



Department of Energy

Brookhaven Site Office
P.O. Box 5000
Upton, New York 11973

FEB 18 2014

Mr. Jason Remien
Brookhaven Science Associates, LLC
Brookhaven National Laboratory
Upton, New York 11973

Dear Mr. Remien:

SUBJECT: BROOKHAVEN NATIONAL LABORATORY (BNL) TITLE V AIR PERMIT
NUMBER 1-4722-00032/00115

Enclosed please find the recently issued Title V Air Permit for BNL. Please review all conditions of the permit and ensure they are complied with.

If you should have any questions, or identify any issues or problems with the permit, please contact Jerry Granzen at extension 4089 as soon as possible.

Sincerely,

A handwritten signature in cursive script that reads "Christopher Senie For Robert Desmarais".

Robert L. Desmarais, Director
Operations Management Division

Enclosure:
As Stated

cc: G. Goode, BSA, w/o encl.
J. Williams, BSA, w/o encl.



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 1-4722-00032/00115
Effective Date: 02/04/2014 Expiration Date: 02/03/2019

Permit Issued To: U S DEPT OF ENERGY
1000 INDEPENDENCE AVE SW
WASHINGTON, DC 20585

Contact: GERALD GRANZEN
US DEPT OF ENERGY
53 BELL AVE
UPTON, NY 11973
(631) 344-4089

Facility: BROOKHAVEN NATIONAL LABORATORY
53 BELL AVE
UPTON, NY 11973

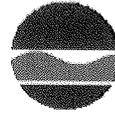
Description:

Brookhaven National Laboratory (BNL) submitted a Title V renewal application on December 28, 2012 for BNL (DEC ID# 1-4722-00032).

BNL is a government-owned contractor-operated research facility. The laboratory is managed by Brookhaven Science Associates (BSA) which is a limited liability company with two principal members: the Research Foundation of the State University of New York on behalf of SUNY at Stony Brook and Battelle Memorial Institute. The laboratory carries out basic and applied research in the following fields: high-energy nuclear and solid state physics; fundamental material and structural properties and the interactions of matter; nuclear medicine; biomedical and environmental sciences; and selected energy technologies.

New York State Department of Environmental Conservation

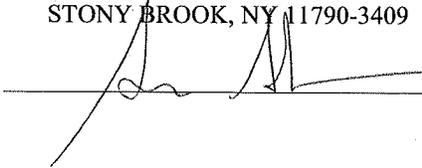
Facility DEC ID: 147220032

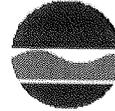


By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator: SUSAN ACKERMAN
NYSDEC - SUNY @ STONY BROOK
50 CIRCLE RD
STONY BROOK, NY 11790-3409

Authorized Signature:


Date: 7/4/2014



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

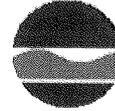
The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject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



PAGE LOCATION OF CONDITIONS

PAGE

DEC GENERAL CONDITIONS

General Provisions

- 4 1 Facility Inspection by the Department
- 4 2 Relationship of this Permit to Other Department Orders and Determinations
- 4 3 Applications for permit renewals, modifications and transfers
- 5 4 Permit modifications, suspensions or revocations by the Department

Facility Level

- 5 5 Submission of application for permit modification or renewal -
REGION 1 HEADQUARTERS



DEC GENERAL CONDITIONS

****** General Provisions ******

For the purpose of your Title V permit, the following section contains state-only enforceable terms and conditions.

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

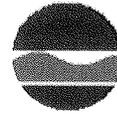
Item 3.1:

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 1
HEADQUARTERS
Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 5.1:

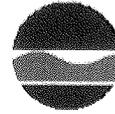
Applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator
Region 1 Headquarters
Division of Environmental Permits
Stony Brook University
50 Circle Road
Stony Brook, NY 11790-3409
(631) 444-0365

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: U S DEPT OF ENERGY
1000 INDEPENDENCE AVE SW
WASHINGTON, DC 20585

Facility: BROOKHAVEN NATIONAL LABORATORY
53 BELL AVE
UPTON, NY 11973

Authorized Activity By Standard Industrial Classification Code:
3812 - SEARCH AND NAVIGATION EQUIPMENT
4961 - STEAM SUPPLY
5541 - GASOLINE SERVICE STATIONS
8731 - COMMERCIAL PHYSICAL RESEARCH
8733 - NONCOMMERCIAL RESEARCH ORGANIZATIONS
8922 - NONCOMMERCIAL RESEARCH ORGANIZATIONS(1977)

Permit Effective Date: 02/04/2014

Permit Expiration Date: 02/03/2019



PAGE LOCATION OF CONDITIONS

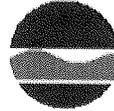
PAGE

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 9 1 6 NYCRR 200.6: Acceptable Ambient Air Quality
- 9 2 6 NYCRR 201-6.4 (a) (7): Fees
- 9 3 6 NYCRR 201-6.4 (c): Recordkeeping and Reporting of Compliance Monitoring
- 10 4 6 NYCRR 201-6.4 (c) (2): Records of Monitoring, Sampling, and Measurement
- 10 5 6 NYCRR 201-6.4 (c) (3) (ii): Compliance Certification
- 12 6 6 NYCRR 201-6.4 (e): Compliance Certification
- 14 7 6 NYCRR 202-2.1: Compliance Certification
- 14 8 6 NYCRR 202-2.5: Recordkeeping requirements
- 14 9 6 NYCRR 215.2: Open Fires - Prohibitions
- 15 10 6 NYCRR 200.7: Maintenance of Equipment
- 16 11 6 NYCRR 201-1.7: Recycling and Salvage
- 16 12 6 NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
- 16 13 6 NYCRR 201-3.2 (a): Exempt Sources - Proof of Eligibility
- 16 14 6 NYCRR 201-3.3 (a): Trivial Sources - Proof of Eligibility
- 17 15 6 NYCRR 201-6.4 (a) (4): Requirement to Provide Information
- 17 16 6 NYCRR 201-6.4 (a) (8): Right to Inspect
- 17 17 6 NYCRR 201-6.4 (f) (6): Off Permit Changes
- 18 18 6 NYCRR 202-1.1: Required Emissions Tests
- 18 19 40 CFR Part 68: Accidental release provisions.
- 19 20 40CFR 82, Subpart F: Recycling and Emissions Reduction
- 19 21 6 NYCRR Subpart 201-6: Emission Unit Definition
- 25 22 6 NYCRR 201-6.4 (d) (4): Progress Reports Due Semiannually
- 26 23 6 NYCRR 211.1: Air pollution prohibited
- 26 24 6 NYCRR 225-2.7: Compliance Certification
- 27 25 6 NYCRR 225-3.3 (a): Compliance Certification
- 27 26 6 NYCRR 227-1.3 (a): Compliance Certification
- 29 27 6 NYCRR 227-2.6 (b): Compliance Certification
- 30 28 40CFR 52.21, Subpart A: Compliance Certification
- 30 29 40CFR 52.21, Subpart A: Compliance Certification
- 31 30 40CFR 52.21, Subpart A: Compliance Certification
- 31 31 40CFR 52.21, Subpart A: Compliance Certification
- 32 32 40CFR 52.21, Subpart A: Compliance Certification
- 32 33 40CFR 52.21, Subpart A: Compliance Certification
- 33 34 40CFR 52.21, Subpart A: Compliance Certification
- 34 35 40CFR 60.42b, NSPS Subpart Db: Compliance Certification
- 34 36 40CFR 60.48b(f), NSPS Subpart Db: Compliance Certification
- 35 37 40CFR 60.49b(e), NSPS Subpart Db: Compliance Certification
- 36 **Emission Unit Level**
- 36 38 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
- 40 39 6 NYCRR Subpart 201-6: Process Definition By Emission Unit

EU=U-61005



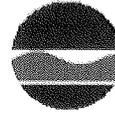
- 52 40 6 NYCRR 227.2 (b) (1): Compliance Certification
53 41 6 NYCRR 227.2 (b) (1): Compliance Certification
- EU=U-61005,Proc=SF1**
54 42 40CFR 60.48b(f), NSPS Subpart Db: Use of alternative methods for measuring NOx during CEMS downtime
- EU=U-61006**
54 43 6 NYCRR 227.2 (b) (1): Compliance Certification
55 44 40CFR 52.21, Subpart A: Compliance Certification
- EU=U-61006,Proc=SF4**
56 45 40CFR 60.48b(f), NSPS Subpart Db: Use of alternative methods for measuring NOx during CEMS downtime
- EU=U-61006,Proc=SF5**
56 46 40CFR 60.44b(a)(1), NSPS Subpart Db: Compliance Certification
57 47 40CFR 60.48b(f), NSPS Subpart Db: Use of alternative methods for measuring NOx during CEMS downtime
- EU=U-61006,Proc=SF6**
57 48 40CFR 60.44b(a)(1), NSPS Subpart Db: Compliance Certification
58 49 40CFR 60.48b(f), NSPS Subpart Db: Use of alternative methods for measuring NOx during CEMS downtime
- EU=U-61007**
58 50 40CFR 52.21, Subpart A: Compliance Certification
59 51 40CFR 52.21, Subpart A: Compliance Certification
59 52 40CFR 52.21, Subpart A: Compliance Certification
60 53 40CFR 52.21, Subpart A: Compliance Certification
61 54 40CFR 52.21, Subpart A: Compliance Certification
61 55 40CFR 52.21, Subpart A: Compliance Certification
62 56 40CFR 52.21, Subpart A: Compliance Certification
63 57 40CFR 60.43b(f), NSPS Subpart Db: Compliance Certification
- EU=U-61007,Proc=SF7**
63 58 40CFR 60.43b(b), NSPS Subpart Db: Compliance Certification
64 59 40CFR 60.48b(f), NSPS Subpart Db: Use of alternative methods for measuring NOx during CEMS downtime
- EU=U-61007,Proc=SF8**
64 60 40CFR 60.44b(a)(1), NSPS Subpart Db: Compliance Certification
65 61 40CFR 60.48b(f), NSPS Subpart Db: Use of alternative methods for measuring NOx during CEMS downtime
- EU=U-61007,Proc=SF9**
65 62 40CFR 60.44b(a)(1), NSPS Subpart Db: Compliance Certification
66 63 40CFR 60.48b(f), NSPS Subpart Db: Use of alternative methods for measuring NOx during CEMS downtime

EU=U-COILS

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



66 64 40CFR 60, NSPS Subpart TT: Compliance Certification

EU=U-FUELS

67 65 6 NYCRR 230.2 (k): Compliance Certification

68 66 6 NYCRR 230.2 (k): Compliance Certification

68 67 6 NYCRR 230.2 (k): Compliance Certification

69 68 6 NYCRR 230.2 (k): Compliance Certification

EU=U-METAL

69 69 6 NYCRR 226.2 (f): Solvent Metal Cleaning Processes

70 70 6 NYCRR 226.2 (g): Solvent Metal Cleaning Processes

70 71 6 NYCRR 226.3 (a) (4): Solvent Metal Cleaning Processes

EU=U-PAINT,EP=00AMB,Proc=PT1,ES=244AE

71 72 6 NYCRR 228-1.3 (b) (1): Compliance Certification

EU=U-PAINT,EP=24402,Proc=PT1,ES=24402

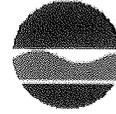
71 73 6 NYCRR 228-1.3 (b) (1): Compliance Certification

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

73 74 ECL 19-0301: Contaminant List

74 75 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities



FEDERALLY ENFORCEABLE CONDITIONS

**** Facility Level ****

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

The items listed below are not subject to the annual compliance certification requirements under Title V. Permittees may also have other obligations under regulations of general applicability.

Item A: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined by subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the Department 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 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 and maintained;

(3) During the period of the emergency the facility owner 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 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 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 B: Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10 (b)

The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.

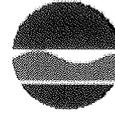
Item C: Timely Application for the Renewal of Title V Permits - 6 NYCRR 201-6.2 (a) (4)

Owners and/or operators of facilities having an issued Title V permit

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



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.

Item D: Certification by a Responsible Official - 6 NYCRR 201-6.2 (d) (12)

Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Item E: Requirement to Comply With All Conditions - 6 NYCRR 201-6.4 (a) (2)

The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

Item F: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR 201-6.4 (a) (3)

This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Item G: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.4 (a) (5)

It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.

Item H: Property Rights - 6 NYCRR 201-6.4 (a) (6)

This permit does not convey any property rights of any sort or any exclusive privilege.

Item I: Severability - 6 NYCRR 201-6.4 (a) (9)

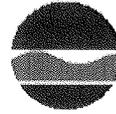
If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

Item J: Permit Shield - 6 NYCRR 201-6.4 (g)

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

- i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;
- ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;
- iii. The applicable requirements of Title IV of the Act;
- iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

Item K: Reopening for Cause - 6 NYCRR 201-6.4 (i)

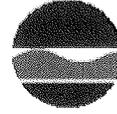
This Title V permit shall be reopened and revised under any of the following circumstances:

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.
- ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.

iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

Proceedings to reopen and issue Title V facility permits shall follow the same procedures as apply to initial permit issuance but shall affect only those parts of the permit for which cause to reopen exists.

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

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)

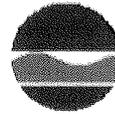
All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

**MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS
SUBJECT TO ANNUAL CERTIFICATIONS AT ALL TIMES**

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements at all times.

Condition 1: Acceptable Ambient Air Quality
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 200.6

Item 1.1:

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.

Condition 2: Fees
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 201-6.4 (a) (7)

Item 2.1:

The owner and/or operator of a stationary source shall pay fees to the Department consistent with the fee schedule authorized by ECL 72-0303.

Condition 3: Recordkeeping and Reporting of Compliance Monitoring
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 201-6.4 (c)

Item 3.1:

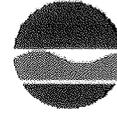
The following information must be included in any required compliance monitoring records and reports:

- (i) The date, place, and time of sampling or measurements;
- (ii) The date(s) analyses were performed;
- (iii)The company or entity that performed the analyses;
- (iv) The analytical techniques or methods used including quality assurance and quality control procedures if required;
- (v) The results of such analyses including quality assurance data where required; and
- (vi) The operating conditions as existing at the time of sampling or measurement.

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Any deviation from permit requirements must be clearly identified in all records and reports. Reports must be certified by a responsible official, consistent with Section 201-6.2 of Part 201.

Condition 4: Records of Monitoring, Sampling, and Measurement
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR 201-6.4 (c) (2)

Item 4.1:

Compliance monitoring and recordkeeping shall be conducted according to the terms and conditions contained in this permit and shall follow all quality assurance requirements found in applicable regulations. Records of all monitoring data and support information must be retained for a period of at least 5 years from the date of the monitoring, sampling, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

Condition 5: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR 201-6.4 (c) (3) (ii)

Item 5.1:

The Compliance Certification activity will be performed for the Facility.

Item 5.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

To meet the requirements of this facility permit with respect to reporting, the permittee must:

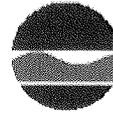
Submit reports of any required monitoring at a minimum frequency of every 6 months, based on a calendar year reporting schedule. These reports shall be submitted to the Department within 30 days after the end of a reporting period. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the responsible official for this facility.

Notify the Department and report permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations shall be submitted to the permitting authority based on the

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



following schedule:

- (1) For emissions of a hazardous air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
- (2) For emissions of any regulated air pollutant, excluding those listed in paragraph (1) of this section, that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
- (3) For all other deviations from permit requirements, the report shall be contained in the 6 month monitoring report required above.
- (4) This permit may contain a more stringent reporting requirement than required by paragraphs (1), (2) or (3) above. If more stringent reporting requirements have been placed in this permit or exist in applicable requirements that apply to this facility, the more stringent reporting requirement shall apply.

If above paragraphs (1) or (2) are met, the source must notify the permitting authority by telephone during normal business hours at the Regional Office of jurisdiction for this permit, attention Regional Air Pollution Control Engineer (RAPCE) according to the timetable listed in paragraphs (1) and (2) of this section. For deviations and incidences that must be reported outside of normal business hours, on weekends, or holidays, the DEC Spill Hotline phone number at 1-800-457-7362 shall be used. A written notice, certified by a responsible official consistent with 6 NYCRR Part 201-6.2(d)(12), must be submitted within 10 working days of an occurrence for deviations reported under (1) and (2). All deviations reported under paragraphs (1) and (2) of this section must also be identified in the 6 month monitoring report required above.

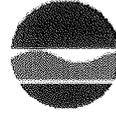
The provisions of 6 NYCRR 201-1.4 shall apply if the permittee seeks to have a violation excused unless otherwise limited by regulation. In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets. Notwithstanding any recordkeeping and reporting requirements in 6 NYCRR 201-1.4, reports of any deviations shall not be on a less frequent basis than the reporting periods described in paragraphs (1) and (4) above.

In the case of any condition contained in this permit with a reporting requirement of "Upon request by regulatory agency" the permittee shall include in the semiannual report, a statement for each such condition that the monitoring or recordkeeping was performed as

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



required or requested and a listing of all instances of deviations from these requirements.

In the case of any emission testing performed during the previous six month reporting period, either due to a request by the Department, EPA, or a regulatory requirement, the permittee shall include in the semiannual report a summary of the testing results and shall indicate whether or not the Department or EPA has approved the results.

All semiannual reports shall be submitted to the Administrator (or his or her representative) as well as two copies to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office). Mailing addresses for the above referenced persons are contained in the monitoring condition for 6 NYCRR Part 201-6.4(e), contained elsewhere in this permit.

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2014.

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

Condition 6: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR 201-6.4 (e)

Item 6.1:

The Compliance Certification activity will be performed for the Facility.

Item 6.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Requirements for compliance certifications with terms and conditions contained in this facility permit include the following:

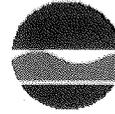
i. Compliance certifications shall contain:

- the identification of each term or condition of the permit that is the basis of the certification;
- the compliance status;
- whether compliance was continuous or intermittent;
- the method(s) used for determining the compliance status of the facility, currently and over the reporting period consistent with the monitoring and related recordkeeping and reporting requirements of this permit;
- such other facts as the Department may require to determine the compliance status of the facility as specified in any special permit terms or conditions; and
- such additional requirements as may be specified elsewhere in this

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



permit related to compliance certification.

ii. The responsible official must include in the annual certification report all terms and conditions contained in this permit which are identified as being subject to certification, including emission limitations, standards, or work practices. That is, the provisions labeled herein as "Compliance Certification" are not the only provisions of this permit for which an annual certification is required.

iii. Compliance certifications shall be submitted annually. Certification reports are due 30 days after the anniversary date of four consecutive calendar quarters. The first report is due 30 days after the calendar quarter that occurs just prior to the permit anniversary date, unless another quarter has been acceptable by the Department.

iv. All compliance certifications shall be submitted to the Administrator (or his or her representative) as well as two copies to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office). Please send annual compliance certifications to Chief of the Stationary Source Compliance Section, the Region 2 EPA representative for the Administrator, at the following address:

USEPA Region 2
Air Compliance Branch
290 Broadway
New York, NY 10007-1866

The address for the RAPCE is as follows:

NYSDEC- Region 1 Headquarters
Stony Brook University
50 Circle Road
Stony Brook, NY 11790-3409

The address for the BQA is as follows:

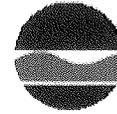
NYSDEC
Bureau of Quality Assurance
625 Broadway
Albany, NY 12233-3258

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2015.
Subsequent reports are due on the same day each year

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Condition 7: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 202-2.1

Item 7.1:

The Compliance Certification activity will be performed for the Facility.

Item 7.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year.

Monitoring Frequency: ANNUALLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due by April 15th for previous calendar year

Condition 8: Recordkeeping requirements
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 202-2.5

Item 8.1:

(a) The following records shall be maintained for at least five years:

(1) a copy of each emission statement submitted to the department; and

(2) records indicating how the information submitted in the emission statement was determined, including any calculations, data, measurements, and estimates used.

(b) These records shall be made available at the facility to the representatives of the department upon request during normal business hours.

Condition 9: Open Fires - Prohibitions
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 215.2

Item 9.1:

Except as allowed by Title 6 NYCRR Section 215.3, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

Item 9.2

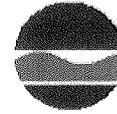
Per Section 215.3, burning in an open fire, provided it is not contrary to other law or regulation, will be allowed as follows:

(a) On-site burning in any town with a total population less than 20,000 of downed limbs and branches (including branches with attached leaves or needles) less than six inches in diameter and eight feet in length between May 15th and the following March 15th. For the purposes of

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



this subdivision, the total population of a town shall include the population of any village or portion thereof located within the town. However, this subdivision shall not be construed to allow burning within any village.

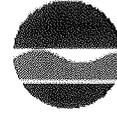
- (b) Barbecue grills, maple sugar arches and similar outdoor cooking devices when actually used for cooking or processing food.
- (c) Small fires used for cooking and camp fires provided that only charcoal or untreated wood is used as fuel and the fire is not left unattended until extinguished.
- (d) On-site burning of agricultural wastes as part of a valid agricultural operation on contiguous agricultural lands larger than five acres actively devoted to agricultural or horticultural use, provided such waste is actually grown or generated on those lands and such waste is capable of being fully burned within a 24-hour period.
- (e) The use of liquid petroleum fueled smudge pots to prevent frost damage to crops.
- (f) Ceremonial or celebratory bonfires where not otherwise prohibited by law, provided that only untreated wood or other agricultural products are used as fuel and the fire is not left unattended until extinguished.
- (g) Small fires that are used to dispose of a flag or religious item, and small fires or other smoke producing process where not otherwise prohibited by law that are used in connection with a religious ceremony.
- (h) Burning on an emergency basis of explosive or other dangerous or contraband materials by police or other public safety organization.
- (i) Prescribed burns performed according to Part 194 of this Title.
- (j) Fire training, including firefighting, fire rescue, and fire/arson investigation training, performed under applicable rules and guidelines of the New York State Department of State's Office of Fire Prevention and Control. For fire training performed on acquired structures, the structures must be emptied and stripped of any material that is toxic, hazardous or likely to emit toxic smoke (such as asbestos, asphalt shingles and vinyl siding or other vinyl products) prior to burning and must be at least 300 feet from other occupied structures. No more than one structure per lot or within a 300 foot radius (whichever is bigger) may be burned in a training exercise.
- (k) Individual open fires as approved by the Director of the Division of Air Resources as may be required in response to an outbreak of a plant or animal disease upon request by the commissioner of the Department of Agriculture and Markets, or for the destruction of invasive plant and insect species.
- (l) Individual open fires that are otherwise authorized under the environmental conservation law, or by rule or regulation of the Department.

**MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS
SUBJECT TO ANNUAL CERTIFICATIONS ONLY IF APPLICABLE**

The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements only if effectuated during the reporting period.

[NOTE: The corresponding annual compliance certification for those conditions not effectuated during the reporting period shall be specified as "not applicable".]

**Condition 10: Maintenance of Equipment
Effective between the dates of 02/04/2014 and 02/03/2019**



Applicable Federal Requirement:6 NYCRR 200.7

Item 10.1:

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.

Condition 11: Recycling and Salvage
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 201-1.7

Item 11.1:

Where practical, the owner or operator of an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of the ECL.

Condition 12: Prohibition of Reintroduction of Collected Contaminants to the air
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 201-1.8

Item 12.1:

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.

Condition 13: Exempt Sources - Proof of Eligibility
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 201-3.2 (a)

Item 13.1:

The owner or operator of an emission source or activity that is listed as being exempt may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all records necessary for demonstrating compliance with this Subpart on-site for a period of five years, and make them available to representatives of the department upon request.

Condition 14: Trivial Sources - Proof of Eligibility
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 201-3.3 (a)

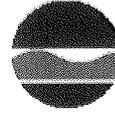
Item 14.1:

The owner or operator of an emission source or activity that is listed as being trivial in this Section may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all required records on-site for a period of five years and make them available to representatives of the department upon request.

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Condition 15: Requirement to Provide Information
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 201-6.4 (a) (4)

Item 15.1:

The owner and/or operator 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 the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the department copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality, if the administrator initiated the request for information or otherwise has need of it.

Condition 16: Right to Inspect
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 201-6.4 (a) (8)

Item 16.1:

The department or an authorized representative shall be allowed upon presentation of credentials and other documents as may be required by law to:

(i) enter upon the permittee's premises where a facility subject to the permitting requirements of this Subpart is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

(ii) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

(iii) inspect at reasonable times any emission sources, equipment (including monitoring and air pollution control equipment), practices, and operations regulated or required under the permit; and

(iv) sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

Condition 17: Off Permit Changes
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 201-6.4 (f) (6)

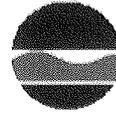
Item 17.1:

No permit revision will be required for operating changes that contravene an express permit term, provided that such changes would not violate applicable requirements as defined under this Part or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting, or compliance certification permit terms and conditions. Such changes

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



may be made without requiring a permit revision, if the changes are not modifications under any provision of title I of the act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions) provided that the facility provides the administrator and the department with written notification as required below in advance of the proposed changes within a minimum of seven days. The facility owner or operator, and the department shall attach each such notice to their copy of the relevant permit.

(i) For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(ii) The permit shield described in section 6 NYCRR 201-6.4 shall not apply to any change made pursuant to this paragraph.

Condition 18: Required Emissions Tests
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 202-1.1

Item 18.1:

For the purpose of ascertaining compliance or non-compliance with any air pollution control code, rule or regulation, the commissioner may require the person who owns such air contamination source to submit an acceptable report of measured emissions within a stated time.

Condition 19: Accidental release provisions.
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40 CFR Part 68

Item 19.1:

If a chemical is listed in Tables 1,2,3 or 4 of 40 CFR §68.130 is present in a process in quantities greater than the threshold quantity listed in Tables 1,2,3 or 4, the following requirements will apply:

a) The owner or operator shall comply with the provisions of 40 CFR Part 68 and;

b) The owner or operator shall submit at the time of permit issuance (if not previously submitted) one of the following, if such quantities are present:

1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a) or,

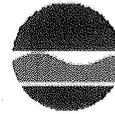
2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan. Information should be submitted to:

Risk Management Plan Reporting Center

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



C/O CSC
8400 Corporate Dr
Carrollton, Md. 20785

Condition 20: Recycling and Emissions Reduction
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 40CFR 82, Subpart F

Item 20.1:

The permittee shall comply with all applicable provisions of 40 CFR Part 82.

The following conditions are subject to annual compliance certification requirements for Title V permits only.

Condition 21: Emission Unit Definition
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 21.1:

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

Emission Unit: U-61005

Emission Unit Description:

This emission unit located in Building 610 consists of two commercial-institutional sized boilers (Boilers 1A and 5) each with its own separate stack (emission points 6101A and 61005). Boiler 1A has a nominal heat capacity of 56.7 MMBTU/hr and is used for peaking and intermittent loads. Boiler 1A burns residual fuel and residual fuel blended with small quantities of waste oil.

Boiler 5 has a nominal heat capacity of 225 MMBTU/hr and is used primarily to meet winter base loads. Since it was constructed before 1986, Boiler 5 is not subject to NSPS subpart DB. Boiler 5 has dual fuel firing capabilities enabling it to burn oil or natural gas. Boiler No. 5 primarily burns residual fuel, residual fuel blended with small quantities of waste oil, and natural gas. Occasionally small volumes of distillate fuel are combusted.

Building(s): 610

Item 21.2:

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

Emission Unit: U-61006

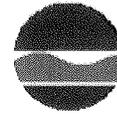
Emission Unit Description:

This Emission Unit located in Building 610. It consists of one commercial-institutional sized boiler (Boiler 6) with its own stack

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



(Emission Point 61006). This boiler has a nominal heat capacity of 147 MMBTU/hr. This boiler is subject to NSPS Subpart Db requirements. Boiler 6 has a heat release rate of 70,402 BTU/hr-cubic-foot. This boiler is equipped with dual fuel burners which enable it to burn oil or natural gas. Construction of Boiler 6 commenced prior to June 19, 1986.

Boiler No. 6 burns residual fuel, residual fuel mixed with small quantities of waste oil, and natural gas. Occasionally small volumes of distillate fuel are combusted.

Building(s): 610

Item 21.3:

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

Emission Unit: U-61007

Emission Unit Description:

This emission unit, located in Building 610, consists of one commercial-institutional sized boiler (Boiler 7) with its own stack (Emission Point 61007). This boiler has a nominal heat capacity of 147 MMBTU/hr. This boiler is subject to NSPS Subpart Db requirements. Boiler 7 has a heat release rate of 87,814 BTU/hr-cubic-foot. The boiler is equipped with dual fuel burners which enable it to burn oil or natural gas. Boiler No. 7 burns residual fuel, residual fuel mixed with small quantities of waste oil, and natural gas. Occasionally small volumes of distillate fuel are combusted.

As construction of Boiler 7 commenced after June 19, 1986, this boiler is subject to the nitrogen oxide (NO_x), sulfur dioxide (SO₂), and particulate (PM) standards of Subpart Db. The boiler is also subject to the NO_x RACT provisions of 6 NYCRR Part 227-2.

Compliance with the emission standards is achieved through the use of low NO_x burners and an overfire air NO_x reduction system. Compliance with the lower emissions limit of Part 227-2 is achieved through the combustion of No. 6 oil with a fuel nitrogen content of less than 0.3% and a fuel sulfur content of less than 0.3%.

Building(s): 610

Item 21.4:

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

Emission Unit: U-COILS

Emission Unit Description:

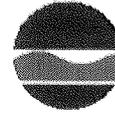
This emission unit consists of a magnet coil coating operation in Building 902 where multiple fiberglass and kevlar yarn substrates are applied to magnet coils using two-part epoxy adhesives. The adhesives and substrates are applied in successive steps and final curing is conducted in a baking oven. The three hoods which capture emissions during adhesive application and the oven exhaust are connected to a common stack (Emission Point 90206).

Building(s): 902

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Item 21.5:

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

Emission Unit: U-FUELS

Emission Unit Description:

This emission unit includes two on-site gasoline refueling facilities.

The first facility located at Building 630 is a contractor operated facility that services private vehicles. The contractor is responsible for inspecting and replacing pump nozzles and hoses and for complying with the operational requirements of 6 NYCRR Part 230. As the owner of the facility, DOE/BNL assumes responsibility for overall compliance with Part 230 requirements and other applicable regulatory requirements at this facility. The facility has three pumps (two pump hoses each) that dispense low and high octane grades of gasoline. The pumps are connected to three 8000 gallon double walled underground storage tanks. All tanks are equipped with Stage I and Stage II engineering controls. Uncaptured vapors generated during tank loading and tank breathing vapors are passively vented to separate stacks (Emission Points 63001, 63002 and 63003).

The second facility located at Building 423 is a refueling facility for BNL fleet gasoline powered vehicles. The facility has two pumps (two pump hoses each) that dispense a low octane grade of gasoline and E85. The pumps are connected to two 8000 gallon double walled underground storage tanks. Both tanks are equipped with Stage I engineering controls. Uncaptured vapors generated during tank loading and tank breathing vapors are passively vented to separate stacks (Emission Points 42309 and 42310). BNL is located in Suffolk County, a severe ozone non-attainment area, and a county included in the New York City Consolidated Metropolitan Statistical Area. Due to the laboratory's location, certain federally enforceable restrictions apply to the gasoline that can be received and dispensed from gasoline refueling facilities at the site. In particular, because BNL is in a severe ozone non-attainment area, the Reid vapor pressure of the gasoline delivered and dispensed at BNL's two refueling facilities cannot exceed 9.0 pounds per square inch (psi) during the peak ozone season (May 1 - September 15). In addition, to meet federally enforceable requirements intended to reduce automobile emissions of volatile organic compounds and hazardous air pollutants, reformulated gasoline must be supplied and dispensed year round. Reformulated gasoline and Reid vapor pressure requirements are found respectively in 40 CFR 80 Subpart D and 6 NYCRR 225-3.

Building(s): 423

Item 21.6:

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

Emission Unit: U-GENER

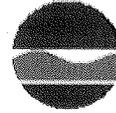
Emission Unit Description:

This emission unit consists of 12 stationary diesel

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



emergency generators identified as emission sources 46301, 49006, 55503, 63501, 73401, 73501, 74001, 74002, 80101, 912A1, 912A2, and 912A3. These emission sources have their own dedicated exhaust stacks identified as 46301, 49006, 55503, 63501, 73401, 73501, 74001, 74002, 80101, 912A1, 912A2, and 912A3.

Building(s): 463
490
555
635
734
740
801
912A

Item 21.7:

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

Emission Unit: U-HALON

Emission Unit Description:

This unit consists of numerous portable Halon 1211 fire extinguishers, several Halon 1301 cylinders associated with various fixed total flooding fire suppression systems, and Halon 1301 reserve tanks. The unit also includes a portable halon 1211 recovery/recharge system. This unit is subject to provisions of 40 CFR Part 82 Subpart H, entitled Halon Emissions Reduction. Emissions are restricted to de minimis releases from the Halon recovery devices during periodic servicing of extinguishers.

Item 21.8:

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

Emission Unit: U-INSIG

Emission Unit Description:

This unit includes one small scale silver electroplating operations located in Bldg 922, which is used to electroplate copper magnet bus bars and other metal parts. Fumes from the operation in Bldg. 922 are released to a stack (EP 92204).

This unit also includes a Specialty Coating System G3P-8 Spin Coater, that is used to apply various coatings to water substrates for subsequent surface chemistry studies. Evaporative emissions from solvents used with the various coatings are vented to the atmosphere via either of two lab hoods in Room 2-109 in Bldg. 510 (EP 510AK).

At the Target Processing Laboratory (TLP) in Bldg. 801, various solvents are used to chemically extract isotopes from irradiated targets to be used later for radiopharmaceutical production. Carbon tetrachloride and methyl ethyl ketone are used in small quantities respectively to extract germanium-68, zinc-65, and technetium-96 from irradiated targets. After the isotopes are recovered, the evaporated extraction solvents pass through two granulated activated charcoal



filters in series before they are released to the atmosphere through a 17.9 m stack (EP 80102).

This unit also includes seven aerosol can recycling units used to reduce the waste disposal costs of used aerosol cans. The two types of units purchased, the Aerosolv Aerosol Can Recycling System and the AeroVent 3, both operate on the same principle. The units thread directly onto the two inch diameter bung of a 55-gallon drum. Each of the units activated carbon filters thread directly to the 3/4 inch diameter bung. A single can is then placed in the unit. When the units handle is depressed, the unit punctures the can allowing the product to drain into the drum. Residual propellants pass through activated carbon filters where VOCs are adsorbed. The units are being used in Bldgs. 326, 423, 339, 624, and 922 where aerosol cans are collected. Chlorofluorocarbon propellants and hydrocarbons not captured by the activated carbon filters are released into the ambient air.

Also included in this unit is the printed circuit board laboratory, in Bldg 535B, where prototype circuit boards are made for BNL experiments. The following is a brief summary of the printed circuit board laboratory emission sources. Circuit board component holes are drilled using a manually adjusted computer controlled drilling machine (trivial source ID 535AT). Within the printed circuit board process room, process tanks are used in a series of steps to pre clean the boards. VOCs are released from the cleaner conditioner used in one of the pre-cleaning tanks. Acid etching also takes place within the room when the boards are immersed in dilute baths of hydrochloric and sulfuric acids. The boards are also electroplated with tin in a plating bath. Finally the boards are immersed in an acid copper plating bath which contains sulfuric and hydrochloric acids.

To reduce evaporative emissions from this tank, plastic balls float atop the solution reducing the surface area. All tanks within this room are exhausted to one stack (EP 53503). Residual water on the boards is then baked off in an electric oven (trivial source ID 535AW). After a circuit pattern is created on the surface of the board through an imaging process, the boards are immersed in a tank containing an aqueous developer. This aqueous formula, in use since Oct. 1997, is 99% water, 0.999% potassium carbonate and 0.001% anti-foaming agent by volume. No emissions are released through the stack (EP 53501). An etching machine filled with an alkaline solution is used to remove background copper from boards after removal from the copper plating bath. From this source ammonium hydroxide and trace ammonium chloride and copper chloride are released through EP 53502.

The aggregate annual emissions from the sources and operations covered under this emission unit are less than the thresholds established in 6 NYCRR 201-6.3(d)(7) for insignificant emission units.

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Building(s): 326
339
423
510
535B
624
801
922

Item 21.9:

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

Emission Unit: U-METAL

Emission Unit Description:

Cold cleaning of metal parts at various site locations. Unit consists of one internally vented immersion cleaning tank in Bldg. 423, one internally vented immersion cleaning tank in Bldg 479, one internally vented immersion cleaning tray in Bldg. 610, one internally vented hose-applied parts cleaning tank in Bldg 903, one spray cleaning process in bldg 923 which consists of an electronic parts cleaning booth and two drying ovens manifolded to emission point 92301, and the BNL Central Degreasing Facility in Bldg. 498 which consists of three immersion wash tanks and three rinse tanks (exhausted to stack 49801) and a drying oven with its own stack.

Building(s): 423
479
498
610
820
903
923

Item 21.10:

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

Emission Unit: U-MVACS

Emission Unit Description:

BNL operates a fleet of approximately 259 vehicles. These vehicles are serviced at the automotive service shop in Bldg 423. It is estimated that there are 200 vehicles with air conditioners charged with R-12 or with R-134a. BNL services heavy duty vehicles in its Heavy Equipment Maintenance Operations Shop, also in Bldg. 423. Several of these heavy duty vehicles have air conditioners that are periodically serviced. The laboratory also has a contractor operated facility located at Building 630 that services privately owned vehicles of employees and laboratory guests.

This emission unit covers activities associated with the service and repair to fleet and private vehicle air conditioning equipment. This unit includes refrigerant recovery/recycling devices that can be used with R-12 and R-134a motor vehicle air conditioners.

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Building(s): 423
630

Item 21.11:

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

Emission Unit: U-PAINT

Emission Unit Description:

This emission unit is located in building 244 and consists of a spray booth (emission point 24402) and two paint storage cabinets (244AE) both internally vented.

Building(s): 244

Item 21.12:

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

Emission Unit: U-RFRIG

Emission Unit Description:

This unit covers all refrigerant recovery, recycling and reclamation activities that take place during the repair, maintenance, and servicing of refrigeration and air conditioning equipment located across the site. This unit includes centrifugal chillers, reciprocating chillers, rotary screw chillers, split air conditioning units, package air conditioning units, and refrigerant recovery devices utilized to recover any refrigerants that might be released during servicing and repair of refrigeration and air conditioning equipment. This unit is subject to provisions of 40 CFR Part 82 Subpart F, entitled Refrigerant Recovery and Recycling Requirements for Refrigeration and Air Conditioning Equipment and Appliances. This unit also covers various pieces of commercial refrigerant equipment utilized in Buildings 30 and 488 that are serviced by an outside contractor.

Item 21.13:

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

Emission Unit: U-SMBLR

Emission Unit Description:

This emission unit consists of four small boilers identified as emission sources 030AB, 244AB, 422AF, and 42304 with nominal heat input capacities of 1.34, 1.50, 2.41, and 1.67 MMBtu/hr respectively. Each boiler has its own dedicated stacks which are identified as Emission Points 03001, 24403, 42206, and 42304.

Condition 22: Progress Reports Due Semiannually

Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR 201-6.4 (d) (4)

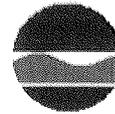
Item 22.1:

Progress reports consistent with an applicable schedule of compliance are to be submitted at least semiannually, or at a more frequent period if specified in the applicable requirement or by

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



the department. Such progress reports shall contain the following:

- (i) dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
- (ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

Condition 23: Air pollution prohibited
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 211.1

Item 23.1:

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 24: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 225-2.7

Item 24.1:

The Compliance Certification activity will be performed for the Facility.

Item 24.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility must sample, analyze, and measure quantities of all waste fuels, both waste fuel A and waste fuel B, received and/or burned. Sampling and analysis of waste fuel samples must be carried out in accordance with methods acceptable to the commissioner.

For waste fuels received from off-site, the facility must and maintain records of quantities of waste fuel B received and the names and addresses the fuel suppliers for three calendar years. Any person delivering waste fuel A and/or B to a facility burning such waste fuel, must maintain records of the identification and quantity of all waste fuel A and/or B delivered to that facility and report such information to the owner of that facility.

Reports of the analysis of waste oil burned at the CSF shall be maintained. Samples shall be analyzed for the criteria contained in Table 2-1 of section 225-2.4 of 6 NYCRR part 225.

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



The facility must make these records available for inspection by the commissioner or his representative during normal business hours; and must furnish copies of such records to the commissioner or his representative upon request.

Monitoring Frequency: PER DELIVERY
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 25: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR 225-3.3 (a)

Item 25.1:

The Compliance Certification activity will be performed for the Facility.

Item 25.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Any gasoline sold or supplied to a retailer or wholesale purchaser-consumer, shall have a Reid vapor pressure (RVP) no greater than 9.0 pounds per square inch (psi), during the period May 1st through September 15th of each year. Sampling and testing will be done according to a protocol approved by the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: GASOLINE

Parameter Monitored: REID VAPOR PRESSURE

Upper Permit Limit: 9.0 pounds per square inch absolute

Monitoring Frequency: PER DELIVERY

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME
(INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2014.

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

Condition 26: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR 227-1.3 (a)

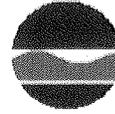
Item 26.1:

The Compliance Certification activity will be performed for the Facility.

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 26.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE
PARAMETERS AS SURROGATE

Monitoring Description:

No owner or operator of a combustion installation shall emit greater than 20 percent opacity (on a six minute block period) except for one six minute block period per hour, not to exceed 27 percent, based upon the six minute average in reference test method 9 in Appendix A of 40 CFR 60.

Operators of air contamination sources that are not exempt from permitting and where a continuous opacity monitor is not utilized for measuring smoke emissions, shall be required to perform the following:

- 1) Observe the stack(s) or vent(s) once per day for visible emissions. This observation(s) must be conducted during daylight hours except during adverse weather conditions (fog, rain, or snow).
- 2) The results of each observation must be recorded in a bound logbook or other format acceptable to the Department. The following data must be recorded for each stack:
 - weather condition
 - was a plume observed?

This logbook must be retained at the facility for five (5) years after the date of the last entry.

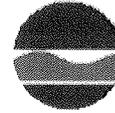
3) If the operator observes any visible emissions (other than steam - see below) two consecutive days, then the Method 9 analysis (based upon a 6-minute mean) of the affected emission point(s) must be conducted within two (2) business days of such occurrence. The results of the Method 9 analysis must be recorded in the logbook. The operator must contact the Regional Air Pollution Control Engineer within one (1) business day of performing the Method 9 analysis if the opacity standard is contravened. Upon notification, any corrective actions or future compliance schedules shall be presented to the Department for acceptance.

**** NOTE **** Steam plumes generally form after leaving the top of the stack (this is known as a detached plume). The distance between the stack and the beginning of the detached plume may vary, however, there is (normally) a distinctive distance between the plume and stack. Steam plumes are white in color and have a billowy consistency. Steam

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



plumes dissipate within a short distance of the stack (the colder the air the longer the steam plume will last) and leave no dispersion trail downwind of the stack.

Parameter Monitored: OPACITY
Upper Permit Limit: 27 percent
Reference Test Method: METHOD 9
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2014.
Subsequent reports are due every 6 calendar month(s).

Condition 27: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR 227-2.6 (b)

Item 27.1:

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

Emission Unit: U-61006

Emission Unit: U-61007

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

Item 27.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Quarterly reports shall include:

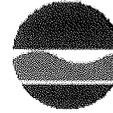
1. CEMS down time (40 CFR 60.7(b)) and excess emissions (40 CFR 60.7(c)) in a summary report format, as found in 40 CFR 60.7(d), or equivalent.
2. The results of the quarterly monitoring performance audit, reported in the format of 40 CFR 60 Appendix F (or equivalent).
3. Excess emissions shall be identified as any 24-hourly block period averaged from one-hour arithmetic averages during the period from May 1 to September 15 and 30-day rolling average for the remainder of the year.

At least three data points, collected at 15 minute intervals, shall be used to calculate the one-hour arithmetic averages. Each 24-hour

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



daily period shall be determined from 12 A.M. to 12 A.M. the following day. The thirty (30) day rolling average shall be the average of the 24-hour daily arithmetic NOx emission rates for a thirty (30) day period. Excess emissions shall be defined as those which exceed the corresponding emissions limit set forth in this permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2014.

Subsequent reports are due every 3 calendar month(s).

Condition 28: Compliance Certification

Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 28.1:

The Compliance Certification activity will be performed for the Facility.

Item 28.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

All records required by this permit shall be kept on-site at the facility for the five most recent years, and upon request, must be made available for review by a NYSDEC representative.

Monitoring Frequency: SEMI-ANNUALLY

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 29: Compliance Certification

Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 29.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 29.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

VOC emissions from the facility is limited to 39.7 tpy.

Work Practice Type: PROCESS MATERIAL THRUPUT

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Process Material: FUEL
Upper Permit Limit: 39.7 tons per year
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 90-DAY AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 30: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 30.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 30.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Total Suspended Particulate TSP emissions from the facility is limited to 49.2 tpy.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: FUEL

Upper Permit Limit: 49.2 tons per year

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 90-DAY AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2014.

Subsequent reports are due every 3 calendar month(s).

Condition 31: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 31.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10

Item 31.2:

Compliance Certification shall include the following monitoring:

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Particulates PM 10 emissions from the facility is limited to 35.7 tons per year.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: FUEL

Upper Permit Limit: 35.7 tons per year

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 90-DAY AVERAGE

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

Condition 32: Compliance Certification

Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 32.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 32.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Facility wide emissions of SO2 is limited to 445.0 tons per year.

Annual emissions based on mass balance of fuel burned and sulfur content by weight compiled on a quarterly basis.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: FUEL

Upper Permit Limit: 445.0 tons per year

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 90-DAY AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2014.

Subsequent reports are due every 3 calendar month(s).

Condition 33: Compliance Certification

Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 52.21, Subpart A

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Item 33.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 33.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Facility wide emissions of Nitrogen Oxide is limited to 159.0 tons per year.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: FUEL

Upper Permit Limit: 159.0 tons per year

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 90-DAY AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2014.

Subsequent reports are due every 3 calendar month(s).

Condition 34: Compliance Certification

Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 34.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 34.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Facility wide Carbon Monoxide emissions is limited to 113.3 tons per year.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: FUEL

Upper Permit Limit: 113.3 tons per year

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 90-DAY AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

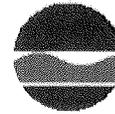
Reports due 30 days after the reporting period.

The initial report is due 4/30/2014.

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Subsequent reports are due every 3 calendar month(s).

Condition 35: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 60.42b, NSPS Subpart Db

Item 35.1:

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

Emission Unit: U-61007

Item 35.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The sulfur content of fuel oil burned in Boiler 7 shall not exceed 0.50 percent by weight, unless otherwise restricted in this permit. (BNL's Major Petroleum Facility storage tanks supply fuel oil to all of the Central Steam Facility boilers.) For each fuel oil delivery, samples will be collected and analyzed. Until such time as sample analysis demonstrates that the oil delivered meets the 0.50 percent by weight sulfur content specifications, the oil shall not be burned in Boiler 7.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: FUEL OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 0.50 percent by weight

Reference Test Method: D-4294

Monitoring Frequency: PER DELIVERY

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

MONITORING DESCRIPTION

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2014.

Subsequent reports are due every 3 calendar month(s).

Condition 36: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 60.48b(f), NSPS Subpart Db

Item 36.1:

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

Emission Unit: U-61006

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Emission Unit: U-61007

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 36.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

When minimum data availability requirements are not met the data substitution method specified in 6 NYCRR Part 227-2.6(b)(3) shall be used:

At a minimum, valid CEMS data must be obtained for 90 percent of the operating hours in each calendar quarter that the subject facility is operating.

When NOx emission data are not obtained because of CEMS downtime, emission data shall be obtained by using the 90th percentile value of all CEMS NOx emission data collected over the last 180 days.

Monitoring Frequency: HOURLY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2014.

Subsequent reports are due every 3 calendar month(s).

Condition 37: Compliance Certification

Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 40CFR 60.49b(e), NSPS Subpart Db

Item 37.1:

The Compliance Certification activity will be performed for the facility:

The Compliance Certification applies to:

Emission Unit: U-61006

Process: SF4

Emission Unit: U-61007

Process: SF7

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 37.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



BNL shall maintain records of the nitrogen content of the residual oil combusted in Boilers 6 and 7 and calculate the average fuel nitrogen content for each calendar quarter. The nitrogen content of the residual oil burned in Boilers 6 and 7 is limited to 0.3 percent by weight. ASTM Method D-5762, entitled Standard Test Method for Nitrogen in Petroleum and Petroleum Products By Boat-Inlet Chemiluminescence, will be used to determine the fuel bound nitrogen content. If residual oil blends are being combusted, fuel nitrogen specifications may be prorated based on the ratio of residual oils of different nitrogen content in the fuel blend.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 6 OIL
Parameter Monitored: NITROGEN CONTENT
Upper Permit Limit: 0.30 percent by weight
Reference Test Method: ASTM D-5762
Monitoring Frequency: QUARTERLY
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2014.
Subsequent reports are due every 3 calendar month(s).

**** Emission Unit Level ****

Condition 38: Emission Point Definition By Emission Unit
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 38.1:

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

Emission Unit: U-61005

Emission Point: 61005

Height (ft.): 62 Diameter (in.): 72
NYTMN (km.): 4526.293 NYTME (km.): 679.367 Building: 610

Emission Point: 6101A

Height (ft.): 62 Diameter (in.): 44
NYTMN (km.): 4526.312 NYTME (km.): 679.398 Building: 610

Item 38.2:

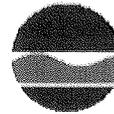
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-61006

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Emission Point: 61006
Height (ft.): 62 Diameter (in.): 60
NYTMN (km.): 4526.297 NYTME (km.): 679.394 Building: 610

Item 38.3:

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

Emission Unit: U-61007

Emission Point: 61007
Height (ft.): 110 Diameter (in.): 48
NYTMN (km.): 4526.285 NYTME (km.): 679.402 Building: 610

Item 38.4:

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

Emission Unit: U-COILS

Emission Point: 90206
Height (ft.): 45 Diameter (in.): 8
NYTMN (km.): 4526.746 NYTME (km.): 678.333 Building: 902

Item 38.5:

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

Emission Unit: U-FUELS

Emission Point: 42309
Height (ft.): 25 Diameter (in.): 2
NYTMN (km.): 4525.65 NYTME (km.): 677.832 Building: 423

Emission Point: 42310
Height (ft.): 25 Diameter (in.): 2
NYTMN (km.): 4525.648 NYTME (km.): 677.836 Building: 423

Emission Point: 63001
Height (ft.): 26 Diameter (in.): 2
NYTMN (km.): 4525.946 NYTME (km.): 678.709 Building: 630

Emission Point: 63002
Height (ft.): 26 Diameter (in.): 2
NYTMN (km.): 4525.937 NYTME (km.): 678.705 Building: 630

Emission Point: 63003
Height (ft.): 26 Diameter (in.): 2
NYTMN (km.): 4525.927 NYTME (km.): 678.704 Building: 630

Item 38.6:

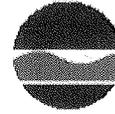
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-GENER

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Emission Point: 46301
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4526.2 NYTME (km.): 678.6 Building: 463

Emission Point: 49006
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4526.2 NYTME (km.): 678.4 Building: 490

Emission Point: 55503
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4526.6 NYTME (km.): 678.6 Building: 555

Emission Point: 63501
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4526.8 NYTME (km.): 679.5 Building: 635

Emission Point: 73401
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4526.2 NYTME (km.): 678.7 Building: 734

Emission Point: 73503
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4526.3 NYTME (km.): 679.1 Building: 735

Emission Point: 74001
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4525.9 NYTME (km.): 679.2 Building: 740

Emission Point: 74002
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4525.9 NYTME (km.): 679.2 Building: 740

Emission Point: 80101
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4526.7 NYTME (km.): 678.9 Building: 801

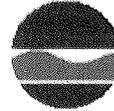
Emission Point: 912A1
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4527.1 NYTME (km.): 678.6 Building: 912A

Emission Point: 912A2
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4527.1 NYTME (km.): 678.6 Building: 912A

Emission Point: 912A3
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4527.1 NYTME (km.): 678.6 Building: 912A

Item 38.7:

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



Emission Unit: U-INSIG

Emission Point: 510AK			
Height (ft.): 31	Diameter (in.): 3		
NYTMN (km.): 4526.5	NYTME (km.): 679.1	Building: 510	
Emission Point: 53501			
Height (ft.): 24	Diameter (in.): 4		
NYTMN (km.): 4525.8	NYTME (km.): 678.8	Building: 535B	
Emission Point: 53502			
Height (ft.): 24	Diameter (in.): 6		
NYTMN (km.): 4525.8	NYTME (km.): 678.8	Building: 535B	
Emission Point: 53503			
Height (ft.): 27	Diameter (in.): 10		
NYTMN (km.): 4525.8	NYTME (km.): 678.8	Building: 535B	
Emission Point: 80102			
Height (ft.): 59	Diameter (in.): 40		
NYTMN (km.): 4526.7	NYTME (km.): 678.9	Building: 801	
Emission Point: 92204			
Height (ft.): 9	Diameter (in.): 6		
NYTMN (km.): 4526.5	NYTME (km.): 679.2	Building: 922	

Item 38.8:

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

Emission Unit: U-METAL

Emission Point: 02AMB			
Height (ft.): 13	Length (in.): 1920	Width (in.): 360	
NYTMN (km.): 4526.181	NYTME (km.): 678.572		
Emission Point: 49801			
Height (ft.): 27	Diameter (in.): 16		
NYTMN (km.): 4525.3	NYTME (km.): 678.4	Building: 498	
Emission Point: 92301			
Height (ft.): 8	Diameter (in.): 20		
NYTMN (km.): 4525.6	NYTME (km.): 678.8	Building: 923	

Item 38.9:

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

Emission Unit: U-MVACS

Emission Point: 03AMB			
Height (ft.): 4	Length (in.): 1920	Width (in.): 360	

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



NYTMN (km.): 4526.181 NYTME (km.): 678.572

Item 38.10:

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

Emission Unit: U-PAINT

Emission Point: 00AMB

Height (ft.): 5 Length (in.): 24 Width (in.): 6
NYTMN (km.): 4526.181 NYTME (km.): 678.572 Building: 244

Emission Point: 24402

Height (ft.): 35 Diameter (in.): 22
NYTMN (km.): 4526.368 NYTME (km.): 677.998 Building: 244

Item 38.11:

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

Emission Unit: U-SMBLR

Emission Point: 03001

Height (ft.): 21 Diameter (in.): 8
NYTMN (km.): 4525.9 NYTME (km.): 677.8 Building: 030

Emission Point: 24403

Height (ft.): 15 Diameter (in.): 8
NYTMN (km.): 4526.3 NYTME (km.): 677.9 Building: 244

Emission Point: 42206

Height (ft.): 33 Diameter (in.): 12
NYTMN (km.): 4526.3 NYTME (km.): 677.9 Building: 422

Emission Point: 42304

Height (ft.): 25 Diameter (in.): 8
NYTMN (km.): 4524.9 NYTME (km.): 677.7 Building: 423

Condition 39: Process Definition By Emission Unit

Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 39.1:

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

Emission Unit: U-61005

Process: SF1 Source Classification Code: 1-03-004-01

Process Description:

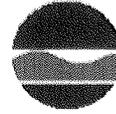
Burning #6 oil in Boiler 1A and Boiler 5. The #6 oil may be blended with low volumes of waste oil (waste fuel A and/or B).

Emission Source/Control: 61005 - Combustion

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Design Capacity: 225 million Btu per hour

Emission Source/Control: 6101A - Combustion

Design Capacity: 56.7 million Btu per hour

Item 39.2:

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

Emission Unit: U-61005

Process: SF2

Source Classification Code: 1-03-006-01

Process Description: Burning of natural gas in Boiler 5.

Emission Source/Control: 61005 - Combustion

Design Capacity: 225 million Btu per hour

Item 39.3:

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

Emission Unit: U-61005

Process: SF3

Source Classification Code: 1-03-005-01

Process Description: Burning of distillate oil in Boilers 1A and 5.

Emission Source/Control: 61005 - Combustion

Design Capacity: 225 million Btu per hour

Emission Source/Control: 6101A - Combustion

Design Capacity: 56.7 million Btu per hour

Item 39.4:

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

Emission Unit: U-61006

Process: SF4

Source Classification Code: 1-03-004-01

Process Description:

Burning #6 oil in Boiler 6. The #6 oil may be blended with low volumes of waste oil (waste fuel A and/or B). The fuel burned has fuel-bound nitrogen content below 0.3% nitrogen, which is guaranteed by supplier. This is a 147 MMBTU/hr package boiler.

Emission Source/Control: 61006 - Combustion

Design Capacity: 147 million Btu per hour

Item 39.5:

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

Emission Unit: U-61006

Process: SF5

Source Classification Code: 1-03-006-01

Process Description: Burning natural gas in Boiler 6.

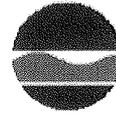
Emission Source/Control: 61006 - Combustion

Design Capacity: 147 million Btu per hour

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Multiple layer application of fiberglass & kevlar yarns to magnet coils with two-part epoxy adhesives.

Emission Source/Control: 90206 - Process

Item 39.11:

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

Emission Unit: U-FUELS

Process: OXY

Source Classification Code: 4-06-006-03

Process Description:

FROM 10/1 TO 4/30, REFORMULATED GASOLINE WITH AN OXYGEN CONTENT FROM 2.7-2.9 SHALL BE DISPENSED. DURING THIS PERIOD, THE REID VAPOR PRESSURE OF GASOLINE DELIVERED NORMALLY FLUCTUATES BETWEEN 11.0 AND 12.0 PSI.

Emission Source/Control: 423A1 - Control
Control Type: PROCESS GAS RECOVERY

Emission Source/Control: 423A2 - Control
Control Type: PROCESS GAS RECOVERY

Emission Source/Control: 630A1 - Control
Control Type: PROCESS GAS RECOVERY

Emission Source/Control: 630A2 - Control
Control Type: PROCESS GAS RECOVERY

Emission Source/Control: 630A3 - Control
Control Type: PROCESS GAS RECOVERY

Emission Source/Control: 630A4 - Control
Control Type: VAPOR LOCK BALANCE RECOVERY SYSTEM

Emission Source/Control: 630A5 - Control
Control Type: VAPOR LOCK BALANCE RECOVERY SYSTEM

Emission Source/Control: 630A6 - Control
Control Type: VAPOR LOCK BALANCE RECOVERY SYSTEM

Emission Source/Control: 42309 - Process

Emission Source/Control: 42310 - Process

Emission Source/Control: 63001 - Process

Emission Source/Control: 63002 - Process

Emission Source/Control: 63003 - Process

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Item 39.12:

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

Emission Unit: U-FUELS

Process: RVP

Source Classification Code: 4-06-006-03

Process Description:

Gasoline dispensing systems with Stage I and II controls.

Emission Source/Control: 423A1 - Control
Control Type: PROCESS GAS RECOVERY

Emission Source/Control: 423A2 - Control
Control Type: PROCESS GAS RECOVERY

Emission Source/Control: 630A1 - Control
Control Type: PROCESS GAS RECOVERY

Emission Source/Control: 630A2 - Control
Control Type: PROCESS GAS RECOVERY

Emission Source/Control: 630A3 - Control
Control Type: PROCESS GAS RECOVERY

Emission Source/Control: 630A4 - Control
Control Type: VAPOR LOCK BALANCE RECOVERY SYSTEM

Emission Source/Control: 630A5 - Control
Control Type: VAPOR LOCK BALANCE RECOVERY SYSTEM

Emission Source/Control: 630A6 - Control
Control Type: VAPOR LOCK BALANCE RECOVERY SYSTEM

Emission Source/Control: 42309 - Process

Emission Source/Control: 42310 - Process

Emission Source/Control: 63001 - Process

Emission Source/Control: 63002 - Process

Emission Source/Control: 63003 - Process

Item 39.13:

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

Emission Unit: U-GENER

Process: SEG

Source Classification Code: 2-01-001-05

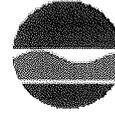
Process Description:

Stationary diesel emergency generators, 2007 model year and later, with a maximum engine power greater than or equal to 2,237 KW and a displacement of less than 10 liters per cylinder must meet 40 CFR

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



89.112 Table 1 emission standards for NMHC + NO_x, CO, and PM.

Stationary diesel emergency generators, model years 2007-2010, with maximum engine power greater than 2,237 KW and a displacement of less than 10 liters per cylinder must meet emission standards of 40 CFR 60 Subpart IIII Table 1. Stationary diesel emergency generators model years 2011 and later with a maximum engine power greater than 2,237 KW and a displacement of less than 10 liters per cylinder must meet 40 CFR 89.112 Table 1 emission standards for NMHC + NO_x, CO, and PM.

Emission Source/Control: 46301 - Combustion
Design Capacity: 400 kilowatts

Emission Source/Control: 49006 - Combustion
Design Capacity: 400 kilowatts

Emission Source/Control: 55503 - Combustion
Design Capacity: 100 kilowatts

Emission Source/Control: 63501 - Combustion
Design Capacity: 200 kilowatts

Emission Source/Control: 73401 - Combustion
Design Capacity: 350 kilowatts

Emission Source/Control: 73501 - Combustion
Design Capacity: 125 kilowatts

Emission Source/Control: 74001 - Combustion
Design Capacity: 700 kilowatts

Emission Source/Control: 74002 - Combustion
Design Capacity: 700 kilowatts

Emission Source/Control: 80102 - Combustion
Design Capacity: 100 kilowatts

Emission Source/Control: 912A1 - Combustion
Design Capacity: 400 kilowatts

Emission Source/Control: 912A2 - Combustion
Design Capacity: 400 kilowatts

Emission Source/Control: 912A3 - Combustion
Design Capacity: 400 kilowatts

Item 39.14:

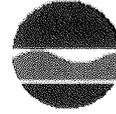
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-HALON

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Process: HR1

Source Classification Code: 2-88-888-01

Process Description:

Recovery and recycling of Halon from portable extinguishers and fixed fire suppression systems.

Emission Source/Control: H1211 - Process

Emission Source/Control: H1301 - Process

Item 39.15:

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

Emission Unit: U-INSIG

Process: IN1

Source Classification Code: 3-99-999-94

Process Description:

A number of permitted emission sources whose combined emissions are insignificant.

Emission Source/Control: 510AK - Process

Emission Source/Control: 53501 - Process

Emission Source/Control: 53502 - Process

Emission Source/Control: 53503 - Process

Emission Source/Control: 80101 - Process

Emission Source/Control: 91904 - Process

Emission Source/Control: 92204 - Process

Emission Source/Control: AEROS - Process

Item 39.16:

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

Emission Unit: U-METAL

Process: SM1

Source Classification Code: 4-01-003-98

Process Description:

Several metal parts cleaning operations subject to Part 226 provisions for cold cleaning degreasing. Cold cleaning operations subject to Part 226 must only use cleaning solvents that have vapor pressures of 1.0 mm of mercury, or less, at 20 C.

Emission Source/Control: 42308 - Process

Emission Source/Control: 47302 - Process

Emission Source/Control: 47908 - Process

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



ENCLOSURES)

Emission Source/Control: MVAC2 - Process

Emission Source/Control: MVAC4 - Process

Item 39.19:

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

Emission Unit: U-PAINT

Process: PT1

Source Classification Code: 4-02-002-10

Process Description:

Spray painting of wood furniture and miscellaneous metal parts w/VOC compliant coatings.

Emission Source/Control: 244B1 - Control

Control Type: FABRIC FILTER

Emission Source/Control: 24402 - Process

Emission Source/Control: 244AE - Process

Item 39.20:

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

Emission Unit: U-RFRIG

Process: RC1

Source Classification Code: 3-12-999-99

Process Description:

This process covers BNL appliances normally containing equal to or less than 50 lbs of refrigerant. Refrigerant recovery and recycling equipment used by certified technicians to service covered equipment meet the levels of evacuation established by EPA as noted in section 82.158. Includes 18 reciprocal chillers, 303 split units, 247 package units and numerous small appliances with Class I or II refrigerant charges of 5 lbs or less. The number of units is subject to change as BNL adds new equipment or replaces old equipment.

Emission Source/Control: REF01 - Control

Control Type: VAPOR RECOVERY SYS(INCL. CONDENSERS,HOODING, OTHER ENCLOSURES).

Emission Source/Control: COMRE - Process

Emission Source/Control: PKG01 - Process

Emission Source/Control: REC06 - Process

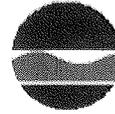
Emission Source/Control: REC08 - Process

Emission Source/Control: REC09 - Process

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



- Emission Source/Control: REC10 - Process
- Emission Source/Control: REC16 - Process
- Emission Source/Control: REC17 - Process
- Emission Source/Control: REC18 - Process
- Emission Source/Control: REC19 - Process
- Emission Source/Control: REC20 - Process
- Emission Source/Control: REC23 - Process
- Emission Source/Control: REC27 - Process
- Emission Source/Control: REC28 - Process
- Emission Source/Control: REC30 - Process
- Emission Source/Control: REC34 - Process
- Emission Source/Control: REC35 - Process
- Emission Source/Control: REC36 - Process
- Emission Source/Control: REC37 - Process
- Emission Source/Control: REC38 - Process
- Emission Source/Control: REC53 - Process
- Emission Source/Control: SPL01 - Process

Item 39.21:

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

Emission Unit: U-RFRIG

Process: RC2

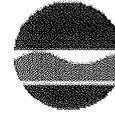
Source Classification Code: 3-12-999-99

Process Description:

This process covers BNL appliances normally containing more than 50 lbs refrigerant. Ref. Recovery and recycling equipment, used by EPA certified technicians to service covered equipment, meet the levels of evacuation established by EPA as noted in 40 CFR section 82.158. Includes 28 reciprocal, 22 centrifugal and 15 rotary chillers, 13 split and 13 package units. The number of units is subject to change as BNL adds new equipment or replaces old equipment.

Emission Source/Control: REF01 - Control

Control Type: VAPOR RECOVERY SYS(INCL. CONDENSERS,HOODING, OTHER ENCLOSURES)

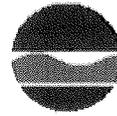


- Emission Source/Control: CEN02 - Process
- Emission Source/Control: CEN06 - Process
- Emission Source/Control: CEN07 - Process
- Emission Source/Control: CEN08 - Process
- Emission Source/Control: CEN09 - Process
- Emission Source/Control: CEN10 - Process
- Emission Source/Control: CEN11 - Process
- Emission Source/Control: CEN13 - Process
- Emission Source/Control: CEN14 - Process
- Emission Source/Control: CEN15 - Process
- Emission Source/Control: CEN18 - Process
- Emission Source/Control: CEN19 - Process
- Emission Source/Control: CEN20 - Process
- Emission Source/Control: CEN21 - Process
- Emission Source/Control: CEN22 - Process
- Emission Source/Control: CEN23 - Process
- Emission Source/Control: CEN24 - Process
- Emission Source/Control: CEN25 - Process
- Emission Source/Control: CEN26 - Process
- Emission Source/Control: CEN27 - Process
- Emission Source/Control: CEN28 - Process
- Emission Source/Control: PKG02 - Process
- Emission Source/Control: REC01 - Process
- Emission Source/Control: REC02 - Process
- Emission Source/Control: REC03 - Process

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032

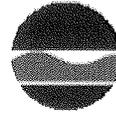


Emission Source/Control: REC07 - Process
Emission Source/Control: REC11 - Process
Emission Source/Control: REC12 - Process
Emission Source/Control: REC13 - Process
Emission Source/Control: REC21 - Process
Emission Source/Control: REC22 - Process
Emission Source/Control: REC24 - Process
Emission Source/Control: REC29 - Process
Emission Source/Control: REC31 - Process
Emission Source/Control: REC32 - Process
Emission Source/Control: REC33 - Process
Emission Source/Control: REC34 - Process
Emission Source/Control: REC41 - Process
Emission Source/Control: REC43 - Process
Emission Source/Control: REC44 - Process
Emission Source/Control: REC46 - Process
Emission Source/Control: REC47 - Process
Emission Source/Control: REC48 - Process
Emission Source/Control: REC49 - Process
Emission Source/Control: REC50 - Process
Emission Source/Control: REC51 - Process
Emission Source/Control: REC52 - Process
Emission Source/Control: REC53 - Process
Emission Source/Control: ROT01 - Process
Emission Source/Control: ROT02 - Process
Emission Source/Control: ROT03 - Process

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Emission Source/Control: ROT04 - Process

Emission Source/Control: ROT05 - Process

Emission Source/Control: ROT06 - Process

Emission Source/Control: ROT07 - Process

Emission Source/Control: ROT08 - Process

Emission Source/Control: ROT09 - Process

Emission Source/Control: ROT10 - Process

Emission Source/Control: ROT11 - Process

Emission Source/Control: ROT12 - Process

Emission Source/Control: ROT13 - Process

Emission Source/Control: ROT14 - Process

Emission Source/Control: ROT15 - Process

Emission Source/Control: SPL02 - Process

Item 39.22:

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

Emission Unit: U-SMBLR

Process: SB1

Source Classification Code: 1-05-001-05

Emission Source/Control: 030AB - Combustion

Design Capacity: 1.34 million Btu per hour

Emission Source/Control: 244AB - Combustion

Design Capacity: 1.5 million Btu per hour

Emission Source/Control: 422AF - Combustion

Design Capacity: 2.41 million Btu per hour

Emission Source/Control: 42304 - Combustion

Design Capacity: 1.67 million Btu per hour

Condition 40: Compliance Certification

Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR 227.2 (b) (1)

Item 40.1:

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



The Compliance Certification activity will be performed for:

Emission Unit: U-61005

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 40.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The NOx RACT emission limit for Boiler 5, a large boiler, is 0.30 lb/MMBTU as per 6 NYCRR Part 227-2.4(b)(1).

Stack testing is required during the term of the permit. The owner or operator must submit a stack test protocol to the Department for approval prior to testing. The owner or operator shall submit stack test results, to the Department for approval, within 60 days of stack test completion.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.3 pounds per million Btus

Reference Test Method: 7 or 7E

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2014.

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

Condition 41: Compliance Certification

Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR 227.2 (b) (1)

Item 41.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-61005

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 41.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

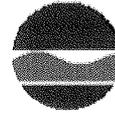
Monitoring Description:

Particulate emission limit for stationary combustion installation firing oil. The owner or operator shall complete the following once

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



per term of this permit:

- 1) Submit to the Department an acceptable protocol for the testing of particulate emission limit cited in this condition.
- 2) Perform a stack test, based upon the approved test protocol, to determine compliance with the particulate emission limit cited in this condition.
- 3) All records shall be maintained at the facility for a minimum of five years.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2014.

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

Condition 42: Use of alternative methods for measuring NOx during CEMS downtime Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 40CFR 60.48b(f), NSPS Subpart Db

Item 42.1:

This Condition applies to Emission Unit: U-61005
Process: SF1

Item 42.2:

When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

Condition 43: Compliance Certification Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR 227.2 (b) (1)

Item 43.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-61006

Regulated Contaminant(s):

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



CAS No: 0NY075-00-0 PARTICULATES

Item 43.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Particulate emission limit for stationary combustion installation firing oil. The owner or operator shall complete the following once per term of this permit:

- 1) Submit to the Department an acceptable protocol for the testing of particulate emission limit cited in this condition.
- 2) Perform a stack test, based upon the approved test protocol, to determine compliance with the particulate emission limit cited in this condition.
- 3) All records shall be maintained at the facility for a minimum of five years.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2014.

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

Condition 44: Compliance Certification

Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 40CFR 52.21, Subpart A

Item 44.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-61006

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 44.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

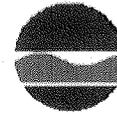
Monitoring Description:

Emissions of Nitrogen Oxides from this unit is limited to 0.3

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



lbs/mmBtu.

Manufacturer Name/Model Number: NA

Upper Permit Limit: 0.3 pounds per million Btus

Reference Test Method: METHOD 19

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2014.

Subsequent reports are due every 3 calendar month(s).

**Condition 45: Use of alternative methods for measuring NOx during CEMS downtime
Effective between the dates of 02/04/2014 and 02/03/2019**

Applicable Federal Requirement:40CFR 60.48b(f), NSPS Subpart Db

Item 45.1:

This Condition applies to Emission Unit: U-61006

Process: SF4

Item 45.2:

When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

Condition 46: Compliance Certification

Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 60.44b(a)(1), NSPS Subpart Db

Item 46.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-61006

Process: SF5

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 46.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

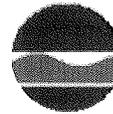
Monitoring Description:

Emissions of Nitrogen Oxides from this unit while burning natural gas at the high release rate are limited to 0.20 #/mmBTU.

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Manufacturer Name/Model Number: Thermal Environmental Inst Model 200 w/ Model 42C
NOx Analyzer

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.20 pounds per million Btus

Reference Test Method: Automated Reference Method: RFNA-1289-074

Monitoring Frequency: CONTINUOUS

Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN - APP. A,
METHOD 19)

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2014.

Subsequent reports are due every 3 calendar month(s).

**Condition 47: Use of alternative methods for measuring NOx during CEMS downtime
Effective between the dates of 02/04/2014 and 02/03/2019**

Applicable Federal Requirement:40CFR 60.48b(f), NSPS Subpart Db

Item 47.1:

This Condition applies to Emission Unit: U-61006

Process: SF5

Item 47.2:

When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

**Condition 48: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019**

Applicable Federal Requirement:40CFR 60.44b(a)(1), NSPS Subpart Db

Item 48.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-61006

Process: SF6

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 48.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

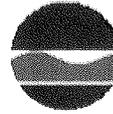
Monitoring Description:

Emissions of Nitrogen Oxides from this unit while burning distillate oil at the high release rate are limited to 0.20 #/mmBTU.

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Manufacturer Name/Model Number: Thermal Environmental Inst Model 200 w/ Model 42C
NOx Analyzer

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.20 pounds per million Btus

Reference Test Method: Automated Reference method: RFNA-1289-074

Monitoring Frequency: CONTINUOUS

Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN - APP. A,
METHOD 19)

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2014.

Subsequent reports are due every 3 calendar month(s).

**Condition 49: Use of alternative methods for measuring NOx during CEMS downtime
Effective between the dates of 02/04/2014 and 02/03/2019**

Applicable Federal Requirement:40CFR 60.48b(f), NSPS Subpart Db

Item 49.1:

This Condition applies to Emission Unit: U-61006

Process: SF6

Item 49.2:

When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

**Condition 50: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019**

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 50.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-61007

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 50.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

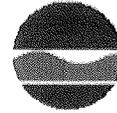
Monitoring Description:

PM, PM 10 emissions from this unit is limited to 0.1 lbs/mmBtu and
14.70 lbs/hr.

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Work Practice Type: PROCESS MATERIAL THRUPUT
Process Material: FUEL
Manufacturer Name/Model Number: n/a
Upper Permit Limit: 0.1 pounds per million Btus
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 51: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 51.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-61007

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 51.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE
PARAMETERS AS SURROGATE

Monitoring Description:
Sulfur content of the fuel oil in this boiler shall not exceed 0.50
% by weight.

Parameter Monitored: SULFUR
Upper Permit Limit: 0.50 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME
(INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 52: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 52.1:
The Compliance Certification activity will be performed for:

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Emission Unit: U-61007

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 52.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE
PARAMETERS AS SURROGATE

Monitoring Description:

Opacity from the boiler stack shall not be greater than 20% (6-minute average) except for one 6-minute period per hour of not more than 27% opacity.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Monitoring Frequency: CONTINUOUS
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 53: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 40CFR 52.21, Subpart A

Item 53.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-61007

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

Item 53.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE
PARAMETERS AS SURROGATE

Monitoring Description:

CO emissions for this emission unit is limited to 0.08 lbs/mmBtu and 11.80 lbs/hr.

Work Practice Type: PROCESS MATERIAL THRUPUT
Process Material: FUEL
Upper Permit Limit: 0.08 pounds per million Btus
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 54: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 54.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-61007

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

Item 54.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)
Monitoring Description:
Oxides of Nitrogen (NOx) emissions are limited to 0.300 lbs/mmBtu and
44.10 lbs/hr.

Manufacturer Name/Model Number: xxx
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.300 pounds per million Btus
Reference Test Method: NA
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 55: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 55.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-61007

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

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Item 55.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

CEM shall meet the requirements of 40 CFR 60, Appendix B and F, and the NESCAUM Guidance Documents for CEMs, September 1990.

Manufacturer Name/Model Number: XXX

Upper Permit Limit: 0.3 pounds per million Btus

Reference Test Method: SEE DISCCRIPTION

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

Condition 56: Compliance Certification

Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 56.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-61007

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 56.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

VOC emissions from this unit is limited to 0.034 lbs/mmBtu and 5.00 lbs/hr.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: FUEL

Manufacturer Name/Model Number: n/a

Upper Permit Limit: 0.034 pounds per million Btus

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2014.

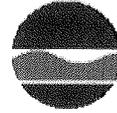
Subsequent reports are due every 3 calendar month(s).

Condition 57: Compliance Certification

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 60.43b(f), NSPS Subpart Db

Item 57.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-61007

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 57.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE
PARAMETERS AS SURROGATE

Monitoring Description:

The owner or operator shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6 minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Monitoring Frequency: CONTINUOUS

Averaging Method: 6 MINUTE AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2014.

Subsequent reports are due every 3 calendar month(s).

Condition 58: Compliance Certification

Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 60.43b(b), NSPS Subpart Db

Item 58.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-61007

Process: SF7

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 58.2:

Compliance Certification shall include the following monitoring:

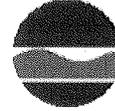
Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Particulate matter emissions when burning oil or oil and other fuels shall not exceed 0.10 lb/MMBTU.

Stack testing is required once during the permit term limit (five years) and shall be performed in accordance with NYSDEC approved protocols. Reports are due within sixty days of testing.

Upper Permit Limit: 0.1 pounds per million Btus

Reference Test Method: See description.

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 59: Use of alternative methods for measuring NOx during CEMS downtime Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 40CFR 60.48b(f), NSPS Subpart Db

Item 59.1:

This Condition applies to Emission Unit: U-61007
Process: SF7

Item 59.2:

When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

Condition 60: Compliance Certification Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 40CFR 60.44b(a)(1), NSPS Subpart Db

Item 60.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-61007
Process: SF8

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

Item 60.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

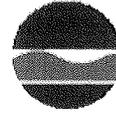
Monitoring Description:

Emissions of Nitrogen Oxides from this unit while burning natural gas

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



at the high release rate are limited to 0.20 #/mmBTU.

Manufacturer Name/Model Number: Thermal Environmental Inst Model 200 w/ Model 42D
NOx Analyzer
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.20 pounds per million Btus
Reference Test Method: Automated Reference Method: RFNA-1289-074
Monitoring Frequency: CONTINUOUS
Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN - APP. A,
METHOD 19)
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2014.
Subsequent reports are due every 3 calendar month(s).

**Condition 61: Use of alternative methods for measuring NOx during CEMS downtime
Effective between the dates of 02/04/2014 and 02/03/2019**

Applicable Federal Requirement:40CFR 60.48b(f), NSPS Subpart Db

Item 61.1:

This Condition applies to Emission Unit: U-61007
Process: SF8

Item 61.2:

When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

**Condition 62: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019**

Applicable Federal Requirement:40CFR 60.44b(a)(1), NSPS Subpart Db

Item 62.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-61007
Process: SF9

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

Item 62.2:

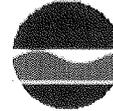
Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)
Monitoring Description:

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Emissions of Nitrogen Oxides from this unit while burning distillate oil at the high release rate are limited to 0.20 #/mmBTU.

Manufacturer Name/Model Number: Automated Reference Method: RFNA-1289-074
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.20 pounds per million Btus
Reference Test Method: Automated Reference Method: RFNA-1289-074
Monitoring Frequency: CONTINUOUS
Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN - APP. A, METHOD 19)
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 63: Use of alternative methods for measuring NOx during CEMS downtime
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 60.48b(f), NSPS Subpart Db

Item 63.1:

This Condition applies to Emission Unit: U-61007
Process: SF9

Item 63.2:

When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

Condition 64: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:40CFR 60, NSPS Subpart TT

Item 64.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-COILS

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 64.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

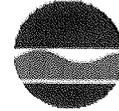
Monitoring Description:

The facility shall not cause to be discharged into the atmosphere

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



more than 0.28 kilogram VOC per liter (kg VOC/l) of coating solids applied for each calendar month. The facility has chosen to comply with Subpart TT through the use of compliance coatings rather than use an emission control device(s).

Following the procedures contained in 40 CFR 60, Subpart TT the facility shall calculate the volume-weighted average of the total mass of VOC's consumed per unit volume of coating solids applied during each calendar month.

The facility shall identify, record, and submit a written report every calendar quarter of each instance in which the volume-weighted average of the local mass of VOC's emitted to the atmosphere per volume of applied coating solids is greater than the 0.28 kg VOC/l limit specified. If no such instances have occurred during a particular quarter, a report stating this shall be submitted to the Administrator semiannually.

The facility shall maintain, for a period of at least 2 years, records of all data and calculations used to determine monthly VOC emissions from each affected facility and to determine the monthly emission limit, where applicable.

Reference Test Method: Calculations as per 40 CFR Subpart TT
Monitoring Frequency: MONTHLY
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 65: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR 230.2 (k)

Item 65.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-FUELS

Item 65.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE
PARAMETERS AS SURROGATE

Monitoring Description:

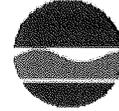
Owners and/or operators of stage II systems must perform dynamic pressure tests at 5 year intervals after commencing operations. The back pressure during the dynamic back pressure tests must not exceed 0.45 inches of water column gauge at a flow rate of 60 cubic feet per hour.

Parameter Monitored: PRESSURE
Upper Permit Limit: 0.45 inches of water

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

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

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 66: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 230.2 (k)

Item 66.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-FUELS

Item 66.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE
PARAMETERS AS SURROGATE

Monitoring Description:

Owners and/or operators of stage II systems must perform dynamic pressure tests at 5 year intervals after commencing operations. The back pressure during the dynamic back pressure tests must not exceed 0.95 inches of water column gauge at a flow rate of 100 cubic feet per hour.

Parameter Monitored: PRESSURE

Upper Permit Limit: 0.95 inches of water

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

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

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 67: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 230.2 (k)

Item 67.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-FUELS

Item 67.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Owners and/or operators of stage II systems must perform leak tests at 5 year intervals after commencing operations. The pressure in

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



gasoline storage tanks must not fall below the values in Table 1 of Part 230.2(k)(2)(iii) after 5 minutes from an initial pressure of 10.0 inches of water column during a leak test.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 68: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR 230.2 (k)

Item 68.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-FUELS

Item 68.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE
PARAMETERS AS SURROGATE

Monitoring Description:

Owners and/or operators of stage II systems must perform liquid blockage tests at 5 year intervals after commencing operations. The back pressure during the liquid blockage tests must not exceed 0.03 inches of water column gauge above the dynamic back pressure test results for the system for flow rates of 60 and 100 cubic feet per hour.

Parameter Monitored: PRESSURE

Upper Permit Limit: 0.03 inches of water

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

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

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 69: Solvent Metal Cleaning Processes
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR 226.2 (f)

Item 69.1:
This Condition applies to Emission Unit: U-METAL

Item 69.2:
A person conducting solvent metal cleaning must not clean sponges, fabric, wood, leather, paper products and other absorbent materials in a degreaser.

Condition 70: Solvent Metal Cleaning Processes

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 226.2 (g)

Item 70.1:

This Condition applies to Emission Unit: U-METAL

Item 70.2:

A person conducting solvent metal cleaning must, if using a cold cleaning degreaser that is subject to section 226.3(a)(4) of this Part, retain a record of the following three items for five years and provide these records to the department upon request. An invoice, a bill of sale, a certificate covering multiple sales, a material safety data sheet (MSDS), or other appropriate documentation acceptable to the department may be used to comply with this requirement:

- (1) the name and address of the solvent supplier;
- (2) the type of solvent including the product or vendor identification number; and
- (3) the vapor pressure of the solvent measured in mm Hg at 20°C (68°F).

Condition 71: Solvent Metal Cleaning Processes

Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement:6 NYCRR 226.3 (a) (4)

Item 71.1:

This Condition applies to Emission Unit: U-METAL

Item 71.2:

For cold cleaning degreasing when the internal volume of the machine is greater than two gallons.

Solvent with a vapor pressure of 1.0 mm Hg, or less, at 20°C must be used. On or after January 1, 2004, the person conducting solvent metal cleaning covered by this subdivision must use compliant solvents or have submitted a process specific RACT demonstration pursuant to section 226.5 of this Part.

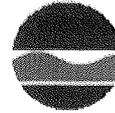
This paragraph does not apply to degreasers:

- (i) used in special and extreme solvent metal cleaning;
- (ii) for which the owner or operator has received department approval of a demonstration that compliance with the requirement of a solvent with a vapor pressure of 1.0 mm Hg, or less, at 20°C will result in unsafe operating conditions; or
- (iii) that are located in a permanent total enclosure having control equipment that is designed and operated with an overall VOC removal efficiency of 90 percent or greater.

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Condition 72: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR 228-1.3 (b) (1)

Item 72.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-PAINT

Emission Point: 00AMB

Process: PT1

Emission Source: 244AE

Item 72.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of an emission source subject to 6 NYCRR Part 228-1 must maintain the following records in a format acceptable to the department for a period of at least five years:

1. A certification from the coating supplier or manufacturer which lists the parameters used to determine the actual VOC content of each as applied coating used at the facility.
2. Purchase, usage and/or production records of each coating material, including solvents.
3. Records identifying each air cleaning device that has an overall removal efficiency of at least 90 percent.
4. Records verifying each parameter used to calculate the overall removal efficiency, as described in Equation 2 of Section 228-1.5(c), if applicable.
5. Any additional information required to determine compliance with Part 228-1.

Upon request, the owner or operator of an emission source subject to 6 NYCRR Part 228-1 must submit a copy of the records kept in accordance with this condition to the department within 90 days of receipt of the request.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 73: Compliance Certification
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable Federal Requirement: 6 NYCRR 228-1.3 (b) (1)

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



Item 73.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-PAINT
Process: PT1

Emission Point: 24402
Emission Source: 24402

Item 73.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

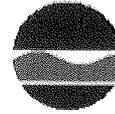
Monitoring Description:

The owner or operator of an emission source subject to 6 NYCRR Part 228-1 must maintain the following records in a format acceptable to the department for a period of at least five years:

1. A certification from the coating supplier or manufacturer which lists the parameters used to determine the actual VOC content of each as applied coating used at the facility.
2. Purchase, usage and/or production records of each coating material, including solvents.
3. Records identifying each air cleaning device that has an overall removal efficiency of at least 90 percent.
4. Records verifying each parameter used to calculate the overall removal efficiency, as described in Equation 2 of Section 228-1.5(c), if applicable.
5. Any additional information required to determine compliance with Part 228-1.

Upon request, the owner or operator of an emission source subject to 6 NYCRR Part 228-1 must submit a copy of the records kept in accordance with this condition to the department within 90 days of receipt of the request.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY



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: 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 applicable requirements and are not subject to compliance certification requirements unless otherwise noted or required under 6 NYCRR Part 201.

Condition 74: Contaminant List
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable State Requirement:ECL 19-0301

Item 74.1:

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

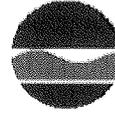
CAS No: 000630-08-0
Name: CARBON MONOXIDE

CAS No: 007446-09-5
Name: SULFUR DIOXIDE

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



CAS No: 0NY075-00-0
Name: PARTICULATES

CAS No: 0NY075-00-5
Name: PM-10

CAS No: 0NY210-00-0
Name: OXIDES OF NITROGEN

CAS No: 0NY998-00-0
Name: VOC

Condition 75: Malfunctions and start-up/shutdown activities
Effective between the dates of 02/04/2014 and 02/03/2019

Applicable State Requirement: 6 NYCRR 201-1.4

Item 75.1:

(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

New York State Department of Environmental Conservation

Permit ID: 1-4722-00032/00115

Facility DEC ID: 1472200032



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

