment:	Weighing
Capacity:	1.67E+00
Units:	other units
Description (if other):	tons/hour processed
Have you attached a diagram showing the location and/or the configuration of this equipment?	
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	
Comments:	

Make:

Manufacturer:

Model:

Type of Manufacturing and Materials Handling Equipment:

Weighing

Capacity:

1.67E+00

Units:

other units

Description (if other):

tons/hour processed

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

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

Comments:

Make:	
Manufacturer:	
Model:	
Type of Manufacturing and Materials Handling Equipment:	Weighing
Capacity:	1.67E+00
Units:	other units
Description (if other):	tons/hour processed
Have you attached a diagram showing the location and/or the configuration of this equipment?	
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	
Comments:	

Make:

Manufacturer:

Model:

Type of Manufacturing and Materials Handling Equipment:

Weighing

Capacity:

5.00E+00

Units:

other units

Description (if other):

tons/hour processed

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

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

Comments:



Make:	<input type="text"/>
Manufacturer:	<input type="text"/>
Model:	<input type="text"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Weighing"/>
Capacity:	<input type="text" value="1.67E+00"/>
Units:	<input type="text" value="other units"/>
Description (if other):	<input type="text" value="tons/hour processed"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text"/>
Comments:	

Make:	<input type="text"/>
Manufacturer:	<input type="text"/>
Model:	<input type="text"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Weighing"/>
Capacity:	<input type="text" value="1.67E+00"/>
Units:	<input type="text" value="other units"/>
Description (if other):	<input type="text" value="tons/hour processed"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text"/>
Comments:	

Make:	
Manufacturer:	
Model:	
Type of Manufacturing and Materials Handling Equipment:	Weighing
Capacity:	1.67E+00
Units:	other units
Description (if other):	tons/hour processed
Have you attached a diagram showing the location and/or the configuration of this equipment?	
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	
Comments:	

Make:

Manufacturer:

Model:

Type of Manufacturing and Materials Handling Equipment:

Weighing

Capacity:

5.00E+00

Units:

other units

Description (if other):

tons/hour processed

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

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

Comments:

Make:

Manufacturer:

Model:

Type of Manufacturing and Materials Handling Equipment:

Weighing

Capacity:

5.00E+00

Units:

other units

Description (if other):

tons/hour processed

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

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

Comments:

Make:

Manufacturer:

Model:

Type of Manufacturing and Materials Handling Equipment:

Weighing

Capacity:

5.00E+00

Units:

other units

Description (if other):

tons/hour processed

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

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

Comments:

Make:	<input type="text"/>
Manufacturer:	<input type="text"/>
Model:	<input type="text"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Weighing"/>
Capacity:	<input type="text" value="5.00E+00"/>
Units:	<input type="text" value="other units"/>
Description (if other):	<input type="text" value="tons/hour processed"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text"/>
Comments:	

Make:	<div></div>
Manufacturer:	<div></div>
Model:	<div></div>
Type of Manufacturing and Materials Handling Equipment:	<div>Weighing</div>
Capacity:	<div>5.00E+00</div>
Units:	<div>other units</div>
Description (if other):	<div>tons/hour processed</div>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<div></div>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<div></div>
Comments:	



Make:

Manufacturer:

Model:

Type of Manufacturing and Materials Handling Equipment:

Weighing

Capacity:

5.00E+00

Units:

other units

Description (if other):

tons/hour processed

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

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

Comments:

Make:	
Manufacturer:	
Model:	
Type of Manufacturing and Materials Handling Equipment:	Weighing
Capacity:	5.00E+00
Units:	other units
Description (if other):	tons/hour processed
Have you attached a diagram showing the location and/or the configuration of this equipment?	
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	
Comments:	

Make:	<input type="text"/>
Manufacturer:	<input type="text"/>
Model:	<input type="text"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Weighing"/>
Capacity:	<input type="text" value="5.00E+00"/>
Units:	<input type="text" value="other units"/>
Description (if other):	<input type="text" value="tons/hour processed"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text"/>
Comments:	

Make:	
Manufacturer:	
Model:	
Type of Manufacturing and Materials Handling Equipment:	Conveyance
Capacity:	5.00E+00
Units:	other units
Description (if other):	tons/hour processed
Have you attached a diagram showing the location and/or the configuration of this equipment?	
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	
Comments:	

Make:

Manufacturer:

Model:

Type of Manufacturing and Materials Handling Equipment:

Conveyance

Capacity:

5.00E+00

Units:

other units

Description (if other):

tons/hour processed

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

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

Comments:

Make:	<input type="text"/>
Manufacturer:	<input type="text"/>
Model:	<input type="text"/>
Type of Manufacturing and Materials Handling Equipment:	<input type="text" value="Conveyance"/>
Capacity:	<input type="text" value="5.00E+00"/>
Units:	<input type="text" value="other units"/>
Description (if other):	<input type="text" value="tons/hour processed"/>
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="text"/>
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input type="text"/>
Comments:	

Make:

Manufacturer:

Model:

Type of Manufacturing and Materials Handling Equipment:

Weighing

Capacity:

5.00E+00

Units:

other units

Description (if other):

tons/hour processed

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

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

Comments:

Make:	
Manufacturer:	
Model:	
Type of Manufacturing and Materials Handling Equipment:	Conveyance
Capacity:	5.00E+00
Units:	other units
Description (if other):	tons/hour processed
Have you attached a diagram showing the location and/or the configuration of this equipment?	
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	
Comments:	



Make:

Manufacturer:

Model:

Type of Manufacturing and Materials Handling Equipment:

Conveyance

Capacity:

5.00E-01

Units:

other units

Description (if other):

tons/hr processed

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

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

Comments:

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E301 (Glass Manufacturing Furnace)  
Print Date: 4/5/2022

Make:	Custom	
Manufacturer:	Custom	
Model:	Custom	
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	5.10	
Type of Heat Exchange:	Direct	
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:	5.1 MMBTU/hr is ifor the gas boost (i.e., the capacity of the NG burner.)	

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

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E302 (Fuel Combustion Equipment (Other))  
Print Date: 4/5/2022

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	0.60
Type of Heat Exchange:	Direct
Equipment Type Description:	Electric/gas combo heating, 30 kW, consumes 0.6 MMBTU/h of natural gas.

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

Comments:

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

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E303 (Fuel Combustion Equipment (Other))  
Print Date: 4/5/2022

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	0.60
Type of Heat Exchange:	Direct
Equipment Type Description:	Electric/gas combo heating, 30 kW, consumes 0.6 MMBTU/h of natural gas.

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

Comments:

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

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E402 (Boiler)  
Print Date: 4/5/2022

Make:	<input type="text" value="Cleaver Brooks"/>
Manufacturer:	<input type="text"/>
Model:	<input type="text"/>
Maximum Rated Gross Heat Input (MMBtu/hr - HHV):	<input type="text" value="6.30"/>
Boiler Type:	<input type="text" value="Package"/>
Utility Type:	<input type="text" value="Non-Utility"/>
Output Type:	<input type="text" value="Steam Only"/>
Steam Output (lb/hr):	<input type="text"/>
Fuel Firing Method:	<input type="text"/>
Description (if other):	<input type="text"/>
Draft Type:	<input type="text"/>
Heat Exchange Type:	<input type="text" value="Indirect"/>

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

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

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

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

Comments:

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E513 (Emergency Generator)  
Print Date: 4/5/2022

Make:

Manufacturer:

Model:

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

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

Comments:

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E514 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	
Manufacturer:	Kercher Industries (Lancaster Products)
Model:	No Model Number Available
Type of Manufacturing and Materials Handling Equipment:	Double Roll Glass Vial Crusher
Capacity:	6.00E+01
Units:	other units
Description (if other):	tons glass/day
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:	
Manufacturer:	Kercher Industries (Lancaster Products)
Model:	No Model Number Available
Type of Manufacturing and Materials Handling Equipment:	Vibratory Feeder and Elevator for Crushed Gla
Capacity:	6.00E+01
Units:	other units
Description (if other):	tons glass/day
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:	



75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E516 (Emergency Generator)  
Print Date: 4/5/2022

Make:	<input type="text" value="Perkins"/>	
Manufacturer:	<input type="text" value="Generac Industrial Power"/>	
Model:	<input type="text" value="SD/M0500 w/ 2506C-E1STAG3 Engine"/>	
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	<input type="text" value="4.37"/>	
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:		

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E517 (Fuel Combustion Equipment (Other))  
Print Date: 4/5/2022

Make:	
Manufacturer:	Custom
Model:	Custom
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1.58
Type of Heat Exchange:	Direct
Equipment Type Description:	Natural-Gas Fired Burners on Glass Conditioner, Forming Bowl, and Overflow Weir

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

☐ Yes  
☒ No

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

☐ Yes  
☒ No

Comments:

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

Make:	
Manufacturer:	Martin Sprocket & Gear, Inc.
Model:	M12
Type of Manufacturing and Materials Handling Equipment:	Cullet Crusher
Capacity:	5.40E+01
Units:	other units
Description (if other):	pounds per minute
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 E519 (Manufacturing and Materials Handling Equipment)  
Print Date: 4/5/2022

Make:	
Manufacturer:	Martin Sprocket & Gear, Inc.
Model:	M12
Type of Manufacturing and Materials Handling Equipment:	Cullet Crusher
Capacity:	5.40E+01
Units:	other units
Description (if other):	pounds per minute
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Make:	NA
Manufacturer:	NA
Model:	NA
Type of Manufacturing and Materials Handling Equipment:	
Capacity:	5.00E+00
Units:	other units
Description (if other):	tons per hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

BOP210001

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

CD NJID	Facility's Designation	Description	CD Type	Install Date	Grand-Fathered	Last Mod. (Since 1968)	CD Set ID
CD10	DC-102	TORIT Model DFT-4-80 dust collector	Particulate Filter (Baghouse)		No		
CD13	DC-201	BH Mixing & S Conveyance	Particulate Filter (Baghouse)	10/1/1997	No		
CD14	DC-210	BH N Belt, scales/hoppers & Can Fill	Particulate Filter (Cartridge)		No		
CD15	DC-209	Bins 1A, 2 & S Elevator	Particulate Filter (Cartridge)		No		
CD16	DC-208	Bins 3A, 3B, 4-9 & N Elevator	Particulate Filter (Cartridge)		No		
CD17	DC-203	Silo #0	Particulate Filter (Baghouse)	12/1/1993	No		
CD22	DC-206	Silo #40	Particulate Filter (Baghouse)	10/1/1997	No		
CD23	DC-202	South Ops Bin 1B Dust Collector	Particulate Filter (Baghouse)	9/1/1999	No		
CD24	DC-207	33 Batch Delivery System	Particulate Filter (Cartridge)	10/1/1997	No		
CD25	DC-104	Q Hopper Dust Collector	Particulate Filter (Baghouse)		No		
CD26	DC-105	R Hopper Cartridge Fliter	Particulate Filter (Baghouse)		No		
CD28	DC-103	S Hopper Dust Collector	Particulate Filter (Baghouse)		No		

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

<b>CD NJID</b>	<b>Facility's Designation</b>	<b>Description</b>	<b>CD Type</b>	<b>Install Date</b>	<b>Grand-Fathered</b>	<b>Last Mod. (Since 1968)</b>	<b>CD Set ID</b>
CD143	DC-106	Furnace L N Baghouse	Particulate Filter (Baghouse)				
CD144	DC-107	Furnace L S Baghouse	Particulate Filter (Baghouse)				
CD145	DC-211	Silos #41 & 10	Particulate Filter (Baghouse)		No		
CD146	DC-108A	Furnace P West Baghouse	Particulate Filter (Baghouse)	5/15/2008	No		
CD147	DC-108B	Furnace P East Baghouse	Particulate Filter (Baghouse)	5/15/2008	No		
CD148	DC-109A	Furnace R Baghouse	Particulate Filter (Baghouse)	7/1/2009	No		
CD150	DC-110A	Furnace R Backup Baghouse	Particulate Filter (Baghouse)	7/1/2009	No		
CD151	DC-111A	Furnace S Baghouse	Particulate Filter (Baghouse)	9/1/2013	No		
CD152	DC-111B	Furnace S Backup Baghouse	Particulate Filter (Baghouse)	12/1/2013	No		
CD153	DC-212	Furnace R Baghouse	Particulate Filter (Baghouse)	3/1/2022	No		

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD10 (Particulate Filter (Baghouse))  
Print Date: 1/10/2022

Make:	
Manufacturer:	Torit
Model:	Model DFT-4-80
Number of Bags:	
Size of Bags (ft²):	
Total Bag Area (ft²):	
Bag Fabric:	
Fabric Weight (oz/ft²):	
Fabric Weave:	
Fabric Finish:	
Maximum Design Temperature Capability (°F):	
Maximum Design Air Flow Rate (acfm):	30,800.0
Draft Type:	
Maximum Air Flow Rate to Cloth Area Ratio:	1.52
Minimum Operating Pressure Drop (in. H2O):	0.75
Maximum Operating Pressure Drop (in. H2O):	6.00
Method of Monitoring Pressure Drop:	
Maximum Inlet Temperature (°F):	
Minimum Inlet Temperature (°F):	
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	
Method for Determining When Cleaning is Required:	
Method of Bag Cleaning:	
Description:	
Is Bag Cleaning Conducted On-Line?	<input type="radio"/> Yes <input type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	14
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No



**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD10 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Comments:

[The total cartridge area is 20,320 square feet.](#)

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD13 (Particulate Filter (Baghouse))

Print Date: 1/10/2022

Make:	Ultra Model
Manufacturer:	
Model:	BB-84-III
Number of Bags:	36
Size of Bags (ft²):	3.50
Total Bag Area (ft²):	382.0
Bag Fabric:	polyester
Fabric Weight (oz/ft²):	16.00
Fabric Weave:	felted
Fabric Finish:	singed
Maximum Design Temperature Capability (°F):	250.0
Maximum Design Air Flow Rate (acfm):	1,500.0
Draft Type:	<div>▼</div>
Maximum Air Flow Rate to Cloth Area Ratio:	3.93
Minimum Operating Pressure Drop (in. H2O):	1.00
Maximum Operating Pressure Drop (in. H2O):	6.00
Method of Monitoring Pressure Drop:	Magnahelic Gauge
Maximum Inlet Temperature (°F):	
Minimum Inlet Temperature (°F):	
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	1,500.0
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	manufacturer's specifications
Method for Determining When Cleaning is Required:	manufacturer's specifications
Method of Bag Cleaning:	Pulse Jet <div>▼</div>
Description:	
Is Bag Cleaning Conducted On-Line?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	5
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD13 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Comments:

[CD 008-02-U147](#)

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD14 (Particulate Filter (Cartridge))

Print Date: 1/10/2022

Make:

Manufacturer:

Model:

Number of Cartridges:

Size of Cartridges (ft<sup>2</sup>):Total Cartridge Area (ft<sup>2</sup>):

Maximum Design Temperature Capability (°F):

Maximum Design Air Flow Rate (acfm):

Maximum Air Flow Rate to Filter Area Ratio:

Minimum Operating Pressure Drop (in. H<sub>2</sub>O):Maximum Operating Pressure Drop (in. H<sub>2</sub>O):

Maximum Inlet Temperature (°F):

Maximum Operating Exhaust Gas Flow  
Rate (acfm):Method for Determining When Cartridge  
Replacement is Required:Maximum Number of Sources Using  
this Apparatus as a Control Device  
(Include Permitted and  
Non-Permitted Sources):Alternative Method to Demonstrate  
Control Apparatus is Operating  
Properly:Have you attached a Particle Size  
Distribution Analysis?Have you attached data from recent  
performance testing?Have you attached any  
manufacturer's data or specifications  
in support of the feasibility and/or  
effectiveness of this control  
apparatus?Have you attached a diagram  
showing the location and/or  
configuration of this control  
apparatus?

Comments:

Torit

DPT 4-16

16

4,064.00

274.0

5,600.0

1.40

0.75

6.00

70.0

500.0

☐ Yes ☒ No☐ Yes ☒ No☐ Yes ☒ No☐ Yes ☒ No

U147

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD15 (Particulate Filter (Cartridge))**

**Print Date: 1/10/2022**

Make:	
Manufacturer:	Torit
Model:	
Number of Cartridges:	1
Size of Cartridges (ft²):	
Total Cartridge Area (ft²):	904.00
Maximum Design Temperature Capability (°F):	275.0
Maximum Design Air Flow Rate (acfm):	565.0
Maximum Air Flow Rate to Filter Area Ratio:	0.90
Minimum Operating Pressure Drop (in. H2O):	1.00
Maximum Operating Pressure Drop (in. H2O):	6.00
Maximum Inlet Temperature (°F):	90.0
Maximum Operating Exhaust Gas Flow Rate (acfm):	700.0

Method for Determining When Cartridge Replacement is Required:

Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):

Alternative Method to Demonstrate Control Apparatus is Operating Properly:

Have you attached a Particle Size Distribution Analysis?

☐ Yes
 ☒ No

Have you attached data from recent performance testing?

☐ Yes
 ☒ No

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

☐ Yes
 ☒ No

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

☐ Yes
 ☒ No

Comments:

BH#3 - 009

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD16 (Particulate Filter (Cartridge))**

**Print Date: 1/10/2022**

Make:	
Manufacturer:	Torit
Model:	
Number of Cartridges:	1
Size of Cartridges (ft²):	
Total Cartridge Area (ft²):	904.00
Maximum Design Temperature Capability (°F):	275.0
Maximum Design Air Flow Rate (acfm):	800.0
Maximum Air Flow Rate to Filter Area Ratio:	0.90
Minimum Operating Pressure Drop (in. H2O):	1.00
Maximum Operating Pressure Drop (in. H2O):	6.00
Maximum Inlet Temperature (°F):	70.0
Maximum Operating Exhaust Gas Flow Rate (acfm):	465.0

Method for Determining When Cartridge Replacement is Required:

Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):

10

Alternative Method to Demonstrate Control Apparatus is Operating Properly:

Have you attached a Particle Size Distribution Analysis?

☐ Yes ☒ No

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Comments:

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD17 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Make:	<input type="text"/>
Manufacturer:	<input type="text" value="Flex Clean"/>
Model:	<input type="text" value="84BVBS16"/>
Number of Bags:	<input type="text"/>
Size of Bags (ft²):	<input type="text"/>
Total Bag Area (ft²):	<input type="text" value="65.0"/>
Bag Fabric:	<input type="text" value="polyester"/>
Fabric Weight (oz/ft²):	<input type="text"/>
Fabric Weave:	<input type="text"/>
Fabric Finish:	<input type="text"/>
Maximum Design Temperature Capability (°F):	<input type="text"/>
Maximum Design Air Flow Rate (acfm):	<input type="text" value="260.0"/>
Draft Type:	<input type="text" value=""/>
Maximum Air Flow Rate to Cloth Area Ratio:	<input type="text" value="4.00"/>
Minimum Operating Pressure Drop (in. H2O):	<input type="text" value="1.00"/>
Maximum Operating Pressure Drop (in. H2O):	<input type="text" value="6.00"/>
Method of Monitoring Pressure Drop:	<input type="text"/>
Maximum Inlet Temperature (°F):	<input type="text"/>
Minimum Inlet Temperature (°F):	<input type="text"/>
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	<input type="text"/>
Maximum Operating Exhaust Gas Flow Rate (acfm):	<input type="text"/>
Maximum Inlet Gas Stream Moisture Content (%):	<input type="text"/>
Method for Determining When Bag Replacement is Required:	<input type="text"/>
Method for Determining When Cleaning is Required:	<input type="text"/>
Method of Bag Cleaning:	<input type="text" value=""/>
Description:	<input type="text"/>
Is Bag Cleaning Conducted On-Line?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	<input type="text"/>
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	<input type="text"/>
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD17 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Comments:



**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD22 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Make:	N/A
Manufacturer:	Ultra Industries
Model:	BB-25-84-IIG
Number of Bags:	25
Size of Bags (ft²):	3.50
Total Bag Area (ft²):	265.0
Bag Fabric:	Polyester
Fabric Weight (oz/ft²):	16.00
Fabric Weave:	Felted
Fabric Finish:	Singled
Maximum Design Temperature Capability (°F):	250.0
Maximum Design Air Flow Rate (acfm):	900.0
Draft Type:	<div>▼</div>
Maximum Air Flow Rate to Cloth Area Ratio:	3.40
Minimum Operating Pressure Drop (in. H2O):	1.00
Maximum Operating Pressure Drop (in. H2O):	6.00
Method of Monitoring Pressure Drop:	Magnahelic gauge
Maximum Inlet Temperature (°F):	80.0
Minimum Inlet Temperature (°F):	60.0
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	900.0
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	manufacturer's specifications
Method for Determining When Cleaning is Required:	manufacturer's specifications
Method of Bag Cleaning:	Pulse Jet <div>▼</div>
Description:	
Is Bag Cleaning Conducted On-Line?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	N/A
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD22 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Comments:

3Bin 40 -U148

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD23 (Particulate Filter (Baghouse))**

**Print Date: 1/10/2022**

Make:	<input type="text"/>
Manufacturer:	<input type="text" value="Ultra Industries"/>
Model:	<input type="text" value="BB-25-84-IIG"/>
Number of Bags:	<input type="text" value="25"/>
Size of Bags (ft²):	<input type="text" value="3.50"/>
Total Bag Area (ft²):	<input type="text" value="265.0"/>
Bag Fabric:	<input type="text" value="Polyester"/>
Fabric Weight (oz/ft²):	<input type="text" value="16.00"/>
Fabric Weave:	<input type="text" value="Felted"/>
Fabric Finish:	<input type="text" value="Singed"/>
Maximum Design Temperature Capability (°F):	<input type="text" value="250.0"/>
Maximum Design Air Flow Rate (acfm):	<input type="text" value="900.0"/>
Draft Type:	<input type="text" value=""/>
Maximum Air Flow Rate to Cloth Area Ratio:	<input type="text" value="3.40"/>
Minimum Operating Pressure Drop (in. H2O):	<input type="text" value="1.00"/>
Maximum Operating Pressure Drop (in. H2O):	<input type="text" value="6.00"/>
Method of Monitoring Pressure Drop:	<input type="text" value="MagnaHelic gauge"/>
Maximum Inlet Temperature (°F):	<input type="text"/>
Minimum Inlet Temperature (°F):	<input type="text"/>
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	<input type="text"/>
Maximum Operating Exhaust Gas Flow Rate (acfm):	<input type="text"/>
Maximum Inlet Gas Stream Moisture Content (%):	<input type="text"/>
Method for Determining When Bag Replacement is Required:	<input type="text"/>
Method for Determining When Cleaning is Required:	<input type="text"/>
Method of Bag Cleaning:	<input type="text" value="Pulse Jet"/>
Description:	<input type="text"/>
Is Bag Cleaning Conducted On-Line?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	<input type="text" value="1"/>
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	<input type="text"/>
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD23 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Comments:

3Bin 1B - U148

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD24 (Particulate Filter (Cartridge))**

**Print Date: 1/10/2022**

Make:	<div>N/A</div>
Manufacturer:	<div>Donaldson Torit</div>
Model:	<div>DPT4-16</div>
Number of Cartridges:	<div>16</div>
Size of Cartridges (ft²):	<div>254.00</div>
Total Cartridge Area (ft²):	<div>4,064.00</div>
Maximum Design Temperature Capability (°F):	<div>150.0</div>
Maximum Design Air Flow Rate (acfm):	<div>5,600.0</div>
Maximum Air Flow Rate to Filter Area Ratio:	<div>1.40</div>
Minimum Operating Pressure Drop (in. H2O):	<div>1.00</div>
Maximum Operating Pressure Drop (in. H2O):	<div>6.00</div>
Maximum Inlet Temperature (°F):	<div>90.0</div>
Maximum Operating Exhaust Gas Flow Rate (acfm):	<div>5,600.0</div>
Method for Determining When Cartridge Replacement is Required:	<div>manufacturer's specifications</div>
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	<div>14</div>
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	<div>N/A</div>
Have you attached a Particle Size Distribution Analysis?	<div><input type="radio"/> Yes <input checked="" type="radio"/> No</div>
Have you attached data from recent performance testing?	<div><input type="radio"/> Yes <input checked="" type="radio"/> No</div>
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	<div><input type="radio"/> Yes <input checked="" type="radio"/> No</div>
Have you attached a diagram showing the location and/or configuration of this control apparatus?	<div><input type="radio"/> Yes <input checked="" type="radio"/> No</div>
Comments:	<div>CD24 - 33-X Unit 158</div>

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD25 (Particulate Filter (Baghouse))  
Print Date: 1/10/2022

Make:	
Manufacturer:	Flex Clean
Model:	58-BVB-S9-II
Number of Bags:	9
Size of Bags (ft²):	2.42
Total Bag Area (ft²):	65.0
Bag Fabric:	Polyester
Fabric Weight (oz/ft²):	16.00
Fabric Weave:	Felted
Fabric Finish:	Singed
Maximum Design Temperature Capability (°F):	170.0
Maximum Design Air Flow Rate (acfm):	260.0
Draft Type:	Forced
Maximum Air Flow Rate to Cloth Area Ratio:	4.00
Minimum Operating Pressure Drop (in. H2O):	0.01
Maximum Operating Pressure Drop (in. H2O):	8.00
Method of Monitoring Pressure Drop:	Photohelic Gauge
Maximum Inlet Temperature (°F):	70.0
Minimum Inlet Temperature (°F):	50.0
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	260.0
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	Manufacturer's Specifications
Method for Determining When Cleaning is Required:	Manufacturer's Specifications
Method of Bag Cleaning:	Pulse Jet
Description:	
Is Bag Cleaning Conducted On-Line?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD25 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Comments:

CD25 - 33-X Q Furnace Bin

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD26 (Particulate Filter (Baghouse))  
Print Date: 1/10/2022

Make:	
Manufacturer:	Klug
Model:	#1101-103 Collector
Number of Bags:	9
Size of Bags (ft²):	7.53
Total Bag Area (ft²):	67.8
Bag Fabric:	polyester
Fabric Weight (oz/ft²):	16.00
Fabric Weave:	
Fabric Finish:	
Maximum Design Temperature Capability (°F):	150.0
Maximum Design Air Flow Rate (acfm):	260.0
Draft Type:	Natural
Maximum Air Flow Rate to Cloth Area Ratio:	
Minimum Operating Pressure Drop (in. H2O):	
Maximum Operating Pressure Drop (in. H2O):	8.00
Method of Monitoring Pressure Drop:	
Maximum Inlet Temperature (°F):	70.0
Minimum Inlet Temperature (°F):	
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	260.0
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	Manufacturer's Specifications
Method for Determining When Cleaning is Required:	
Method of Bag Cleaning:	
Description:	
Is Bag Cleaning Conducted On-Line?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No



**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD26 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Comments:

CD26 - 33-X Furnace R Bin

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD28 (Particulate Filter (Baghouse))  
Print Date: 1/10/2022

Make:	
Manufacturer:	Flex Clean
Model:	58-BVBS-9
Number of Bags:	9
Size of Bags (ft²):	
Total Bag Area (ft²):	65.0
Bag Fabric:	felted polyester
Fabric Weight (oz/ft²):	
Fabric Weave:	
Fabric Finish:	
Maximum Design Temperature Capability (°F):	170.0
Maximum Design Air Flow Rate (acfm):	260.0
Draft Type:	Forced
Maximum Air Flow Rate to Cloth Area Ratio:	4.00
Minimum Operating Pressure Drop (in. H2O):	0.01
Maximum Operating Pressure Drop (in. H2O):	6.00
Method of Monitoring Pressure Drop:	Magnehelic Gauge
Maximum Inlet Temperature (°F):	70.0
Minimum Inlet Temperature (°F):	70.0
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	260.0
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	Manufacturer Specifications
Method for Determining When Cleaning is Required:	Manufacturer Specifications
Method of Bag Cleaning:	Pulse Jet
Description:	
Is Bag Cleaning Conducted On-Line?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD28 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Comments:

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD143 (Particulate Filter (Baghouse))

Print Date: 1/10/2022

Make:	
Manufacturer:	Dustex, Inc.
Model:	4330-3-12
Number of Bags:	96
Size of Bags (ft²):	11.77
Total Bag Area (ft²):	1,130.0
Bag Fabric:	fiberglass
Fabric Weight (oz/ft²):	22.00
Fabric Weave:	Double filling face
Fabric Finish:	1.5 oz. PTFE Surface coating
Maximum Design Temperature Capability (°F):	500.0
Maximum Design Air Flow Rate (acfm):	4,700.0
Draft Type:	
Maximum Air Flow Rate to Cloth Area Ratio:	4.00
Minimum Operating Pressure Drop (in. H2O):	1.00
Maximum Operating Pressure Drop (in. H2O):	15.00
Method of Monitoring Pressure Drop:	Photohelic
Maximum Inlet Temperature (°F):	400.0
Minimum Inlet Temperature (°F):	200.0
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	150
Maximum Operating Exhaust Gas Flow Rate (acfm):	4,700.0
Maximum Inlet Gas Stream Moisture Content (%):	8.00
Method for Determining When Bag Replacement is Required:	DP-Photohelic / Broken Bag Detector
Method for Determining When Cleaning is Required:	DP-Photohelic
Method of Bag Cleaning:	Pulse Jet
Description:	
Is Bag Cleaning Conducted On-Line?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	Stack Test
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD143 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☒ Yes ☐ No

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

☐ Yes ☒ No

Comments:

Either CD143 or CD144 will operate with the other unit off-line, providing 100% redundancy.

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD144 (Particulate Filter (Baghouse))  
Print Date: 1/10/2022

Make:	
Manufacturer:	Dustex, Inc.
Model:	4330-3-12
Number of Bags:	96
Size of Bags (ft²):	11.77
Total Bag Area (ft²):	1,130.0
Bag Fabric:	fiberglass
Fabric Weight (oz/ft²):	22.00
Fabric Weave:	Double filling face
Fabric Finish:	1.5 oz. PTFE Surface coating
Maximum Design Temperature Capability (°F):	500.0
Maximum Design Air Flow Rate (acfm):	4,700.0
Draft Type:	<input type="button" value="v"/>
Maximum Air Flow Rate to Cloth Area Ratio:	4.00
Minimum Operating Pressure Drop (in. H2O):	1.00
Maximum Operating Pressure Drop (in. H2O):	15.00
Method of Monitoring Pressure Drop:	Photohelic
Maximum Inlet Temperature (°F):	400.0
Minimum Inlet Temperature (°F):	200.0
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	150
Maximum Operating Exhaust Gas Flow Rate (acfm):	4,700.0
Maximum Inlet Gas Stream Moisture Content (%):	8.00
Method for Determining When Bag Replacement is Required:	DP-Photohelic / Broken Bag Detector
Method for Determining When Cleaning is Required:	DP-Photohelic
Method of Bag Cleaning:	Pulse Jet <input type="button" value="v"/>
Description:	
Is Bag Cleaning Conducted On-Line?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	Stack Test
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD144 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☒ Yes ☐ No

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

☐ Yes ☒ No

Comments:

Either CD143 or CD144 will operate with the other unit off-line, providing 100% redundancy.

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD145 (Particulate Filter (Baghouse))

Print Date: 1/10/2022

Make:	
Manufacturer:	
Model:	
Number of Bags:	9
Size of Bags (ft²):	
Total Bag Area (ft²):	650.0
Bag Fabric:	polypropylene felt
Fabric Weight (oz/ft²):	9.00
Fabric Weave:	felted bag
Fabric Finish:	singed
Maximum Design Temperature Capability (°F):	170.0
Maximum Design Air Flow Rate (acfm):	650.0
Draft Type:	
Maximum Air Flow Rate to Cloth Area Ratio:	1.00
Minimum Operating Pressure Drop (in. H2O):	1.00
Maximum Operating Pressure Drop (in. H2O):	6.00
Method of Monitoring Pressure Drop:	
Maximum Inlet Temperature (°F):	70.0
Minimum Inlet Temperature (°F):	
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	260.0
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	
Method for Determining When Cleaning is Required:	
Method of Bag Cleaning:	Pulse Jet
Description:	
Is Bag Cleaning Conducted On-Line?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No



**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD145 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Comments:

U153, U156

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD146 (Particulate Filter (Baghouse))

Print Date: 1/10/2022

Make:	
Manufacturer:	Dustex Corporation
Model:	4330-8-12
Number of Bags:	192
Size of Bags (ft²):	
Total Bag Area (ft²):	2,260.0
Bag Fabric:	
Fabric Weight (oz/ft²):	22.00
Fabric Weave:	Double Filling Face
Fabric Finish:	1.5 oz. PTFE Surface Coating
Maximum Design Temperature Capability (°F):	500.0
Maximum Design Air Flow Rate (acfm):	4,700.0
Draft Type:	Induced
Maximum Air Flow Rate to Cloth Area Ratio:	5.10
Minimum Operating Pressure Drop (in. H2O):	1.00
Maximum Operating Pressure Drop (in. H2O):	15.00
Method of Monitoring Pressure Drop:	Magnehelic
Maximum Inlet Temperature (°F):	430.0
Minimum Inlet Temperature (°F):	
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	Magnehelic pressure drop
Method for Determining When Cleaning is Required:	Magnehelic pressure drop
Method of Bag Cleaning:	Pulse Jet
Description:	
Is Bag Cleaning Conducted On-Line?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD146 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Comments:

[Two Modules are installed, each with 96 bags. See application BOP090002 for manufacturer information on bag fabric construction.](#)

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD147 (Particulate Filter (Baghouse))

Print Date: 1/10/2022

Make:	
Manufacturer:	Dustex Corporation
Model:	4330-8-12
Number of Bags:	192
Size of Bags (ft²):	
Total Bag Area (ft²):	2,260.0
Bag Fabric:	
Fabric Weight (oz/ft²):	22.00
Fabric Weave:	Double Filling Face
Fabric Finish:	1.5 oz. PTFE Surface Coating
Maximum Design Temperature Capability (°F):	500.0
Maximum Design Air Flow Rate (acfm):	4,700.0
Draft Type:	Induced
Maximum Air Flow Rate to Cloth Area Ratio:	5.10
Minimum Operating Pressure Drop (in. H2O):	1.00
Maximum Operating Pressure Drop (in. H2O):	15.00
Method of Monitoring Pressure Drop:	Magnehelic
Maximum Inlet Temperature (°F):	430.0
Minimum Inlet Temperature (°F):	
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	Magnehelic pressure drop
Method for Determining When Cleaning is Required:	Magnehelic pressure drop
Method of Bag Cleaning:	Pulse Jet
Description:	
Is Bag Cleaning Conducted On-Line?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD147 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Comments:

Two Modules are installed, each with 96 bags. See application BOP090002 for manufacturer information on bag fabric construction.

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD148 (Particulate Filter (Baghouse))

Print Date: 1/10/2022

Make:	
Manufacturer:	Dustex Corporation
Model:	4330-8-12
Number of Bags:	192
Size of Bags (ft²):	
Total Bag Area (ft²):	2,260.0
Bag Fabric:	
Fabric Weight (oz/ft²):	14.00
Fabric Weave:	
Fabric Finish:	
Maximum Design Temperature Capability (°F):	430.0
Maximum Design Air Flow Rate (acfm):	4,500.0
Draft Type:	Induced
Maximum Air Flow Rate to Cloth Area Ratio:	3.98
Minimum Operating Pressure Drop (in. H2O):	2.00
Maximum Operating Pressure Drop (in. H2O):	8.00
Method of Monitoring Pressure Drop:	Magnehelic
Maximum Inlet Temperature (°F):	430.0
Minimum Inlet Temperature (°F):	
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	Magnehelic Pressure Drop
Method for Determining When Cleaning is Required:	Magnehelic Pressure Drop
Method of Bag Cleaning:	Pulse Jet
Description:	
Is Bag Cleaning Conducted On-Line?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD148 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☒ Yes ☐ No

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

☐ Yes ☒ No

Comments:

75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD150 (Particulate Filter (Baghouse))  
Print Date: 1/10/2022

Make:	
Manufacturer:	Dustex Corporation
Model:	4330-8-12
Number of Bags:	192
Size of Bags (ft²):	
Total Bag Area (ft²):	2,260.0
Bag Fabric:	
Fabric Weight (oz/ft²):	14.00
Fabric Weave:	
Fabric Finish:	
Maximum Design Temperature Capability (°F):	430.0
Maximum Design Air Flow Rate (acfm):	5,500.0
Draft Type:	Induced
Maximum Air Flow Rate to Cloth Area Ratio:	4.86
Minimum Operating Pressure Drop (in. H2O):	2.00
Maximum Operating Pressure Drop (in. H2O):	8.00
Method of Monitoring Pressure Drop:	Magnehelic
Maximum Inlet Temperature (°F):	430.0
Minimum Inlet Temperature (°F):	
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	Magnehelic Pressure Drop
Method for Determining When Cleaning is Required:	Magnehelic Pressure Drop
Method of Bag Cleaning:	Pulse Jet
Description:	
Is Bag Cleaning Conducted On-Line?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No



**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD150 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☒ Yes ☐ No

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

☐ Yes ☒ No

Comments:

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD151 (Particulate Filter (Baghouse))

Print Date: 1/10/2022

Make:	
Manufacturer:	
Model:	
Number of Bags:	192
Size of Bags (ft²):	
Total Bag Area (ft²):	2,260.0
Bag Fabric:	
Fabric Weight (oz/ft²):	14.00
Fabric Weave:	
Fabric Finish:	
Maximum Design Temperature Capability (°F):	430.0
Maximum Design Air Flow Rate (acfm):	5,500.0
Draft Type:	Induced
Maximum Air Flow Rate to Cloth Area Ratio:	2.43
Minimum Operating Pressure Drop (in. H2O):	2.00
Maximum Operating Pressure Drop (in. H2O):	8.00
Method of Monitoring Pressure Drop:	Magnehelic
Maximum Inlet Temperature (°F):	430.0
Minimum Inlet Temperature (°F):	
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	Magnehelic Pressure Drop
Method for Determining When Cleaning is Required:	Magnehelic Pressure Drop
Method of Bag Cleaning:	Pulse Jet
Description:	
Is Bag Cleaning Conducted On-Line?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD151 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Comments:

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD152 (Particulate Filter (Baghouse))

Print Date: 1/10/2022

Make:	
Manufacturer:	
Model:	
Number of Bags:	192
Size of Bags (ft²):	
Total Bag Area (ft²):	2,260.0
Bag Fabric:	
Fabric Weight (oz/ft²):	14.00
Fabric Weave:	
Fabric Finish:	
Maximum Design Temperature Capability (°F):	430.0
Maximum Design Air Flow Rate (acfm):	5,500.0
Draft Type:	Induced
Maximum Air Flow Rate to Cloth Area Ratio:	2.43
Minimum Operating Pressure Drop (in. H2O):	2.00
Maximum Operating Pressure Drop (in. H2O):	8.00
Method of Monitoring Pressure Drop:	Magnehelic
Maximum Inlet Temperature (°F):	430.0
Minimum Inlet Temperature (°F):	
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	Magnehelic Pressure Drop
Method for Determining When Cleaning is Required:	Magnehelic Pressure Drop
Method of Bag Cleaning:	Pulse Jet
Description:	
Is Bag Cleaning Conducted On-Line?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD152 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Comments:

## 75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD153 (Particulate Filter (Baghouse))

Print Date: 1/10/2022

Make:	Custom Torit
Manufacturer:	Custom Torit
Model:	Custom Torit
Number of Bags:	192
Size of Bags (ft <sup>2</sup> ):	
Total Bag Area (ft <sup>2</sup> ):	2,260.0
Bag Fabric:	
Fabric Weight (oz/ft <sup>2</sup> ):	14.00
Fabric Weave:	
Fabric Finish:	
Maximum Design Temperature Capability (°F):	430.0
Maximum Design Air Flow Rate (acfm):	5,500.0
Draft Type:	Induced
Maximum Air Flow Rate to Cloth Area Ratio:	2.43
Minimum Operating Pressure Drop (in. H <sub>2</sub> O):	2.00
Maximum Operating Pressure Drop (in. H <sub>2</sub> O):	8.00
Method of Monitoring Pressure Drop:	Magnehelic
Maximum Inlet Temperature (°F):	430.0
Minimum Inlet Temperature (°F):	
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	Magnehelic Pressure Drop
Method for Determining When Cleaning is Required:	Magnehelic Pressure Drop
Method of Bag Cleaning:	Pulse Jet
Description:	
Is Bag Cleaning Conducted On-Line?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No

**75505 NIPRO PHARMAPACKAGING AMERICAS BOP210001 CD153 (Particulate Filter (Baghouse))**  
**Print Date: 1/10/2022**

Have you attached data from recent performance testing?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Comments:

BOP210001

**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.		
PT5	TPB Boiler	Tubing Products Boiler	Round	16	33	210	127.0	98.0	156.0	1,443.0	1,657.0	2,114.0	Up	
PT20	L-Bowl	Door closest to natural gas-fired conditioner, forming bowl, and overflow weir	Door	57	0	600	70.0	60.0	90.0	15.0	0.0	20.0	Horizontal	
PT22	P-Bowl	Door closest to natural gas-fired conditioner, forming bowl, and overflow weir	Door	57	0	600	70.0	60.0	90.0	15.0	0.0	20.0	Horizontal	
PT23	Q-Bowl	Door closest to natural gas-fired conditioner, forming bowl, and overflow weir	Door	57	0	600	70.0	60.0	90.0	15.0	0.0	20.0	Horizontal	
PT24	R-Bowls	Door closest to natural gas-fired conditioners, forming bowls, and overflow weirs	Door	57	0	600	70.0	60.0	90.0	15.0	0.0	20.0	Horizontal	
PT25	S-Forehearth	Door closest to natural gas-fired forehearth	Door	57	0	300	70.0	60.0	90.0	15.0	0.0	20.0	Horizontal	
PT27	S-Hopper DC	Vent from dust collector associated with the S hopper	Round	3	40	135	70.0	50.0	90.0	200.0	0.0	400.0	Up	
PT32	F-X	Furnace X	Round	16	40	600	250.0	125.0	500.0	500.0	50.0	1,000.0	Up	
PT45	F-P Pri	Furnace P (Primary Stack)	Round	16	66	600	400.0	200.0	430.0	4,800.0	3,500.0	5,200.0	Up	
PT46	F-L Back	Furnace L (Backup Stack)	Round	16	64	600	300.0	200.0	800.0	3,500.0	2,000.0	5,000.0	Up	
PT47	F-L Pri	Furnace L (Primary Stack)	Round	16	62	600	300.0	200.0	800.0	3,500.0	2,000.0	5,000.0	Up	
PT48	F-P Back	Furnace P (Backup Stack)	Round	16	66	600	400.0	200.0	800.0	2,000.0	1,000.0	3,000.0	Up	
PT50	F-S Pri	S Furnace (Primary Stack)	Round	18	65	300	400.0	250.0	400.0	4,250.0	0.0	5,500.0	Up	
PT52	8-02	S Batch Mixing	Square	11	35	600	70.0	50.0	90.0	1,500.0	1,000.0	3,000.0	Horizontal	
PT53	8-03	S Conveyor	Round	6	60	600	70.0	50.0	90.0	465.0	350.0	581.0	Horizontal	



**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.		
PT54	9-01	3 South Oper	Round	6	80	600	70.0	50.0	90.0	20.0	15.0	465.0	Horizontal	
PT55	10-01	3 North Oper	Round	6	80	600	70.0	50.0	90.0	20.0	15.0	465.0	Horizontal	
PT56	F-Q Backup	Furnace Q (Backup Stack)	Round	16	64	600	300.0	250.0	650.0	2,000.0	1,500.0	5,000.0	Up	
PT57	F-R Tertiary	Furnace R (Tertiary Stack)	Round	16	64	600	300.0	250.0	650.0	2,000.0	1,500.0	5,000.0	Up	
PT58	14	Bin O	Round	6	65	600	70.0	50.0	90.0	208.0	156.0	260.0	Horizontal	
PT59	F-Q Primary	Furnace Q (Primary Stack)	Round	16	65	600	400.0	250.0	400.0	4,000.0	1,500.0	4,500.0	Up	
PT60	F-R Backup	Furnace R (Backup Stack)	Round	18	65	600	400.0	250.0	400.0	5,000.0	1,500.0	5,500.0	Up	
PT62	157	Bin 40	Round	8	73	600	70.0	50.0	90.0	900.0	675.0	1,100.0	Horizontal	
PT63	U148/009-02	Bin 1B	Round	8	60	600	70.0	50.0	90.0	900.0	675.0	1,100.0	Horizontal	
PT64	U158 33-X	33-X Batch Delivery	Round	18	25	600	70.0	50.0	90.0	5,600.0	4,100.0	7,000.0	Horizontal	
PT65	U158, 158-7	Q Bin	Round	4	25	600	70.0	50.0	90.0	208.0	156.0	260.0	Horizontal	
PT66	U158, 158-8	R Bin	Round	4	25	600	70.0	50.0	90.0	208.0	156.0	260.0	Horizontal	
PT67	Bins 10, 41	Bins 10, 41	Round	6	65	600	70.0	50.0	90.0	208.0	156.0	260.0	Horizontal	
PT68	EG-1	Emergency Generator 1, E157	Round	4	12	300	750.0	250.0	900.0	3,000.0	2,500.0	3,500.0	Up	
PT69	EG-2	Emergency Generator 2, E158	Round	4	12	500	750.0	250.0	900.0	3,000.0	2,500.0	3,500.0	Up	
PT70	Window	Scales U201	Square	36	36	600	70.0	50.0	90.0	50.0	0.0	100.0	Horizontal	
PT71	N Minors Vac	Vent from E203, U200	Round	3	6	600	70.0	50.0	90.0	50.0	0.0	100.0	Up	
PT72	33-X Min Vac	Vent from E227, U200	Round	6		600	70.0	50.0	90.0	50.0	0.0	100.0	Horizontal	
PT73	EG-4	Emergency Generator No. 4, E516	Round	4	12	300	750.0	250.0	900.0	3,000.0	2,500.0	3,500.0	Up	

BOP210001

**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.		
PT80		Dust collector CD10 (cullet crushers)	Square	36	32	135	70.0	60.0	90.0	15,000.0	0.0	30,800.0	Horizontal	
PT93	EG-3	Emergency Generator 3, E513	Round	5	6	200	1,025.0	750.0	1,300.0	2,300.0	2,100.0	2,500.0	Up	
PT95	VialCrusher	Loading Hopper for Vial Crusher	Rectangle	108	10	135	70.0	60.0	90.0	15.0	0.0	20.0	Up	
PT96	Vial Chute1	Discharge Chute for Vibratory Feeder Associated with Vial Crusher/Elevator	Round	10	15	135	70.0	60.0	90.0	15.0	0.0	20.0	Down	
PT97	Vial Chute2	Discharge Chute for Vibratory Feeder Associated with Vial Crusher/Elevator	Round	10	15	135	70.0	60.0	90.0	15.0	0.0	20.0	Down	
PT98	F-S Back	S Furnace (Backup Stack)	Round	18	62	300	300.0	250.0	650.0	2,000.0	0.0	5,000.0	Up	
PT101	1.1 MMBtu H	1.1 MMBtu/hr NG Heater	Window	65	7	550	160.0	160.0	160.0	6,400.0	6,400.0	6,400.0	Horizontal	
PT102	Batch House	Batch House	Door	217	8	600	55.0	55.0	55.0	0.0	0.0	0.0	Horizontal	
PT103	W-33 Convey	W-33 Conveyor Loading	Surface	0	0	450	55.0	55.0	55.0	0.0	0.0	0.0	Up	
PT104	F-R Primary	Furnace R (Primary Stack)	Round	18	65	300	400.0	250.0	400.0	4,250.0	0.0	5,500.0	Up	

**NIPRO PHARMAPACKAGING AMERICAS (75505)**  
**BOP210001**

Date: 9/22/2022

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

**U 100 Furnace X Electric Melt Glass Furnace X, natural gas-boosted**

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	Soda Lime	Soda Lime Specialty Tubing Production	Normal - Steady State	E62		PT32	3-05-014-02	0.0	4,080.0		50.0	1,000.0	125.0	500.0
OS2	Specialty	Specialty Glass Tubing Production	Normal - Steady State	E62		PT32	3-05-014-02	0.0	4,080.0		50.0	1,000.0	125.0	500.0

**U 106 TPB Boiler 6.3 MMBTU/hr Natural Gas-fired Tubing Products Heating Boiler**

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	TPB Boiler	Firing Natural Gas	Normal - Steady State	E402		PT5	1-02-006-03	2,000.0	8,760.0					

**NIPRO PHARMAPACKAGING AMERICAS (75505)**  
**BOP210001**

Date: 9/22/2022

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

**U 107 1.1 MMBtu/hr 1.1 MMBtu/hr Space Heater**

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	1.1 MMBtu SH	1.1 MMBtu/hr Space Heater	Normal - Steady State	E61		PT101	1-05-001-06	0.0	8,760.0					

**U 143 L Furnace Electric Melt Glass Furnace L, natural gas-boosted**

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	L Furn Boro	Production of Borosilicate Specialty Tubing, controlled by Dust collectors CD143 & CD 144	Normal - Steady State	E112	CD143 (P) CD144 (P)	PT46 PT47	3-05-014-02	0.0	8,760.0		2,500.0	4,700.0	200.0	400.0
OS2	L Furn S/L	Production of Soda Lime Specialty Tubing	Normal - Steady State	E112		PT46 PT47	3-05-014-02	0.0	8,760.0		2,500.0	4,700.0	200.0	400.0
OS3	NG-Bowl	Natural-Gas Fired Burners on Glass Conditioner, Forming Bowl, and Overflow Weir on L Furnace	Normal - Steady State	E70		PT20	3-05-014-99	0.0	8,760.0		0.0	1,000.0	200.0	600.0

**NIPRO PHARMAPACKAGING AMERICAS (75505)**  
**BOP210001**

Date: 9/22/2022

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

**U 144 P Furnace Electric Melt Glass Furnace P, natural gas-boosted**

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	P Furnace	Production of Borosilicate Specialty Tubing, controlled by Dust collectors CD146 & CD 147	Normal - Steady State	E113	CD146 (P) CD147 (S)	PT45 PT48	3-05-014-02	0.0	8,760.0		1,000.0	3,000.0	200.0	800.0
OS2	P Furnace	Production of Soda Lime Specialty Tubing	Normal - Steady State	E113		PT45 PT48	3-05-014-02	0.0	1,030.0		1,000.0	3,000.0	200.0	800.0
OS3	NG-Bowl	Natural-Gas Fired Burners on Glass Conditioner, Forming Bowl, and Overflow Weir on P Furnace	Normal - Steady State	E72		PT22	3-05-014-99	0.0	8,760.0		0.0	1,000.0	200.0	600.0

**U 147 S Operations Furnace S Batch House Operations, controlled by Dust Collectors CD13, CD14, and CD28**

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.
OS2	3mixing dust	Munsen Mixer (E117)	Normal - Steady State	E117	CD13 (P)	PT52	3-05-014-10	0.0	2,400.0		1,000.0	1,500.0	50.0	90.0
OS3	3mixing dust	Munsen Mixer (E118)	Normal - Steady State	E118	CD13 (P)	PT52	3-05-014-10	0.0	2,400.0		1,000.0	1,500.0	50.0	90.0
OS4	008-04	S Conveyer (E149)	Normal - Steady State	E149	CD13 (P)	PT52	3-05-014-10	0.0	8,760.0		1,000.0	1,500.0	50.0	90.0

**NIPRO PHARMAPACKAGING AMERICAS (75505)**  
**BOP210001**

Date: 9/22/2022

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

**U 147 S Operations Furnace S Batch House Operations, controlled by Dust Collectors CD13, CD14, and CD28**

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.
OS5	008-05	S Elevator (E150)	Normal - Steady State	E150	CD13 (P)	PT52	3-05-014-10	0.0	8,760.0		1,000.0	1,500.0	50.0	90.0
OS6	008-06	Conveyor (E151)	Normal - Steady State	E151	CD14 (P)	PT53	3-05-014-10	0.0	8,760.0		350.0	581.0	50.0	90.0
OS7	008-07	Munsen Mixer (E152)	Normal - Steady State	E152	CD13 (P)	PT52	3-05-014-10	0.0	8,760.0		1,000.0	1,500.0	50.0	90.0
OS8	008-08	S Furnace Hopper	Normal - Steady State	E159	CD28 (P)	PT27	3-05-014-10	0.0	8,760.0		0.0	400.0	50.0	90.0
OS9		Screw Conveyor	Normal - Steady State	E223	CD13 (P)	PT52	3-05-014-10	0.0	8,760.0		1,000.0	3,000.0	50.0	90.0
OS10	008-10	S to Q/R Conveyor	Normal - Steady State	E520	CD26 (P)	PT66	3-05-014-10	0.0	8,760.0		0.0	400.0	50.0	90.0

**U 148 3 South Oper Batch House Bins store raw materials (South Operations), controlled by Dust Collectors CD15 and CD23**

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	3South Oper	Filling of Bin 1A	Normal - Steady State	E119	CD15 (P)	PT54	3-05-014-10	0.0	600.0		15.0	465.0	50.0	90.0
OS2	3South Ope	Filling of Bin 1B (E120), controlled by Dust Collector CD23	Normal - Steady State	E120	CD23 (P)	PT63	3-05-014-10	0.0	750.0		670.0	1,100.0	50.0	90.0

**NIPRO PHARMAPACKAGING AMERICAS (75505)**  
**BOP210001**

Date: 9/22/2022

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

**U 148 3 South Oper Batch House Bins store raw materials (South Operations), controlled by Dust Collectors CD15 and CD23**

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	3South Ope	Filling of Bin 2	Normal - Steady State	E121	CD15 (P)	PT54	3-05-014-10	0.0	600.0		15.0	465.0	50.0	90.0

**U 149 3 North Oper Batch House Bins store raw materials (North Operations), controlled by Dust Collectors CD16**

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	3 north oper	Filling of Bin 4	Normal - Steady State	E124	CD16 (P)	PT55	3-05-014-10	0.0	600.0		15.0	465.0	50.0	90.0
OS2	3 north oper	Filling of Bin 5	Normal - Steady State	E125	CD16 (P)	PT55	3-05-014-10	0.0	600.0		15.0	465.0	50.0	90.0
OS3	3 north oper	Filling of Bin 6	Normal - Steady State	E126	CD16 (P)	PT55	3-05-014-10	0.0	600.0		15.0	465.0	50.0	90.0
OS4	3 north oper	Filling of Bin 7	Normal - Steady State	E127	CD16 (P)	PT55	3-05-014-10	0.0	600.0		15.0	465.0	50.0	90.0
OS5	3 north oper	Filling of Bin 8	Normal - Steady State	E128	CD16 (P)	PT55	3-05-014-10	0.0	600.0		15.0	465.0	50.0	90.0
OS6	3 north oper	Filling of Bin 9	Normal - Steady State	E129	CD16 (P)	PT55	3-05-014-10	0.0	600.0		15.0	465.0	50.0	90.0
OS7	3 north oper	Filling of Batch House Bin	Normal - Steady State	E134	CD16 (P)	PT55	3-05-014-10	0.0	600.0		15.0	465.0	50.0	90.0
OS8	3 North Oper	Filling of Bin 3A	Normal - Steady State	E122	CD16 (P)	PT55	3-05-014-10	0.0	600.0		15.0	465.0	50.0	90.0

**NIPRO PHARMAPACKAGING AMERICAS (75505)**  
**BOP210001**

Date: 9/22/2022

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

**U 149 3 North Oper Batch House Bins store raw materials (North Operations), controlled by Dust Collectors CD16**

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.
OS9	3 North Oper	Filling of Bin 3B	Normal - Steady State	E123	CD16 (P)	PT55	3-05-014-10	0.0	600.0		15.0	465.0	50.0	90.0

**U 150 QFurnace Electric Melt Glass Furnace Q, natural gas-boosted & controlled by CD148 or CD150**

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	QFurnace	Production of Borosilicate Specialty Tubing, controlled by CD148 or CD150	Normal - Steady State	E130	CD148 (P) CD150 (S)	PT104 PT56 PT59	3-05-014-02	0.0	8,760.0		1,500.0	4,500.0	250.0	650.0
OS2	QFurnace	Production of Soda Lime Specialty Tubing, controlled by CD148 or CD150	Normal - Steady State	E130	CD148 (P) CD150 (S)	PT104 PT56 PT59	3-05-014-02	0.0	1,089.0		1,500.0	4,500.0	250.0	650.0
OS3	NG-Bowl	Natural-Gas Fired Burners on Glass Conditioner, Forming Bowl, and Overflow Weir on Q Furnace	Normal - Steady State	E73		PT23	3-05-014-99	0.0	8,760.0		0.0	1,000.0	200.0	600.0



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**U 151 RFurnace Electric Melt Glass Furnace R, natural gas-boosted & controlled by CD148, CD150, or CD153**

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	RFurnace	Production of Borosilicate Specialty Tubing, controlled by CD148	Normal - Steady State	E131	CD148 (P)	PT104 PT57 PT60	3-05-014-02	0.0	8,760.0		0.0	5,500.0	250.0	650.0
OS2	RFurnace	Production of Borosilicate Specialty Tubing, controlled by CD150	Normal - Steady State	E131	CD150 (P)	PT104 PT57 PT60	3-05-014-02	0.0	8,760.0		0.0	5,500.0	250.0	650.0
OS3	RFurnace	Production of Borosilicate Specialty Tubing, controlled by CD153	Normal - Steady State	E131	CD153 (P)	PT104 PT57 PT60	3-05-014-02	0.0	8,760.0		0.0	5,500.0	250.0	650.0
OS4	RFurnace	Production of Soda Lime Specialty Tubing, controlled by CD148	Normal - Steady State	E131	CD148 (P)	PT104 PT57 PT60	3-05-014-02	0.0	1,352.0		0.0	5,500.0	250.0	650.0
OS5	RFurnace	Production of Soda Lime Specialty Tubing, controlled by CD150	Normal - Steady State	E131	CD150 (P)	PT104 PT57 PT60	3-05-014-02	0.0	1,352.0		0.0	1,000.0	200.0	600.0
OS6	RFurnace	Production of Soda Lime Specialty Tubing, controlled by CD153	Normal - Steady State	E131	CD153 (P)	PT104 PT57 PT60	3-05-014-02	0.0	1,352.0		0.0	1,000.0	200.0	600.0
OS7	NG Bowl	Natural-Gas Fired Burner on Glass Conditioner, Forming Bowl, and Overflow Weir on R Furnace	Normal - Steady State	E74		PT24	3-05-014-99	0.0	8,760.0		0.0	1,000.0	200.0	600.0

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

U 151 RFurnace Electric Melt Glass Furnace R, natural gas-boosted & controlled by CD148, CD150, or CD153

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.
OS8	NG Bowl 2	Natural-Gas Fired Burner on Glass Conditioner 2, Forming Bowl 2, and Overflow Weir 2 on R Furnace	Normal - Steady State	E517		PT24	3-05-014-99	0.0	8,760.0		0.0	1,000.0	200.0	600.0

U 152 Bin 0 Batch House Bin 0 storing raw materials, controlled by Dust Collector CD17

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	Bin 0	BH3 - Bin 0	Normal - Steady State	E132	CD17 (P)	PT58	3-05-014-10	0.0	720.0		156.0	260.0	50.0	90.0

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**U 153 Bins 10, 41 Batch House Bins 10 and 41 storing raw materials, controlled by Dust Collector CD145**

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	Bin 10	BH3 - Bin 10	Normal - Steady State	E133	CD145 (P)	PT67	3-05-014-10	0.0	500.0		156.0	260.0	50.0	90.0
OS2	Bin 41	BH3 - Bin 41	Normal - Steady State	E143	CD145 (P)	PT67	3-05-014-10	0.0	8,760.0		156.0	260.0	50.0	90.0

**U 157 Bin 40 Batch House Bin 40 storing raw materials, controlled by Dust Collector CD22**

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	Bin 40	BH3 - Bin 40	Normal - Steady State	E144	CD22 (P)	PT62	3-05-014-10	0.0	750.0		675.0	1,100.0	50.0	90.0

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**Emission Unit/Batch Process Inventory**

**U 158 33-X 33-X Batch Delivery System, controlled by Dust Collectors CD14, CD24, CD25 and CD26**

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	158-1	33-X Conveyor (E145)	Normal - Steady State	E145	CD24 (P)	PT64	3-05-014-10	0.0	8,760.0		4,100.0	7,000.0	50.0	90.0
OS2	158-2	33-X Elevator (E146)	Normal - Steady State	E146	CD24 (P)	PT64	3-05-014-10	0.0	8,760.0		4,100.0	7,000.0	50.0	90.0
OS3	158-3	33-X Mixer (E147)	Normal - Steady State	E147	CD24 (P)	PT64	3-05-014-10	0.0	8,760.0		4,100.0	7,000.0	50.0	90.0
OS4	158-4	33-X Can Filling (E148)	Normal - Steady State	E148	CD24 (P)	PT64	3-05-014-10	0.0	8,760.0		4,100.0	7,000.0	50.0	90.0
OS5	158-5	33-X Mixed Bucket Elevator (E153)	Normal - Steady State	E153	CD24 (P)	PT64	3-05-014-10	0.0	8,760.0		4,100.0	7,000.0	50.0	90.0
OS6	158-6	33-X Mixed Conveyor (E154)	Normal - Steady State	E154	CD24 (P)	PT64	3-05-014-10	0.0	8,760.0		4,100.0	7,000.0	50.0	90.0
OS7	158-7	Furnace Q Bin (E155), controlled by Q Bin Dust Collector CD25	Normal - Steady State	E155	CD25 (P)	PT65	3-05-014-10	0.0	8,760.0		156.0	260.0	50.0	90.0
OS8	158-8	Furnace R Bin (E156), controlled by R Bin Cartridge Filter CD26	Normal - Steady State	E156	CD26 (P)	PT66	3-05-014-10	0.0	8,760.0		156.0	260.0	50.0	90.0
OS9	CLS1	Can Loading Station 1	Normal - Steady State	E224	CD14 (P)	PT53	3-05-014-10	0.0	8,760.0		350.0	581.0	50.0	90.0
OS10	CLS2	Can Loading Station 2	Normal - Steady State	E225	CD14 (P)	PT53	3-05-014-10	0.0	8,760.0		350.0	581.0	50.0	90.0
OS11	CLS3	Can Loading Station 3	Normal - Steady State	E226	CD14 (P)	PT53	3-05-014-10	0.0	8,760.0		350.0	581.0	50.0	90.0

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**U 159 Emerg Gens 400 HP Diesel-fired, Engine-driven Emergency Electric Generators E157 & 158 (< 5 MMBTU/hr Heat Input)**

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	EG-1	Emergency Generator No. 1	Normal - Steady State	E157		PT68	2-03-002-01	0.0	100.0		2,500.0	3,500.0	250.0	900.0
OS2	EG-2	Emergency Generator No. 2	Normal - Steady State	E158		PT69	2-03-002-01	0.0	100.0		2,500.0	3,500.0	250.0	900.0

**U 162 Cullet Crush Production line cullet crushers**

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	S1 Crusher	Cullet crusher associated with production line S1	Normal - Steady State	E80	CD10 (P)	PT80	3-05-014-13	0.0	8,760.0		0.0	30,800.0	50.0	90.0
OS2	S2 Crusher	Cullet crusher associated with production line S2	Normal - Steady State	E81	CD10 (P)	PT80	3-05-014-13	0.0	8,760.0		0.0	30,800.0	50.0	90.0
OS3	S1 Crusher#2	Cullet crusher #2 associated with production line S1	Normal - Steady State	E82	CD10 (P)	PT80	3-05-020-05	0.0	8,760.0		0.0	30,800.0	50.0	90.0
OS4	S2 Crusher#2	Cullet crusher #2 associated with production line S2	Normal - Steady State	E83	CD10 (P)	PT80	3-05-020-05	0.0	8,760.0		0.0	30,800.0	50.0	90.0
OS6	L Crusher	Cullet crusher associated with production line L	Normal - Steady State	E85	CD10 (P)	PT80	3-05-014-13	0.0	8,760.0		0.0	30,800.0	50.0	90.0
OS7	P1 Crusher	Cullet crusher associated with production line P1	Normal - Steady State	E86	CD10 (P)	PT80	3-05-014-13	0.0	8,760.0		0.0	30,800.0	50.0	90.0

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**U 162 Cullet Crush Production line cullet crushers**

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.
OS8	P2 Crusher	Cullet crusher associated with production line P2	Normal - Steady State	E87	CD10 (P)	PT80	3-05-014-13	0.0	8,760.0		0.0	30,800.0	50.0	90.0
OS9	Q1 Crusher	Cullet crusher associated with production line Q1	Normal - Steady State	E88	CD10 (P)	PT80	3-05-014-13	0.0	8,760.0		0.0	30,800.0	50.0	90.0
OS10	Q2 Crusher	Cullet crusher associated with production line Q2	Normal - Steady State	E89	CD10 (P)	PT80	3-05-014-13	0.0	8,760.0		0.0	30,800.0	50.0	90.0
OS11	R1 Crusher	Cullet crusher associated with production line R1	Normal - Steady State	E90	CD10 (P)	PT80	3-05-014-13	0.0	8,760.0		0.0	30,800.0	50.0	90.0
OS12	R2 Crusher	Cullet crusher associated with production line R2	Normal - Steady State	E91	CD10 (P)	PT80	3-05-014-13	0.0	8,760.0		0.0	30,800.0	50.0	90.0
OS13	M1 Crusher	Cullet crusher associated with production line M1	Normal - Steady State	E92	CD10 (P)	PT80	3-05-014-13	0.0	8,760.0		0.0	30,800.0	50.0	90.0
OS14	M2 Crusher	Cullet crusher associated with production line M2	Normal - Steady State	E93	CD10 (P)	PT80	3-05-014-13	0.0	8,760.0		0.0	30,800.0	50.0	90.0
OS15	L Crusher #2	Cullet crusher associated with production line L #2	Normal - Steady State	E94	CD10 (P)	PT80	3-05-014-13	0.0	8,760.0		0.0	30,800.0	50.0	90.0
OS16	Cullet Crush	Cullet Crusher	Normal - Steady State	E98	CD10 (P)	PT80	3-05-014-13	0.0	8,760.0					
OS17	R2-Crusher1	Cullet crusher #1 associated with production line R2	Normal - Steady State	E518	CD10 (P)	PT80	3-05-014-13	0.0	8,760.0		0.0	30,800.0	50.0	90.0
OS18	R2-Crusher2	Cullet crusher #2 associated with production line R2	Normal - Steady State	E519	CD10 (P)	PT80	3-05-014-13	0.0	8,760.0		0.0	30,800.0	50.0	90.0

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**U 163 Generator Diesel-fired, Engine-driven Emergency Electric Generator E513 (< 5 MMBTU/hr Heat Input)**

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	EG-3	Emergency Generator No. 3	Normal - Steady State	E513		PT93	2-03-002-01	0.0	500.0		2,100.0	2,500.0	750.0	1,300.0

**U 164 Vial Crusher Double Roller Crusher for Glass Vials with Associated Vibratory Feeder and Elevator**

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	VialCrusher	Glass Vial Crusher	Normal - Steady State	E514		PT95	3-05-014-13	0.0	8,760.0		0.0	20.0	60.0	90.0
OS2	Feeder Elev	Vibratory Feeder with Elevator (2 discharge chutes)	Normal - Steady State	E515		PT96 PT97	3-05-014-13	0.0	8,760.0		0.0	20.0	60.0	90.0

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**U 165 Emerg Gens 500 KW Diesel-fired, Engine-driven Emergency Electric Generator E516 (< 5 MMBTU/hr), Sub to NSPS Sub IIII**

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	EG-4	Emergency Generator No. 4	Normal - Steady State	E516		PT73	2-03-001-01	0.0	450.0		2,500.0	3,500.0	250.0	900.0

**U 166 NSVSL Crush NSV\_SL Crushers**

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	NSVSL Crush1	NSV_SL Cullet Crusher 1	Normal - Steady State	E99		PT102	3-05-014-13	0.0	8,760.0					
OS2	NSVSL Crush2	NSV_SL Cullet Crusher 2	Normal - Steady State	E95		PT102	3-05-014-13	0.0	8,760.0					
OS3	NSVSL Crush3	NSV_SL Cullet Crusher 3	Normal - Steady State	E96		PT102	3-05-014-13	0.0	8,760.0					



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**U 167 W33 C Conv W-33 Cullet Conveyor**

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	W33 C Conv	W-33 Cullet Conveyor	Normal - Steady State	E97		PT103	3-05-014-10	0.0	8,760.0					

**U 200 conveyer Raw Material Conveyance, controlled by Dust Collectors CD14, CD15, CD16, CD17, CD22 and CD145**

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		North Raw Materials Bucket Elevator, controlled by CD16	Normal - Steady State	E200	CD16 (P)	PT55	3-05-014-10							
OS2		South Raw Materials Bucket Elevator, controlled by CD15	Normal - Steady State	E201	CD15 (P)	PT54	3-05-014-10							
OS3		33-X Raw Materials Elevator, controlled by CD17, CD22 & CD145	Normal - Steady State	E202	CD145 (P) CD17 (P) CD22 (P)	PT58 PT62 PT67	3-05-014-10							
OS4		North Minor Ingredients Vacuum Pump Conveyance System	Normal - Steady State	E203		PT71	3-05-014-10							
OS5		Minor Ingredients Dump Station, controlled by CD14	Normal - Steady State	E204	CD14 (P)	PT53	3-05-014-10							

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**U 200   conveyer   Raw Material Conveyance, controlled by Dust Collectors CD14, CD15, CD16, CD17, CD22 and CD145**

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS6		33-X Minor Ingredients Vacuum Pump Conveyance System	Normal - Steady State	E227		PT72	3-05-014-10							

**U 201   scales   Raw Material Scales, controlled by Dust Collectors CD14 and CD24**

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		Weighing Raw Materials on Scale 1	Normal - Steady State	E205	CD14 (P)	PT53	3-05-014-10							
OS2		Weighing Raw Materials on Scale 2	Normal - Steady State	E206		PT70	3-05-014-10							
OS3		Weighing Raw Materials on Scale 3	Normal - Steady State	E207		PT70	3-05-014-10							
OS4		Weighing Raw Materials on Scale 4	Normal - Steady State	E208		PT70	3-05-014-10							
OS5		Weighing Raw Materials on Scale 5	Normal - Steady State	E209		PT70	3-05-014-10							
OS6		Weighing Raw Materials on Scale 6	Normal - Steady State	E210	CD14 (P)	PT53	3-05-014-10							
OS7		Weighing Raw Materials on Scale 7	Normal - Steady State	E211		PT70	3-05-014-10							
OS8		Weighing Raw Materials on Scale 8	Normal - Steady State	E212		PT70	3-05-014-10							

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**U 201 scales Raw Material Scales, controlled by Dust Collectors CD14 and CD24**

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.
OS9		Weighing Raw Materials on Scale 9, all vented uncontrolled through PT70	Normal - Steady State	E213		PT70	3-05-014-10							
OS10		Weighing Raw Materials on Scale 10	Normal - Steady State	E214	CD14 (P)	PT53	3-05-014-10							
OS11		Weighing Raw Materials on Scale 33-1	Normal - Steady State	E215	CD24 (P)	PT64	3-05-014-10				5,600.0		50.0	70.0
OS12		Weighing Raw Materials on Scale 33-2	Normal - Steady State	E216	CD24 (P)	PT64	3-05-014-10				5,600.0		50.0	70.0
OS13		Weighing Raw Materials on Scale 33-3	Normal - Steady State	E217	CD24 (P)	PT64	3-05-014-10				5,600.0		50.0	70.0
OS14		Weighing Raw Materials on Scale 33-4	Normal - Steady State	E218	CD24 (P)	PT64	3-05-014-10				5,600.0		50.0	70.0
OS15		Weighing Minor Ingredients on Scale 1	Normal - Steady State	E219	CD24 (P)	PT64	3-05-014-10				5,600.0		50.0	70.0
OS16		Weighing Minor Ingredients on Scale 2	Normal - Steady State	E220	CD24 (P)	PT64	3-05-014-10				5,600.0		50.0	70.0
OS17		Weighing Minor Ingredients on Scale 3	Normal - Steady State	E221	CD24 (P)	PT64	3-05-014-10				5,600.0		50.0	70.0
OS18		Weighing Minor Ingredients (33)	Normal - Steady State	E222	CD24 (P)	PT64	3-05-014-10				5,600.0		50.0	70.0

**NIPRO PHARMAPACKAGING AMERICAS (75505)**

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

**U 301   SFurnace   Electric Melt Glass Furnace S, natural gas-boosted & controlled by CD151, or CD152**

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	Borosil Prod	Production of Borosilicate Tubing, controlled by dust collector CD151, or CD152.	Normal - Steady State	E301	CD151 (P) CD152 (P)	PT50 PT98	3-05-014-02	0.0	8,760.0		0.0	5,500.0	250.0	650.0
OS2	Soda Lim Pro	Production of Soda Lime Tubing, controlled by dust collector CD151, or CD152.	Normal - Steady State	E301	CD151 (P) CD152 (P)	PT50 PT98	3-05-014-02	0.0	8,760.0		0.0	5,500.0	250.0	650.0
OS3	S1 Fore	Natural Gas-Fired Burners on S1 Forehearth and Forming Bowl on S Furnace	Normal - Steady State	E302		PT25	3-05-014-99	0.0	8,760.0		0.0	1,000.0	150.0	600.0
OS4	S2 Fore	Natural Gas-Fired Burners on S2 Forehearth and Forming Bowl on S Furnace	Normal - Steady State	E303		PT25	3-05-014-99	0.0	8,760.0		0.0	1,000.0	150.0	600.0

Date: 9/22/2022

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

**Group NJID:** GR1 Bins/Silos

**Members:**

Type	ID	OS	Step
U	U 148	OS0 Summary	
U	U 149	OS0 Summary	
U	U 152	OS0 Summary	
U	U 153	OS0 Summary	
U	U 157	OS0 Summary	

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

☒ Other

**Other (explain):** Throughput Cap

**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:** GR5 Mixing

**Members:**

Type	ID	OS	Step
U	U 147	OS2 3mixing dust	
U	U 147	OS3 3mixing dust	
U	U 147	OS7 008-07	
U	U 158	OS3 158-3	

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

☒ Other

**Other (explain):** Throughput Cap

**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:** GR7 Mixed Bins

**Members:**

Type	ID	OS	Step
U	U 147	OS8 008-08	
U	U 158	OS10 CLS2	
U	U 158	OS11 CLS3	
U	U 158	OS4 158-4	
U	U 158	OS7 158-7	
U	U 158	OS8 158-8	
U	U 158	OS9 CLS1	

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

☒ Other

**Other (explain):** Throughput Cap

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

**Operating Circumstances:**