



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 2-6304-00268/00028
Effective Date: 08/21/2013 Expiration Date: 08/20/2023

Permit Issued To: SIMSMETAL EAST LLC
1 LINDEN AVE
JERSEY CITY, NJ 07305

Contact: JACK J BERNARDINO
SIMS METAL EAST LLC
1 LINDEN AVE EAST
JERSEY CITY, NJ 07305
(201) 577-3167

Facility: SIMSMETAL EAST LLC-QUEENS PLANT
30-27 GREENPOINT AVE
LONG ISLAND CITY, NY 11101

Description:

PERMIT DESCRIPTION
Sims Metal East LLC-Queens Plant
DEC ID # 2-6304-00268/00028 (ASF)

This project is a planned facility modification that includes the following:

1. Removing the two (2) existing 1000 KW each engine generators (Emission Sources 0005D & 0005E) from the facility on June 30, 2013, noting that the 0005E engine generator was never installed,
2. Installing and permitting a new 815 HP (608 KW) generator - Cummins Gen Drive Series 12V 1600 G20S engine (Emission Source 0005F), and
3. Capping the facility's NOx emissions below 24.99 tons/yr by limiting the #2 diesel fuel use to less than 217,900 gallons/year.

This modification will limit the facility's NOx emissions to 24.99 tons per year (below 25 tons per year) and will no longer be considered a major source of NOx, and therefore the facility will not be subject to Title V permitting or NOx RACT requirements. The Simsmatal East LLC (Sims Metal Management - SMM) facility located at 30-27 Greenpoint Avenue, Long Island City, New York, will be issued an Air State Facility (ASF) permit, DEC ID # 2-6304-00268/00028.

The facility operates the following three (3) engine-generators:

1. Generator #1 (Cummins 402 hp), Emission Source 0005B is 402 HP (300 KW) with fuel usage of 11.4 gal/hr @ 100% load, and NOx emissions of 8.046 grams/KW-hr (6.0



grams/bHP-hr).

2. Generator #2 (Cummins 402 hp), Emission Source 0005C is a 402 HP (300 KW) with fuel usage of 11.4 gal/hr @ 100% load, and NOx emissions of 8.046 grams/KW-hr (6.0 grams/bHP-hr).

3. Generator #3 (Cummins Glen Drive Series 815 hp), Emission Source 0005F is a 815 HP (608 KW) with fuel usage of 22.5 gal/hr @ 100% load, and NOx emissions of 6.255 grams/KW-hr (4.67 grams/bHP-hr).

The NOx emission factor for each of the two 402 HP - 300 KW (Emission Sources 0005B & 0005C) is 6.0 gram/HP-hr (8.046 grams/KW-hr).

The NOx emission factor for the new 815 HP - 608 KW (Emission Source 0005F) is 4.664 gram/HP-hr (6.255 grams/KW-hr).

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator: JOHN F CRYAN
 NYSDEC
 47-40 21ST ST
 LONG ISLAND CITY, NY 11101-5407

Authorized Signature: _____ Date: ____ / ____ / ____



Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the compliance permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in any compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.



LIST OF CONDITIONS

DEC GENERAL CONDITIONS

General Provisions

- Facility Inspection by the Department
- Relationship of this Permit to Other Department Orders and Determinations
- Applications for permit renewals, modifications and transfers
- Permit modifications, suspensions or revocations by the Department

Facility Level

- Submission of application for permit modification or renewal -
REGION 2 HEADQUARTERS



DEC GENERAL CONDITIONS
****** General Provisions ******
GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1: Facility Inspection by the Department

Applicable State Requirement: ECL 19-0305

Item 1.1:

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

Item 1.2:

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

Item 1.3:

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Condition 2: Relationship of this Permit to Other Department Orders and Determinations

Applicable State Requirement: ECL 3-0301 (2) (m)

Item 2.1:

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Condition 3: Applications for permit renewals, modifications and transfers

Applicable State Requirement: 6 NYCRR 621.11

Item 3.1:

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item 3.2:

The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

Item 3.3:

Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.



Condition 4: Permit modifications, suspensions or revocations by the Department
Applicable State Requirement: 6 NYCRR 621.13

Item 4.1:

The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

- a) materially false or inaccurate statements in the permit application or supporting papers;
- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

****** Facility Level ******

Condition 5: Submission of application for permit modification or renewal - REGION 2 HEADQUARTERS
Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 5.1:

Submission of applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator
Region 2 Headquarters
Division of Environmental Permits
1 Hunters Point Plaza, 4740 21st Street
Long Island City, NY 11101-5407
(718) 482-4997

New York State Department of Environmental Conservation

Permit ID: 2-6304-00268/00028

Facility DEC ID: 2630400268



Permit Under the Environmental Conservation Law (ECL)

**ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY
PERMIT**

IDENTIFICATION INFORMATION

Permit Issued To: SIMSMETAL EAST LLC
1 LINDEN AVE
JERSEY CITY, NJ 07305

Facility: SIMSMETAL EAST LLC-QUEENS PLANT
30-27 GREENPOINT AVE
LONG ISLAND CITY, NY 11101

Authorized Activity By Standard Industrial Classification Code:
5093 - SCRAP AND WASTE MATERIALS

Permit Effective Date: 08/21/2013

Permit Expiration Date: 08/20/2023



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6 NYCRR 201-7.1: Facility Permissible Emissions
- *2 6 NYCRR 201-7.1: Capping Monitoring Condition
- *3 6 NYCRR 201-7.1: Capping Monitoring Condition
- 4 6 NYCRR 211.1: Air pollution prohibited
- 5 6 NYCRR 225-1.2 (b): Compliance Demonstration
- 6 6 NYCRR 225-1.2 (g): Compliance Demonstration
- 7 6 NYCRR 225-1.2 (h): Compliance Demonstration
- 8 40CFR 60, NSPS Subpart IIII: Applicability
- 9 40CFR 60.4204(b), NSPS Subpart IIII: Compliance Demonstration
- 10 40CFR 63, Subpart ZZZZ: Engines at Area sources of HAP
- 11 40CFR 63, Subpart ZZZZ: Compliance Demonstration
- 12 40CFR 63, Subpart ZZZZ: Compliance Demonstration
- 13 40CFR 63.6625(e), Subpart ZZZZ: Compliance Demonstration
- 14 40CFR 63.6665, Subpart ZZZZ: Compliance Demonstration

Emission Unit Level

- 15 6 NYCRR 201-7.1: Emission Unit Permissible Emissions
- 16 6 NYCRR 201-7.1: Process Permissible Emissions

EU=2-00002,EP=0005F

- 17 40CFR 63.6590(a)(2), Subpart ZZZZ: Applicability of new RICE at an area source of HAP
- 18 40CFR 63.6590(c), Subpart ZZZZ: Stationary RICE subject to regulations under 40 CFR Part 60

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 19 ECL 19-0301: Contaminant List
- 20 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
- 21 6 NYCRR Subpart 201-5: Emission Unit Definition
- 22 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
- 23 6 NYCRR 201-5.3 (c): Compliance Demonstration
- 24 6 NYCRR 211.2: Visible Emissions Limited

Emission Unit Level

- 25 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
- 26 6 NYCRR Subpart 201-5: Process Definition By Emission Unit

NOTE: * preceding the condition number indicates capping.



FEDERALLY ENFORCEABLE CONDITIONS
****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Sealing - 6 NYCRR 200.5

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation.

Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

No person shall operate any air contamination source sealed by the Commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

Item B: Acceptable Ambient Air Quality - 6 NYCRR 200.6

Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

Item C: Maintenance of Equipment - 6 NYCRR 200.7

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications,



required to operate such device effectively.

Item D: Unpermitted Emission Sources - 6 NYCRR 201-1.2

If an existing emission source was subject to the permitting requirements of 6 NYCRR Part 201 at the time of construction or modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

- (a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.
- (b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

Item E: Emergency Defense - 6 NYCRR 201-1.5

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;
- (2) The equipment at the permitted facility causing the emergency was at the time being properly operated;
- (3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- (4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.



(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

Item F: Recycling and Salvage - 6 NYCRR 201-1.7

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Item G: Prohibition of Reintroduction of Collected Contaminants to the Air - 6 NYCRR 201-1.8

No person shall unnecessarily remove, handle, or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

Item H: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR 201-3.2 (a)

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item I: Proof of Eligibility for Sources Defined as Trivial Activities - 6 NYCRR 201-3.3 (a)

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item J: Required Emission Tests - 6 NYCRR 202-1.1



An acceptable report of measured emissions shall be submitted, as may be required by the Commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the Commissioner within the time stated shall be sufficient reason for the Commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6 NYCRR Subpart 202-1.

- Item K: Open Fires Prohibitions - 6 NYCRR 215.2**
Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.
- Item L: Permit Exclusion - ECL 19-0305**
The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.
- Item M: Federally Enforceable Requirements - 40 CFR 70.6 (b)**
All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

FEDERAL APPLICABLE REQUIREMENTS
The following conditions are federally enforceable.

Condition 1: Facility Permissible Emissions



Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:6 NYCRR 201-7.1

Item 1.1:

The sum of emissions from the emission units specified in this permit shall not equal or exceed the following

Potential To Emit (PTE) rate for each regulated contaminant:

CAS No: 0NY210-00-0

PTE: 49,880 pounds per year

Name: OXIDES OF NITROGEN

Condition 2: Capping Monitoring Condition

Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:6 NYCRR 201-7.1

Item 2.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 201-6

Item 2.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 2.3:

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Item 2.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 2.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 2.6:

The Compliance Demonstration activity will be performed for the facility:



The Compliance Demonstration applies to:

Emission Unit: 2-00002 Emission Point: 0005B
Process: 002 Emission Source: 0005B

Emission Unit: 2-00002 Emission Point: 0005C
Process: 002 Emission Source: 0005C

Emission Unit: 2-00002 Emission Point: 0005F
Process: 002 Emission Source: 0005F

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 2.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The facility is capping out of Title V permit requirements by limiting the #2 diesel fuel usage to less than 217,900 gallons per per any 12 consecutive rolling months. The facility wide NOx emissions will be limited to 24.99 tons per year for the three (3) generators (Emission Sources 0005B, 0005C & 0005F) for electricity generation. The facility will demonstrate compliance with the cap by recording monthly #2 diesel fuel oil usage and rolling the monthly NOx emissions during any 12 month consecutive period.

At the beginning of each month, the facility shall calculate total NOx emissions for the previous month and total NOx emissions for the previous consecutive 12 month period. Monthly NOx emissions shall be determined by utilizing appropriate emission factors.

Generator #1 (Cummins 402 hp), Emission Source 0005B is 402 HP (300 KW) with fuel usage of 11.4 gal/hr @ 100% load, and NOx emissions of 8.046 grams/KW-hr (6.0 grams/bHP-hr).

Generator #2 (Cummins 402 hp), Emission Source 0005C is a 402 HP (300 KW) with fuel usage of 11.4 gal/hr @ 100% load, and NOx emissions of 8.046 grams/KW-hr (6.0 grams/bHP-hr).

Generator #3 (Cummins Glen Drive Series 815 hp), Emission Source 0005F is a 815 HP (608 KW) with fuel usage of 22.5 gal/hr @ 100% load, and NOx emissions of 6.255 grams/KW-hr (4.67 grams/bHP-hr).



The emission factors for determining the NO_x emissions in this condition are based on fuel consumption and are derived as follows:

Conversion Factors:

- 1 BHP = 7,000 btu (Conversion factor from AP-42, Table 3.3-1, Note a)
- Heating Value of #2 Diesel Fuel Oil = 138,000 BTU/gallon.
- 1 kW-hr = 1.341 HP-hr
- 1000 grams = 2.2046 lbs

NO_x Emissions for each 300 kW engine: $(8.046 \text{ grams} / \text{kW-hr}) \times (1 \text{ kW} / 1.341 \text{ HP}) \times (2.2046 \text{ lbs} / 1000 \text{ grams}) / (7,000 \text{ btu} / \text{HP}) \times (138,000 \text{ btu} / \text{gallon}) \times (1,000 \text{ gallons}) = 260.8 \text{ lbs} / 1,000 \text{ gallons}$

NO_x Emissions for 608 kW engine: $(6.255 \text{ grams} / \text{kW-hr}) \times (1 \text{ kW-hr} / 1.341 \text{ HP}) \times (2.2046 \text{ lbs} / 1000 \text{ grams}) / (7,000 \text{ btu} / \text{HP}) \times (138,000 \text{ btu} / \text{gallon}) \times (1,000 \text{ gallons}) = 202.8 \text{ lbs} / 1,000 \text{ gallons}$

The following NO_x emission equation will be used to calculate the facility's monthly NO_x emissions, and to demonstrate compliance with this cap (24.99 tons/yr NO_x) on a rolling 12-month basis where the individual monthly NO_x emissions will be determined from the following equation:

$$Y = [(A \times B) + (C \times D)] / 2,000$$

Where:

- Y = Monthly facility NO_x emissions (tons);
- A = the monthly consumption of diesel fuel in Emission Sources 0005B and 0005C (1,000 gallons);
- B = 260.8 lbs NO_x / 1,000 gallons burned (based on 6.0 g/hp-hr (8.046 g/KW-h) NO_x emissions);
- C = the monthly consumption of diesel fuel in Emission Source 0005F and (1,000 gallons);
- D = 202.8 lbs NO_x / 1,000 gallons burned (based on 4.67 g/hp-hr (6.255 g/KW-h) NO_x emissions);

A + C cannot exceed a total of 217,900 gallons of fuel oil. This is based on the assumption that the two Cummins 300 kW engines combined will not run more than 8,760 hours a year (assuming maximum load of 100% and 11.4



gallons of fuel used per hour), and the new 608 kW engine will operate the remainder of the time up to the 24.99 ton cap (assuming maximum load of 100% and 22.5 gallons of fuel used per hour). This calculation is based on the logic and emissions found in the potential to emit calculations submitted by the facility.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NUMBER 2 OIL

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 24.99 tons per year

Reference Test Method: Keep Records of Fuel Usage

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MINIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2014.

Subsequent reports are due every 12 calendar month(s).

Condition 3: Capping Monitoring Condition
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement: 6 NYCRR 201-7.1

Item 3.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 201-6

Item 3.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 3.3:

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Item 3.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 3.5:



grams/bHP-hr).

Generator #3 (Cummins Glen Drive Series 815 hp), Emission Source 0005F is a 815 HP (608 KW) with fuel usage of 22.5 gal/hr @ 100% load, and NOx emissions of 6.255 grams/KW-hr (4.67 grams/bHP-hr).

The emission factors for determining the NOx emissions in this condition are based on fuel consumption and are derived as follows:

Conversion Factors:

- 1 BHP = 7,000 btu (Conversion factor from AP-42, Table 3.3-1, Note a)
- Heating Value of #2 Diesel Fuel Oil = 138,000 BTU/gallon.
- 1 kW-hr = 1.341 HP-hr
- 1000 grams = 2.2046 lbs

NOx Emissions for each 300 kW engine: $(8.046 \text{ grams} / \text{kW-hr}) \times (1 \text{ kW} / 1.341 \text{ HP}) \times (2.2046 \text{ lbs} / 1000 \text{ grams}) / (7,000 \text{ btu} / \text{HP}) \times (138,000 \text{ btu} / \text{gallon}) \times (1,000 \text{ gallons}) = 260.8 \text{ lbs} / 1,000 \text{ gallons}$

NOx Emissions for 608 kW engine: $(6.255 \text{ grams} / \text{kW-hr}) \times (1 \text{ kW-hr} / 1.341 \text{ HP}) \times (2.2046 \text{ lbs} / 1000 \text{ grams}) / (7,000 \text{ btu} / \text{HP}) \times (138,000 \text{ btu} / \text{gallon}) \times (1,000 \text{ gallons}) = 202.8 \text{ lbs} / 1,000 \text{ gallons}$

The following NOx emission equation will be used to calculate the facility's monthly NOx emissions, and to demonstrate compliance with this cap (24.99 tons/yr NOx) on a rolling 12-month basis where the individual monthly NOx emissions will be determined from the following equation:

$$Y = [(A \times B) + (C \times D)] / 2,000$$

Where:

- Y = Monthly facility NOx emissions (tons);
- A = the monthly consumption of diesel fuel in Emission Sources 0005B and 0005C (1,000 gallons);
- B = 260.8 lbs NOx / 1,000 gallons burned (based on 6.0 g/hp-hr (8.046 g/KW-h) NOx emissions);
- C = the monthly consumption of diesel fuel in Emission Source 0005F and (1,000 gallons);
- D = 202.8 lbs NOx / 1,000 gallons burned (based on 4.67



g/hp-hr (6.255 g/KW-h) NOx emissions);

A + C cannot exceed a total of 217,900 gallons of fuel oil. This is based on the assumption that the two Cummins 300 kW engines combined will not run more than 8,760 hours a year (assuming maximum load of 100% and 11.4 gallons of fuel used per hour), and the new 608 kW engine will operate the remainder of the time up to the 24.99 ton cap (assuming maximum load of 100% and 22.5 gallons of fuel used per hour). This calculation is based on the logic and emissions found in the potential to emit calculations submitted by the facility.

Work Practice Type: PROCESS MATERIAL THRUPUT
Process Material: NUMBER 2 OIL
Upper Permit Limit: 217900 gallons per year
Reference Test Method: Keep Records of Fuel Usage
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MINIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2014.
Subsequent reports are due every 12 calendar month(s).

Condition 4: Air pollution prohibited
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:6 NYCRR 211.1

Item 4.1:

No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

Condition 5: Compliance Demonstration
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:6 NYCRR 225-1.2 (b)

Item 5.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 5.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:



Owners and/or operators of any stationary combustion installation that fires either solid fuels or oil are limited to the firing of solid fuels or oil with a sulfur content listed in paragraph 6 NYCRR 225-1.(2)(b) through June 30, 2014.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.20 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY
TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 6: Compliance Demonstration
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement: 6 NYCRR 225-1.2 (g)

Item 6.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 6.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC
OPERATIONS

Monitoring Description:

Owners and/or operators of a stationary combustion installation that fires distillate oil other than number two heating oil are limited to the purchase of distillate oil with 0.0015 percent sulfur by weight or less on or after July 1, 2014. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period.

New York State Department of Environmental Conservation

Permit ID: 2-6304-00268/00028

Facility DEC ID: 2630400268



All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.0015 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY
TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 7: Compliance Demonstration
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:6 NYCRR 225-1.2 (h)

Item 7.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 7.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC
OPERATIONS

Monitoring Description:

Owners and/or operators of a stationary combustion installations that fire distillate oil are limited to the firing of distillate oil with 0.0015 percent sulfur by weight or less on or after July 1, 2016. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.0015 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY
TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

New York State Department of Environmental Conservation

Permit ID: 2-6304-00268/00028

Facility DEC ID: 2630400268



Condition 8: Applicability
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:40CFR 60, NSPS Subpart IIII

Item 8.1:

Facilities that have stationary compression ignition internal combustion engines must comply with applicable portions of 40 CFR 60 Subpart IIII.

Condition 9: Compliance Demonstration
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:40CFR 60.4204(b), NSPS Subpart IIII

Item 9.1:

The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 2-00002

Emission Point: 0005F

Process: 002

Emission Source: 0005F

Item 9.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of a 2007 model year and later non-emergency stationary compression ignition (CI) internal combustion engine with a maximum power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters/cylinder will require certification of the emission standards for new non-road CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable for all pollutants, for the same model year and maximum engine power. Compliance with this requirement will be established by purchasing an engine certified to the emission standard referenced above and installed and configured to the manufacturer's specifications. Records documenting these actions must be kept on site.

If an emission certification cannot be obtained from the manufacturer, then the testing requirements stated in 40 CFR 60.4212 must be completed at least once during the term of this permit (10 years) for NO_x, NMHC, CO and PM.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

New York State Department of Environmental Conservation

Permit ID: 2-6304-00268/00028

Facility DEC ID: 2630400268



The initial report is due 1/30/2014.
Subsequent reports are due every 6 calendar month(s).

Condition 10: Engines at Area sources of HAP
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:40CFR 63, Subpart ZZZZ

Item 10.1:

Internal combustion engines, constructed or re-constructed on or after June 12, 2006, that meet the requirements of 40 CFR 60 Subpart IIII or Subpart JJJJ meet the requirements of 40 CFR 63 Subpart ZZZZ.

Condition 11: Compliance Demonstration
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:40CFR 63, Subpart ZZZZ

Item 11.1:

The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 2-00002	Emission Point: 0005B
Process: 002	Emission Source: 0005B

Regulated Contaminant(s):	
CAS No: 000630-08-0	CARBON MONOXIDE

Item 11.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The 402 HP (300 HP) generator engine (Emission Source 0005B) is subject to the carbon monoxide (CO) emissions limitation found in 40 CFR 63.6603(a). The facility must perform stack testing once during the term of the permit (10 years) that demonstrates that the generator engine meets 49 ppmvd or less at 15% O₂. If the facility fails to meet this requirement, then it must reduce its CO emissions by 70%, utilizing an appropriate control device and associated CEMS in accordance with 40 CFR 63.6580.

The facility was required to perform CO emissions testing on the two Cummins 300 kW engines to demonstrate compliance with 40 CFR 63.6580, Requirement 2(a) and (b) of Table 2D. The facility was required to perform USEPA Methods 3 & 10 to test for Carbon Monoxide (CO) or reduce CO emissions by 70% or more. To that end, SMM installed catalysts on each of the two 300 KW engines and performed

New York State Department of Environmental Conservation

Permit ID: 2-6304-00268/00028

Facility DEC ID: 2630400268



stack testing on May 13th, 2013. Test results demonstrated approximately 90% CO emissions reduction across the catalyst.

Upper Permit Limit: 49 parts per million by volume (dry, corrected to 15% O₂)

Reference Test Method: EPA Methods 3 & 10

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -
SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

Subsequent reports are due every 6 calendar month(s).

Condition 12: Compliance Demonstration
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:40CFR 63, Subpart ZZZZ

Item 12.1:

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: 2-00002

Emission Point: 0005C

Process: 002

Emission Source: 0005C

Regulated Contaminant(s):

CAS No: 000630-08-0

CARBON MONOXIDE

Item 12.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The 402 HP (300 HP) generator engine (Emission Source 0005C) is subject to the carbon monoxide (CO) emissions limitation found in 40 CFR 63.6603(a). The facility must perform stack testing once during the term of the permit (10 years) that demonstrates that the generator engine meets 49 ppmvd or less at 15% O₂. If the facility fails to meet this requirement, then it must reduce its CO emissions by 70%, utilizing an appropriate control device and associated CEMS in accordance with 40 CFR 63.6580.

The facility was required to perform CO emissions testing on the two Cummins 300 kW engines to demonstrate compliance with 40 CFR 63.6580, Requirement 2(a) and (b) of Table 2D. The facility was required to perform USEPA Methods 3 & 10 to test for Carbon Monoxide (CO) or reduce CO emissions by 70% or more. To that end, SMM installed

New York State Department of Environmental Conservation

Permit ID: 2-6304-00268/00028

Facility DEC ID: 2630400268



catalysts on each of the two 300 KW engines and performed stack testing on May 13th, 2013. Test results demonstrated approximately 90% CO emissions reduction across the catalyst.

Upper Permit Limit: 49 parts per million by volume (dry, corrected to 15% O₂)

Reference Test Method: EPA Methods 3 & 10

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -

SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

Subsequent reports are due every 6 calendar month(s).

Condition 13: Compliance Demonstration
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:40CFR 63.6625(e), Subpart ZZZZ

Item 13.1:

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: 2-00002

Process: 002

Emission Point: 0005B

Emission Source: 0005B

Emission Unit: 2-00002

Process: 002

Emission Point: 0005C

Emission Source: 0005C

Item 13.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

For all existing stationary RICEs located at an area source of HAP emissions not subject to any numerical emission standards shown in Table 2d of this subpart, the owner or/and operator 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 facility can develop its own 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.

This condition does not apply to Emission Source 0005F since its on-site installation date is post June 12, 2006.



Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.
Subsequent reports are due every 6 calendar month(s).

Condition 14: Compliance Demonstration
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:40CFR 63.6665, Subpart ZZZZ

Item 14.1:

The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 2-00002	Emission Point: 0005B
Process: 002	Emission Source: 0005B
Emission Unit: 2-00002	Emission Point: 0005C
Process: 002	Emission Source: 0005C

Item 14.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Table 8 of Subpart ZZZZ indicates which parts of the General Provisions in Subpart 63.1 through 63.15 apply to the emergency engines located at an area source of HAP emissions.

This condition does not apply to Emission Source 0005F since its on-site installation date is post June 12, 2006.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.
Subsequent reports are due every 6 calendar month(s).

**** Emission Unit Level ****

Condition 15: Emission Unit Permissible Emissions
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:6 NYCRR 201-7.1

New York State Department of Environmental Conservation

Permit ID: 2-6304-00268/00028

Facility DEC ID: 2630400268



Item 15.1:

The sum of emissions from all regulated processes specified in this permit for the emission unit cited

shall not exceed the following Potential to Emit (PTE) rates for each regulated contaminant:

Emission Unit: 2-00002

CAS No: 0NY210-00-0

Name: OXIDES OF NITROGEN

PTE(s): 5.68 pounds per hour

49,980 pounds per year

Condition 16: Process Permissible Emissions

Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:6 NYCRR 201-7.1

Item 16.1:

The sum of emissions from the regulated process cited shall not exceed the following Potential to Emit (PTE) rates for each regulated contaminant:

Emission Unit: 2-00002

Process: 002

CAS No: 0NY210-00-0

Name: OXIDES OF NITROGEN

PTE(s): 5.68 pounds per hour

49,980 pounds per year

24.99 tons per year

Condition 17: Applicability of new RICE at an area source of HAP

Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:40CFR 63.6590(a)(2), Subpart ZZZZ

Item 17.1:

This Condition applies to Emission Unit: 2-00002 Emission Point: 0005F

Item 17.2:

A stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions is new if construction or reconstruction commenced on or after June 12, 2006.

Condition 18: Stationary RICE subject to regulations under 40 CFR Part

60

Effective between the dates of 08/21/2013 and 08/20/2023

Applicable Federal Requirement:40CFR 63.6590(c), Subpart ZZZZ

Item 18.1:

This Condition applies to Emission Unit: 2-00002 Emission Point: 0005F



Item 18.2:

An affected source that meets any of the criteria listed below must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

- new or reconstructed stationary RICE located at an area source,
- new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake horsepower located at a major source of HAP emissions,
- new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake horsepower located at a major source of HAP emissions,
- new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake horsepower located at a major source of HAP emissions,
- new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake horsepower located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis,
- new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake horsepower located at a major source of HAP emissions,
- new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake horsepower located at a major source of HAP emissions.



STATE ONLY ENFORCEABLE CONDITIONS
****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)

Where facility owners and/or operators keep records pursuant to compliance with the requirements of 6 NYCRR Subpart 201-5.4, and/or the emission capping requirements of 6 NYCRR Subpart 201-7, the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. Facility owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department.

Item B: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

STATE ONLY APPLICABLE REQUIREMENTS

The following conditions are state only enforceable.

Condition 19: Contaminant List
Effective between the dates of 08/21/2013 and 08/20/2023



Applicable State Requirement:ECL 19-0301

Item 19.1:

Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 000630-08-0

Name: CARBON MONOXIDE

CAS No: 0NY210-00-0

Name: OXIDES OF NITROGEN

**Condition 20: Malfunctions and start-up/shutdown activities
Effective between the dates of 08/21/2013 and 08/20/2023**

Applicable State Requirement:6 NYCRR 201-1.4

Item 20.1:

(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

(b) The facility owner or operator shall compile and maintain records of all equipment malfunctions, maintenance, or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when requested to do so, or when so required by a condition of a permit issued for the corresponding air contamination source. Such reports shall state whether any violations occurred and, if so, whether they were unavoidable, include the time, frequency and duration of the maintenance and/or start-up/shutdown activities, and an estimate of the emission rates of any air contaminants released. Such records shall be maintained for a period of at least five years and made available for review to department representatives upon request. Facility owners or operators subject to continuous stack monitoring and quarterly reporting requirements need not submit additional reports for equipment maintenance or start-up/shutdown activities for the facility to the department.

(c) In the event that emissions of air contaminants in excess of any emission standard in this Subchapter occur due to a malfunction, the facility owner or operator shall compile and maintain records of the malfunction and notify the department as soon as possible during normal working hours, but not later than two working days after becoming aware that the malfunction occurred. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates.

(d) The department may also require the owner or operator to include, in reports described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.

(e) A violation of any applicable emission standard resulting from start-up, shutdown, or malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that



such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.

Condition 21: Emission Unit Definition
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 21.1:

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: 2-00002

Emission Unit Description:

Emission Unit 2-00002 is for the generation of electricity via # 2 fuel oil fired engine generator sets for various operations at the facility. Process 002 consists of # 2 diesel fuel fired in the three engine-generator sets in Emission Unit 2-00002. This emission unit consists of the following three (3) engine-generators:

1. Generator #1 (Cummins 402 hp), Emission Source 0005B is 402 HP (300 KW) with fuel usage of 11.4 gal/hr @ 100% load, and NOx emissions of 8.046 grams/KW-hr (6.0 grams/bHP-hr).
2. Generator #2 (Cummins 402 hp), Emission Source 0005C is a 402 HP (300 KW) with fuel usage of 11.4 gal/hr @ 100% load, and NOx emissions of 8.046 grams/KW-hr (6.0 grams/bHP-hr).
3. Generator #3 (Cummins Glen Drive Series 815 hp), Emission Source 0005F is a 815 HP (608 KW) with fuel usage of 22.5 gal/hr @ 100% load, and NOx emissions of 6.255 grams/KW-hr (4.67 grams/bHP-hr).

The flue gas from each engine generator exhaust through its own stack, identified as Emission Points 0005B, 0005C & 0005F; respectively. The Cummins # 1 & Cummins # 2 engine generator operates at separate times, depending on the requirement for on-site electricity. One of the two identical 1000 KW each (1,322 bhp maximum rated output each) Cummins Plastics Recycle Generators (Emission Source 0005D) in Emission Unit 2-00002 was removed from the facility on June 30, 2013, and the other Cummins Plastics Recycle Generator (Emission Source 0005E) was never installed.

The emission factors for determining the NOx emissions in this condition are based on fuel consumption and are derived as follows:

Conversion Factors:



- 1 BHP = 7,000 btu (Conversion factor from AP-42, Table 3.3-1, Note a)
- Heating Value of #2 Diesel Fuel Oil = 138,000 BTU/gallon.
- 1 kW-hr = 1.341 HP-hr
- 1000 grams = 2.2046 lbs

NOx Emissions for each 300 kW engine: $(8.046 \text{ grams} / \text{kW-hr}) \times (1 \text{ kW} / 1.341 \text{ HP}) \times (2.2046 \text{ lbs} / 1000 \text{ grams}) / (7,000 \text{ btu} / \text{HP}) \times (138,000 \text{ btu} / \text{gallon}) \times (1,000 \text{ gallons}) = 260.8 \text{ lbs} / 1,000 \text{ gallons}$

NOx Emissions for 608 kW engine: $(6.255 \text{ grams} / \text{kW-hr}) \times (1 \text{ kW-hr} / 1.341 \text{ HP}) \times (2.2046 \text{ lbs} / 1000 \text{ grams}) / (7,000 \text{ btu} / \text{HP}) \times (138,000 \text{ btu} / \text{gallon}) \times (1,000 \text{ gallons}) = 202.8 \text{ lbs} / 1,000 \text{ gallons}$

Building(s): GENERATOR

**Condition 22: Renewal deadlines for state facility permits
Effective between the dates of 08/21/2013 and 08/20/2023**

Applicable State Requirement: 6 NYCRR 201-5.2 (c)

Item 22.1:

The owner or operator of a facility having an issued state facility permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

**Condition 23: Compliance Demonstration
Effective between the dates of 08/21/2013 and 08/20/2023**

Applicable State Requirement: 6 NYCRR 201-5.3 (c)

Item 23.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 23.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Any reports or submissions required by this permit shall be submitted to the Regional Air Pollution Control Engineer (RAPCE) at the following address:

Division of Air Resources
NYS Dept. of Environmental Conservation

New York State Department of Environmental Conservation

Permit ID: 2-6304-00268/00028

Facility DEC ID: 2630400268



Region 2
47-40 21st St.
Long Island City, NY 11101

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2014.
Subsequent reports are due every 12 calendar month(s).

Condition 24: Visible Emissions Limited
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable State Requirement:6 NYCRR 211.2

Item 24.1:

Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

****** Emission Unit Level ******

Condition 25: Emission Point Definition By Emission Unit
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 25.1:

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 2-00002

Emission Point: 0005B

Height (ft.): 45 Diameter (in.): 8
NYTMN (km.): 4509.8 NYTME (km.): 589.6 Building: GENERATOR

Emission Point: 0005C

Height (ft.): 41 Diameter (in.): 8
NYTMN (km.): 4509.8 NYTME (km.): 589.6 Building: GENERATOR

Emission Point: 0005F

Height (ft.): 41 Diameter (in.): 8
NYTMN (km.): 4509.8 NYTME (km.): 589.6 Building: GENERATOR

Condition 26: Process Definition By Emission Unit
Effective between the dates of 08/21/2013 and 08/20/2023

Applicable State Requirement:6 NYCRR Subpart 201-5



Item 26.1:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-00002

Process: 002

Source Classification Code: 2-03-001-01

Process Description:

Process 002 consists of the burning of # 2 diesel fuel oil in the three (3) engine generators (Emission Sources 0005B, 0005C & 0005F) in Emission Unit 2-00002 for the generation of electricity. There are two identical 300 KW each diesel Cummins Generators (Cummins # 1 & Cummins # 2), identified as Emission Sources 0005B & 0005C; respectively, and a new 815 HP (608 KW) engine - Cummins # 3 Cummins Gen Drive Series 12V 1600 G20S generator, identified as Emission Source 0005F.

The flue gas from each engine generator exhaust through its own stack, identified as Emission Points 0005B, 0005C & 0005F; respectively. The Cummins # 1 & Cummins # 2 engine generator operates at separate times, depending on the requirement for on-site electricity. One of the two identical 1000 KW each (1,322 bhp maximum rated output each) Cummins Plastics Recycle Generators (Emission Source 0005D) in Emission Unit 2-00002 was removed from the facility on June 30, 2013, and the other Cummins Plastics Recycle Generator (Emission Source 0005E) was never installed.

The two identical 1000 KW each (1,322 bhp maximum rated output each) Cummins Plastics Recycle Generator (Emission Sources 0005D) in Emission Unit 2-00002 was removed from the facility on June 30, 2013, and Cummins Plastics Recycle Generator (Emission Sources 0005D) in Emission Unit 2-00002 was never installed.

1. Generator #1 (Cummins 402 hp), Emission Source 0005B is 402 HP (300 KW) with fuel usage of 11.4 gal/hr @ 100% load, and NOx emissions of 8.046 grams/KW-hr (6.0 grams/bHP-hr).
2. Generator #2 (Cummins 402 hp), Emission Source 0005C is a 402 HP (300 KW) with fuel usage of 11.4 gal/hr @ 100% load, and NOx emissions of 8.046 grams/KW-hr (6.0 grams/bHP-hr).
3. Generator #3 (Cummins Glen Drive Series 815 hp), Emission Source 0005F is a 402 HP (608 KW) with fuel usage of 22.5 gal/hr @ 100% load, and NOx emissions of 6.255 grams/KW-hr (4.67 grams/bHP-hr).

The emission factors for determining the NOx emissions in



this condition are based on fuel consumption and are derived as follows:

Conversion Factors:

- 1 BHP = 7,000 btu (Conversion factor from AP-42, Table 3.3-1, Note a)
- Heating Value of #2 Diesel Fuel Oil = 138,000 BTU/gallon.
- 1 kW-hr = 1.341 HP-hr
- 1000 grams = 2.2046 lbs

NOx Emissions for each 300 kW engine: $(8.046 \text{ grams} / \text{kW-hr}) \times (1 \text{ kW} / 1.341 \text{ HP}) \times (2.2046 \text{ lbs} / 1000 \text{ grams}) / (7,000 \text{ btu} / \text{HP}) \times (138,000 \text{ btu} / \text{gallon}) \times (1,000 \text{ gallons}) = 260.8 \text{ lbs} / 1,000 \text{ gallons}$

NOx Emissions for 608 kW engine: $(6.255 \text{ grams} / \text{kW-hr}) \times (1 \text{ kW-hr} / 1.341 \text{ HP}) \times (2.2046 \text{ lbs} / 1000 \text{ grams}) / (7,000 \text{ btu} / \text{HP}) \times (138,000 \text{ btu} / \text{gallon}) \times (1,000 \text{ gallons}) = 202.8 \text{ lbs} / 1,000 \text{ gallons}$

The facility's NOx emissions are limited to a maximum of 24.99 tons/year. The facility's total fuel consumption of # 2 fuel oil for the three (3) engine generators is limited to 217,900 gallons/year.

Emission Source/Control: 0005B - Combustion
Design Capacity: 402 horsepower (electric)

Emission Source/Control: 0005C - Combustion
Design Capacity: 402 horsepower (electric)

Emission Source/Control: 0005F - Combustion
Design Capacity: 815 horsepower (electric)

