PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 9-2930-00032/00263
Effective Date: 08/14/2015 Expiration Date: 08/13/2020

Permit Issued To:TAM CERAMICS GROUP OF NY LLC
4511 HYDE PARK BLVD
NIAGARA FALLS, NY 14305

Contact: GEORGE H BILKEY, V
TAM CERAMICS INC
4511 HYDE PARK BLVD
NIAGARA FALLS, NY 14305
(716) 278-9595

Facility: TAM CERAMICS LLC
4511 HYDE PARK BLVD
NIAGARA FALLS, NY 14305-0067

Contact: VINCENT GRANDINETTI
COMPCO OF WNY INC
3667 LOWER RIVER RD
YOUNGSTOWN, NY 14174

Description:

Title V Permit
Site Description

TAM Ceramics, Inc., located in Niagara Falls, New York is a manufacturer of refractory mixtures and ceramic powders. Raw materials are processed by furnacing, crushing, screening, blending, drying, and sometimes calcining. Primary products produced are titanium oxide, zirconium silicate, potassium titanate, zirconium oxide.

Emission units:
Each emission unit consists of various processes by which calcined and/or uncalcined materials may be fed through a varied series of dry mills and wet mills, holding tanks, screens and filters, dryers, and calciners prior to final product packout.

Emission unit 00002 additionally consists of four submersion-type electric arc furnaces used for production of high purity zircon, rotary gas-fired calciners, and a carbon bake-out furnace in addition to various crushing, grinding, blending and milling operations.

Emission unit 00003 consists of final milling prior to pack-out or further processing.

Emission units 00004 and 00005 consist of rotary gas fired calciners and associated milling, classification, and material handling equipment. In emission unit 00006 products can be produced by calcining and further processing materials.

Emissions:
TAM Ceramics is a major source subject to 6NYCRR, Part 201-6 Title V permitting requirements for the emissions of particulate matter and nitrogen oxides greater than 100 tons. Stack testing has been performed on various representative processes in order to develop emission factors which were used in conjunction with production rates in the completion of the initial Title V application.

Applicable Requirements:
Particulate matter is subject to the regulatory emission limits of 6NYCRR, Part 212.3(b) and 212.4(c) which are 0.15 and 0.05 grains/dscf respectively.

Results from source tests conducted on the three electric arc furnaces demonstrated that actual nitrogen oxide(NOx) emissions are in excess of 100 tons per year and require compliance with the Reasonably Available Control Technology(RACT) requirements of 6NYCRR, Part 212.10. A RACT analysis was performed and submitted for the three single-phase electric arc furnaces and one small scale three-phase electric arc R & D furnace, each described within emission unit 00002. Because there are no control options available, TAM requests a technical variance from the RACT requirements. Both this Department and the United States Environmental Protection Agency(USEPA) have conducted a preliminary review of the RACT analysis and found it to be acceptable. This permit incorporates a special condition for emission
unit 00002 which limits actual NOx emissions from these four sources to 15.9#/hour per furnace and 210 tons per year total. Each furnace consists of a steel shell with a flat bottom and an inner shell which is constructed of carbon, therefore, there is no refractory maintenance requirement. The variance request was formally submitted to the USEPA as a source specific revision to the State Implementation Plan(SIP).

Compliance Monitoring:
Baghouses:
Tam utilizes fabric filter dust collectors in the control of particulate emissions at the facility. In order to demonstrate continuous compliance with 6NYCRR, Part 212; inspection and maintenance procedures which consist of daily inspections to record magnehelic readings and daily visible emissions
evaluations are required. If visible emissions are observed or deviations from the normal operating ranges specified on the log sheets noted, an inspection of the control equipment is conducted as per the troubleshooting guidelines and the required maintenance procedures implemented. In addition, weekly or between production runs, a visual inspection to determine the physical integrity of bags and supporting cages and appurtenances is conducted.

Cyclones:
Cyclones are utilized for the control of particulate emissions associated with two rotary gas-fired calciners, emission points 203 and 401. Inspection, maintenance, and recordkeeping activities are conducted on a minimum six month basis or as necessitated by daily visible emissions evaluations.

Settling Chambers:
Settling chambers are utilized as the primary control of emissions from three rotary gas-fired calciners, emission points 501, 601, and 602. Inspection, maintenance, and recordkeeping

activities are conducted on a minimum six month basis or as necessitated by daily visible emissions evaluations.

Fugitives:
Raw material and product storage are enclosed in buildings and storage tanks to minimize fugitive emissions. Conditions include monitoring and minimization of fugitive emissions from roadways and raw material storage piles.

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: LISA M CZECHOWICZ
NYSDEC - REGION 9
270 MICHIGAN AVE
BUFFALO, NY 14203-2915

Authorized Signature: _____ Date: ___ / ___ / _____

Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

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

Item B: Permittee's Contractors to Comply with Permit

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

Item C: Permittee Responsible for Obtaining Other Required Permits

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

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

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

LIST OF CONDITIONS

DEC GENERAL CONDITIONS
General Provisions
Facility Inspection by the Department
Relationship of this Permit to Other Department Orders and Determinations
Applications for permit renewals, modifications and transfers
Permit modifications, suspensions or revocations by the Department
Facility Level
Submission of application for permit modification or renewal-REGION 9 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 9 HEADQUARTERS
Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 5.1:
Submission of applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator
Region 9 Headquarters
Division of Environmental Permits
270 Michigan Avenue
Buffalo, NY 14203-2915
(716) 851-7165

Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

IDENTIFICATION INFORMATION

Permit Issued To:TAM CERAMICS GROUP OF NY LLC
4511 HYDE PARK BLVD
NIAGARA FALLS, NY 14305

Facility: TAM CERAMICS LLC
4511 HYDE PARK BLVD
NIAGARA FALLS, NY 14305-0067

Authorized Activity By Standard Industrial Classification Code:
3295 - MINERALS, GROUND OR TREATED
3297 - NONCLAY REFRACTORIES
3299 - NONMETALLIC MINERAL PRODUCTS

Permit Effective Date: 08/14/2015 Permit Expiration Date: 08/13/2020

LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

1 6 NYCRR 200.6: Acceptable Ambient Air Quality
2 6 NYCRR 201-6.4 (a) (7): Fees
3 6 NYCRR 201-6.4 (c): Recordkeeping and Reporting of Compliance Monitoring
4 6 NYCRR 201-6.4 (c) (2): Records of Monitoring, Sampling, and Measurement
5 6 NYCRR 201-6.4 (c) (3) (ii): Compliance Certification
6 6 NYCRR 201-6.4 (e): Compliance Certification
7 6 NYCRR 202-2.1: Compliance Certification
8 6 NYCRR 202-2.5: Recordkeeping requirements
9 6 NYCRR 215.2: Open Fires - Prohibitions
10 6 NYCRR 200.7: Maintenance of Equipment
11 6 NYCRR 201-1.7: Recycling and Salvage
12 6 NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
13 6 NYCRR 201-3.2 (a): Exempt Sources - Proof of Eligibility
14 6 NYCRR 201-3.3 (a): Trivial Sources - Proof of Eligibility
15 6 NYCRR 201-6.4 (a) (4): Requirement to Provide Information
16 6 NYCRR 201-6.4 (a) (8): Right to Inspect
17 6 NYCRR 201-6.4 (f) (6): Off Permit Changes
18 40 CFR Part 68: Accidental release provisions.
19 40CFR 82, Subpart F: Recycling and Emissions Reduction
20 6 NYCRR Subpart 201-6: Emission Unit Definition
21 6 NYCRR 201-6.4 (d) (4): Progress Reports Due Semiannually
22 6 NYCRR 201-6.4 (f) (2): Compliance Certification
23 6 NYCRR 202-1.1: Required Emissions Tests - Facility Level
24 6 NYCRR Part 211: Compliance Certification
25 6 NYCRR 211.1: Air pollution prohibited
26 6 NYCRR Part 212: Compliance Certification
27 6 NYCRR 212.3 (b): Compliance Certification
28 6 NYCRR 212.3 (b): Compliance Certification
29 6 NYCRR 212.4 (c): Compliance Certification
30 6 NYCRR 212.4 (c): Compliance Certification
31 6 NYCRR 212.6 (a): Compliance Certification
32 6 NYCRR 212.10 (c) (3): Compliance Certification

Emission Unit Level

33 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
34 6 NYCRR Subpart 201-6: Process Definition By Emission Unit

EU=0-00002,Proc=B04

35 6 NYCRR 212.4 (b): Compliance Certification

EU=0-00002,EP=00201

36 40 CFR Part 64: Compliance Certification

EU=0-00005,EP=00503

37 40 CFR Part 64: Compliance Certification

STATE ONLY ENFORCEABLE CONDITIONS
Facility Level

38 ECL 19-0301: Contaminant List
39 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 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)

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.

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

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 08/14/2015 and 08/13/2020

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 08/14/2015 and 08/13/2020

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 08/14/2015 and 08/13/2020

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.

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 08/14/2015 and 08/13/2020

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 08/14/2015 and 08/13/2020

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 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 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 may be submitted electronically or physically. Electronic reports shall be submitted using the Department's Air Compliance and Emissions Electronic-Reporting system (ACE). If the facility owner or operator elects to send physical copies instead, two copies shall be sent 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) and one copy shall be sent to the Administrator (or his or her representative). 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.

Monitoring Frequency: SEMI-ANNUALLY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2016.
Subsequent reports are due every 6 calendar month(s).

Condition 6: Compliance Certification
Effective between the dates of 08/14/2015 and 08/13/2020

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 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 annual compliance certifications may be submitted electronically or physically. Electronic reports shall be submitted using the Department's Air Compliance and Emissions Electronic-Reporting system (ACE). If the facility owner or operator elects to send physical copies instead, two copies shall be sent 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) and one copy shall be sent to the Administrator (or his or her representative). The mailing addresses for the above referenced persons are:

Chief – Stationary Source Compliance Section
USEPA Region 2
Air Compliance Branch
290 Broadway
New York, NY 10007-1866

The address for the RAPCE is as follows:

Regional Air Pollution Control Engineer
NYSDEC Region 9 Headquarters
270 Michigan Avenue
Buffalo, NY 14203-2915

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 1/30/2016.
Subsequent reports are due on the same day each year

Condition 7: Compliance Certification
Effective between the dates of 08/14/2015 and 08/13/2020

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. Statements are to be mailed to: New York State Department of Environmental Conservation, Division of Air Resources, Bureau of Air Quality Planning, 625 Broadway, Albany NY 12233-3251

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 08/14/2015 and 08/13/2020

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 08/14/2015 and 08/13/2020

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 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 08/14/2015 and 08/13/2020

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 08/14/2015 and 08/13/2020

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 08/14/2015 and 08/13/2020

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 08/14/2015 and 08/13/2020

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 08/14/2015 and 08/13/2020

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.

Condition 15: Requirement to Provide Information
Effective between the dates of 08/14/2015 and 08/13/2020

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 08/14/2015 and 08/13/2020

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 08/14/2015 and 08/13/2020

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 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: Accidental release provisions.
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:40 CFR Part 68

Item 18.1:
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
C/O CSC
8400 Corporate Dr
Carrollton, Md. 20785

Condition 19: Recycling and Emissions Reduction
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:40CFR 82, Subpart F

Item 19.1:
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 20: Emission Unit Definition

Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 20.1:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 0-00002
Emission Unit Description:
Calcined and uncalcined materials are fed into a series of furnaces, heated into a slagged material, crushed, screened, and fed through a second stage calciner, screened, blended, pulverized and discharged for final product pack-out.

Building(s): 0000000008
0000000010
0000000011
0000000018
0000000115
0000000123
0000000127
0000000134
0000000137
0000000143
0000000145
0000000162

Item 20.2:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 0-00003
Emission Unit Description:
Calcined and uncalcined materials are milled (8 x 12 mill) and discharged for pack out or sent on for further processing.

Building(s): 0000000123

Item 20.3:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 0-00004
Emission Unit Description:
Raw materials consisting of rutile, soda ash and pot ash are mixed and fed through the PT calciner, milled, classified and screened for final pack out.

Building(s): 0000000017

Item 20.4:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 0-00005
Emission Unit Description:
Uncalcined materials are dry milled, mixed with water to

form a slurry, then fed through a series of wet mills and holding tanks. The slurry is then calcined, milled and screened for the final product which is discharged for final packout.

Building(s): 0000000008
0000000013

Item 20.5:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 0-00006
Emission Unit Description:
This emission unit includes those processes and equipment associated with mixing, milling, calcining, drying, blending, screening and associated material handling equipment leading to final packout.

Building(s): 0000000002
0000000147
0000000159
0000000163

Condition 21: Progress Reports Due Semiannually
Effective between the dates of 08/14/2015 and 08/13/2020

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

Item 21.1:
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 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 22: Compliance Certification
Effective between the dates of 08/14/2015 and 08/13/2020

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

Item 22.1:
The Compliance Certification activity will be performed for the Facility.

Item 22.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

The permittee produces ceramic materials for sale and use in other forms of manufacturing. The processes employed include arc furnacing, milling, calcining, and mixing. The primary products manufactured are zirconium silicate, zirconium oxide, titanium oxide, sodium titanate, potassium titanate, calcium carbide with silicates, silicates with flourides, aluminum oxides, and dielectric powders primarily manufactured from barium titanate. The facility emits particulate emissions in excess of 100 ton per year.

This protocol will allow the facility to evaluate the addition of new or modification of existing minor particulate emission sources without re-opening the Title V permit. This protocol applies only to particulate emissions not assigned an Environmental Rating of 'A', or designated a Persistent, Bioaccumulative and Toxic compounds in Table 1 of 6NYCRR, Part 201-9. Examples of potential changes which would be allowed under this protocol are the addition of new processing lines, crushers, screeners, and replacement or addition of fabric filter collectors.

Notifications:

Prior to making changes under the terms of this flexibility protocol, the permittee will notify this Department in writing 30 days prior and include all information necessary to substantiate that the changes are consistent with this protocol and will ensure compliance with all applicable requirements. The information to be submitted includes but is not limited to: a description of the changes to be made; the addition or modification of process and control equipment; the specific contaminants to be emitted; calculations of emission rate potentials and potential to emit based on AP-42 emission factors, stack tests, and/or material balance; and an Air Guide-1 analysis.

If the submission of this information demonstrates that the changes to be made are not consistent with the terms of this protocol or if addittional monitoring conditions required, then the Department will require the submission of a permit modification.

Evaluation of Particulate Emissions:

Prior to the start-up of the new or modified equipment, the permittee must demonstrate compliance with the 0.05 gr/dscf standard in 6NYCRR, Part 212.4(c). The particulate emission rate potential (ERP) and emission control efficiency, if applicable, will be determined using mass

balance, engineering estimates, manufacturers guarantee, AP-42 emission factors, stack tests on the affected source or a representative emissions source.

A performance test may be required to demonstrate compliance with the emission limit.

Particulate emissions shall be evaluated in terms of PM-10 and PM 2.5 emissions. All measured or estimated PM-10 emissions will be assumed PM-2.5. If PM-10 emissions from the project do not equal or exceed 15 tons per year, then the PM-2.5 impacts from the project shall be considered insignificant, no further assessment required and the change will be allowed under the terms of this protocol.

Recordkeeping:

The permittee shall maintain records of all modifications made under this flexibility protocol. These modifications will be incorporated into the Title V permit at the time of renewal. Records will be kept on-site for a period of 5 years and made available to Department representatives on request. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2016.
Subsequent reports are due every 6 calendar month(s).

Condition 23: Required Emissions Tests - Facility Level
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:6 NYCRR 202-1.1

Item 23.1:
An acceptable report of measured emissions shall be submitted, as required by the commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation.

Condition 24: Compliance Certification
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:6 NYCRR Part 211

Item 24.1:
The Compliance Certification activity will be performed for the Facility.

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

Item 24.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
The permittee shall employ techniques to reduce fugitive emissions from paved and unpaved roadways and material transfer, storage and handling areas.

The failure to implement the control strategies described below will be considered a violation of 6NYCRR, Part 211 which prohibits air pollution.

Daily, the permitte shall inspect roadways and initiate corrective action when required as follows:

The permittee shall employ reasonably available control measures to reduce fugitive emissions from all paved and upaved roadways and parking areas by sweeping, the application of water and/or any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. The implementation of control measures shall be determined by weather conditions and the severity of dry and/or windy conditions.

The permittee shall promptly remove, in such a manner as to minimize or prevent re-entrainment of fugitive dust particles, material from paved areas onto which has been deposited by trucking or earth moving equipment or erosion by water or other means.

The permittee shall employ reasonably available control measures to reduce fugitive emissions from raw material unloading stations for railcars and/or trucks, raw material conveyors, raw material handling operations, and raw material transfer points.

Loading or unloading of raw material trucks, baghouse fines, etc., shall be conducted in a manner or in an enclosed area to prevent re-entrainment of air pollutants.

For each raw material loading/unloading station for railcars or trucks, raw material conveyor, raw material

handling operation, and raw material transfer point that is not enclosed, the drop heights for unloading shall be minimized and loading/unloading shall occur at a rate to minimize fugitive emissions. If fugitive emissions are observed during normal operation, the application of water and/or wet suppressants at sufficient treatment frequencies will be required.

Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times.

The permittee shall employ good operating practices to minimize wind erosion from storage piles.

Implementation of the control measures shall not be necessary for storage piles and roadways that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above mentioned applicable requirements.

Parameter Monitored: VISIBLE EMISSIONS
Upper Permit Limit: 1 prescence of cond: yes=1; no=0
Monitoring Frequency: DAILY
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2016.
Subsequent reports are due every 6 calendar month(s).

Condition 25: Air pollution prohibited
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:6 NYCRR 211.1

Item 25.1:
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 26: Compliance Certification
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:6 NYCRR Part 212

Item 26.1:
The Compliance Certification activity will be performed for the Facility.

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

Item 26.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
The permittee shall implement a routine baghouse control equipment inspection, maintenance, and recordkeeping (I&M) plan as summarized below in order to ensure compliance with the particulate emission limits in 6NYCRR, Part 212.3(b) and 6NYCRR, Part 212.4(c). The inspection will occur as noted below or as a result of a visible emissions evaluation.

The magnehelic range will be established each time the filter bags are changed and entered on to the baghouse inspection form. These changes are to be indicated in the annual and semi-annual compliance certifications submitted to this Department.

The pressure drop (delta P) across the fabric filter control device will be monitored and recorded daily. Readings outside established normal operating ranges will require that inspection and maintenance procedures be implemented to ensure continuous compliance.

Daily:

Inspection of the baghouses will be conducted on a daily basis. The permittee shall record in an inspection log the date, time, name of staff person performing inspection, and inspection results for each inspection; and, whenever a problem is discovered, a description of the problem, cause and corrective action taken.

1. Differential pressure readings will be monitored and recorded daily noting date and summary of necessary repairs if required.

If a reading is observed at or below the low limit of the established magnehelic range then:

(a) Conduct a visual inspection of the filter bags and repair if necessary.
(b) If the bags are intact, check the magnehelic gauge for proper operation. Check tubing and clear. Examine for loose fittings, cracked, broken or pinched tubing.
(c) Inspect ductwork to and leading from the dust collector for air leakages or blockage. Make sure dampers are correctly positiioned to allow air to flow through the dust collector.
(d) Check the tube sheets and dust collector housing for holes, cracks, or loose gasketing.

If a reading is observed at or above the high limit of the established magnehelic range then:
(a) Check the magnehelic gauge for proper operation.
(b) Inspect the pulsing system to ensure bags are cleaned.
(c) Inspect upper portions of bags for dust caking, dampness or oil which can indicate moisture or oil in compressed air supply.
(d) Inspect bags for blinding from either dry or wet dust. Run the pulsing system for a period of time to clean the bags. If the blinding persists or reoccurs then perform the following as appropriate:

(i) For blinded bags (dry dust), check for:
-dust not discharging from hopper;
-particle size and dust load are per design specifications for bags;
-bags are too tight.

(ii) For blinded bags (wet dust) check for:
-water leakes into baghouse housing and ductwork;
-condensation

If the pressure drops are steadily increasing:
(a) Run pulsing/shake-out system as needed to reduce differential pressure.
(b) Perform above inspection for high pressure drop.

(2) Visual inspection of baghouse and discharge stack:

-If continuous stack emissions are observed, a check to determine the physical integrity of the bags, assemblies, gasketing, housing and other fittings, and correct bag installation.

-If dust is observed after bag pulse, check the header pressure, pulse frequency and duration, shake cycle time

to verify that the baghouse is operating within manufacturers' recommendations.

-Check filter bags for excessive wear

-check clean air plenum for residual dust and as needed clean air plenum and bag cage assemblies to remove residual dust.

The dust collection hopper(s) shall be checked and emptied as needed.

Weekly/Between Production Runs:

Visual inspection of bags and supporting cages and appurtenances for physical integrity including:

-Holes, rips, tears, and signs of excessive wear,
-Loose or missing gaskets, fittings, bolts or assemblies,
-Blockage or bag cages intact

If the results of visual inspection and differential pressure readings indicate a problem which requires immediate attention (i.e. excessive pressure build-up, torn or ripped bags), the baghouse will be taken off line to implement repairs.

If the inspection indicates a potential problem (i.e. worn bags, steadily increasing differential pressure) that does not pose an immediate risk to the integrity of the baghouse system, maintenance will be performed after the associated processing operations are completed and prior to restarting the baghouse. Where necessary, personnel may temporarily remove any bags from service (i.e. the associated air header and pulsing system can be temporarily blanked off) provided operation can occur without significantly compromising the particulate removal efficiency of the baghouse.

A daily inspection/maintenance log will be completed by each department and include magnehelic readings, required repairs, and date of repair completion. The permittee will conduct compliance verifications including but not limited to production rate, process material, air flow rate, control equipment parameters, visible emissions, etc. The permittee will confirm that during source operation all pertinent parameters are within ranges that ensure compliance with the particulate emission rate.

Additionally, the permittee will investigate, in a timely

manner, any instance where there is cause to believe that particulate emissions in excess of the particulate limit are occurring or have occurred. These instances include but are not limited to process upsets, control device malfunctions or problems, abnormal visible emissions, complaints, etc. The permittee shall determine the cause of any exceedance, make the necessary correction, and verify that the excess emissions problem has been corrected.

Records of these verifications, investigations and corrective actions will be kept on-site for a period of 5 years and made available to Department representatives on request. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2016.
Subsequent reports are due every 6 calendar month(s).

Condition 27: Compliance Certification
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:6 NYCRR 212.3 (b)

Item 27.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 0-00002 Emission Point: 00203

Emission Unit: 0-00005 Emission Point: 00501

Emission Unit: 0-00006 Emission Point: 00601

Emission Unit: 0-00006 Emission Point: 00602

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

Item 27.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL

DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

Rotary calciners are employed in the thermal processing of dry and slurry material at elevated temperatures to effect a desired change in a given material. Calcination can involve oxidation, reduction, pyrolysis, removal of chemically bound water, crystal structure changes. Calciners are indirectly heated units which have their heat source separated from both the process material and process off-gases by the rotating cylinder.

Four of these units, having been constructed prior to July 1, 1973 are subject to the grain concentration limit in 6NYCRR, Part 212.3(b) which prohibits particulate emissions in excess of 0.15 grains per dscf. These calciners, their emission points, and hourly process throughputs are as follows:

EP 00203: 7x40 calciner: 2000 lb/hr
EP 00501: 7x70 calciner: 2250 lb/hr
EP 00601: 6x50 calciner: 1200 lb/hr
EP 00602: 6x60 calciner: 1300 lb/hr

The 7x40 calciner employs a cyclone as the method of emissions control whereas the other calciners are only equipped with settling chambers.

The permittee shall inspect the cyclone every six months for holes, rust, and the removal of collected material.

The permittee shall every six months remove collected material from the settling chamber to ensure collected product does not build-up.

The permittee shall maintain records of the hourly process throughput as determined by the total process throughput divided by the number of hours required to pass all the material through the calciner.

The permittee will investigate, in a timely manner, any instance where there is cause to believe that particulate emissions in excess of the particulate limit are occurring or have occurred. These instances include but are not limited to process upsets, malfunctions, abnormal visible emissions, complaints, etc. The permittee shall determine the cause of any exceedance, make the necessary correction, and verify that the excess emissions problem has been corrected.

Records of inspections, verifications, investigations and corrective actions will be kept on-site for a period of 5

years and made available to Department representatives on request. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.15 grains per dscf
Reference Test Method: Method 5
Monitoring Frequency: SEMI-ANNUALLY
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 1/30/2016.
Subsequent reports are due every 6 calendar month(s).

Condition 28: Compliance Certification
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:6 NYCRR 212.3 (b)

Item 28.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 0-00002 Emission Point: 00205

Emission Unit: 0-00002 Emission Point: 00206

Emission Unit: 0-00002 Emission Point: 00207

Emission Unit: 0-00003 Emission Point: 00301

Emission Unit: 0-00005 Emission Point: 00502

Emission Unit: 0-00006 Emission Point: 00613

Emission Unit: 0-00006 Emission Point: 00614

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 28.2:
Compliance Certification shall include the following monitoring:

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

Implementation of a routine baghouse control equipment inspection, maintenance, and recordkeeping (I & M) plan as incorporated into this permit under the facility-wide condition for 6NYCRR, Part 212 for each emission source/point constructed prior to July 1, 1973 and subject to the 0.15 gr/dscf limit. The Department reserves the right to require the performance of a Method 5 emissions evaluation at any time to demonstrate compliance with the emission standard. The following protocol for monitoring baghouse operation shall be followed:

The permittee shall at all times that the process equipment is in operation, monitor the pressure drop across the compartment(s) and operate within the levels established either during a compliance test or established by the fabric filter manufacturer. Daily pressure drop readings shall be recorded. If the pressure drop range changes as a result of filter bag change, the permittee will note the new range and date of bag replacement, and operate within that range. The pressure drop range (s) shall be confirmed in each semi-annual certification report submitted to this Department.

The permittee shall maintain and calibrate a pressure monitoring device in accordance in accordance with the manufacturer's specifications and shall be calibrated annually and be accurate to within a range of ± 0.5 inches water gauge pressure or a span of ± 0.5%.

These parameters are to be used as diagnostic indicators of a potential problem in the operation of the baghouses. Values outside these parameters will require a visual observation of the baghouse outlets. If visible emissions are observed, the permittee will initiate an investigation as to the cause and initiate corrective action as necessary.

The permittee will conduct compliance verifications including but not limited to production rate, process material, air flow rate, control equipment parameters, visible emissions, etc. The permittee will confirm that during source operation all pertinent parameters are within ranges that ensure compliance with the particulate emission rate.

All gauges shall be readily accessible and easily read by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). Each excursion of operation outside the operational ranges except during startup and shut down periods, including date and time, cause, and corrective action taken, shall be recorded and kept on site. Exceedance of operational range shall not be considered a violation of an emission limit of this permit, unless the exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place. Reports of these excursions shall be submitted semiannually. If no excursions occurred during the reporting period then a letter shall indicate such.

Additionally, the permittee will investigate, in a timely manner, any instance where there is cause to believe that particulate emissions in excess of the particulate limit are occurring or have occurred. These instances include but are not limited to process upsets, control device malfunctions or problems, abnormal visible emissions, complaints, etc. The permittee shall determine the cause of any exceedance, make the necessary correction, and verify that the excess emissions problem has been corrected.

Records of verifications, investigations and corrective actions will be kept on-site for a period of 5 years and made available to Department representatives on request. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.15 grains per dscf
Reference Test Method: Method 5
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION
Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.
The initial report is due 1/30/2016.
Subsequent reports are due every 12 calendar month(s).

Condition 29: Compliance Certification
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:6 NYCRR 212.4 (c)

Item 29.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 0-00002 Emission Point: 00202

Emission Unit: 0-00004 Emission Point: 00401

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

Item 29.2:
Compliance Certification shall include the following monitoring:

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

Rotary calciners are employed in the thermal processing of dry and slurry material at elevated temperatures to effect a desired change in a given material. Calcination can involve oxidation, reduction, pyrolysis, removal of chemically bound water, crystal structure changes. Calciners are indirectly heated units which have their heat source separated from both the process material and process off-gases by the rotating cylinder.

Two of these units, having been constructed after July 1, 1973 are subject to the grain concentration limit in 6NYCRR, Part 212.4(c) which prohibits particulate emissions in excess of 0.05 grains per dscf. These calciners, their emission points, and hourly process throughputs are as follows:

EP 00202: 7x40 calciner: 1300 lb/hr
EP 00401: PT calciner: 1300 lb/hr

The 7x40 calciner employs a baghouse only as the method of emissions control whereas the PT calciner is equipped with a cyclone and baghouse.

The permittee shall inspect the cyclone every six months for holes, rust, and the removal of collected material.

The baghouses shall be maintained in accordance with the baghouse maintenance and inspection plan incorporated into this permit as referenced under 6NYCRR, Part 212.4(c).

The permittee will investigate, in a timely manner, any instance where there is cause to believe that particulate emissions in excess of the particulate limit are occurring or have occurred. These instances include but are not limited to process upsets, malfunctions, abnormal visible emissions, complaints, etc. The permittee shall determine the cause of any exceedance, make the necessary correction, and verify that the excess emissions problem has been corrected.

Records of inspections, verifications, investigations and corrective actions will be kept on-site for a period of 5 years and made available to Department representatives on request. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.05 grains per dscf
Reference Test Method: Method 5
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2016.
Subsequent reports are due every 6 calendar month(s).

Condition 30: Compliance Certification
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:6 NYCRR 212.4 (c)

Item 30.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 0-00002 Emission Point: 00201

Emission Unit: 0-00002 Emission Point: 00202

Emission Unit: 0-00002	Emission Point: 00204
Emission Unit: 0-00002	Emission Point: 00208
Emission Unit: 0-00002	Emission Point: 00209
Emission Unit: 0-00002	Emission Point: 00210
Emission Unit: 0-00002	Emission Point: 00211
Emission Unit: 0-00002	Emission Point: 00212
Emission Unit: 0-00002	Emission Point: 00213
Emission Unit: 0-00002	Emission Point: 00214
Emission Unit: 0-00002	Emission Point: 00215
Emission Unit: 0-00002	Emission Point: 00216
Emission Unit: 0-00002	Emission Point: 00222
Emission Unit: 0-00004	Emission Point: 00401
Emission Unit: 0-00004	Emission Point: 00402
Emission Unit: 0-00005	Emission Point: 00503
Emission Unit: 0-00006	Emission Point: 00603
Emission Unit: 0-00006	Emission Point: 00604
Emission Unit: 0-00006	Emission Point: 00606
Emission Unit: 0-00006	Emission Point: 00607
Emission Unit: 0-00006	Emission Point: 00608
Emission Unit: 0-00006	Emission Point: 00609
Emission Unit: 0-00006	Emission Point: 00610
Emission Unit: 0-00006	Emission Point: 00611
Emission Unit: 0-00006	Emission Point: 00612
Emission Unit: 0-00006	Emission Point: 00618
Emission Unit: 0-00006	Emission Point: 00619
Emission Unit: 0-00006	Emission Point: 00620

Emission Unit: 0-00006 Emission Point: 00621

Emission Unit: 0-00006 Emission Point: 00624

Emission Unit: 0-00006 Emission Point: 00631

Emission Unit: 0-00006 Emission Point: 00635

Emission Unit: 0-00006 Emission Point: 00637

Emission Unit: 0-00006 Emission Point: 00638

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

Item 30.2:
Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Implementation of a routine baghouse control equipment inspection, maintenance, and recordkeeping (I & M) plan as incorporated into this permit under the facility-wide condition for 6NYCRR, Part 212 for the emission source/point constructed after July 1, 1973 and subject to the 0.05 gr/dscf limit. The Department reserves the right to require the performance of a Method 5 emissions evaluation at any time to demonstrate compliance with the emission limit. The following protocol for monitoring baghouse operation shall be followed:

The permittee shall at all times that the process equipment is in operation, monitor the pressure drop across the compartment(s) and operate within the levels established either during a compliance test or established by the fabric filter manufacturer. Daily pressure drop readings shall be recorded. If the pressure drop range changes as a result of filter bag change, the permittee will note the new range and date of bag replacement, and operate within that range. The pressure drop range (s) shall be confirmed in the annual certification report submitted to this Department.

The permittee shall maintain and calibrate a pressure monitoring device in accordance in accordance with the manufacturer's specifications and shall be calibrated annually and be accurate to within a range of ± 0.5 inches water gauge pressure or a span of ± 0.5%.

These parameters are to be used as diagnostic indicators of a potential problem in the operation of the baghouses.

Values outside these parameters will require a visual observation of the baghouse outlets. If visible emissions are observed, the permittee will initiate an investigation as to the cause and initiate corrective action as necessary.

Exceedance of an operational range shall not be considered a violation of an emission limit of this permit, unless the exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place. Reports of these excursions shall be submitted semiannually. If no excursions occurred during the reporting period then a letter shall indicate such.

The permittee will conduct compliance verifications including but not limited to production rate, process material, air flow rate, control equipment parameters, visible emissions, etc. The permittee will confirm that during source operation all pertinent parameters are within ranges that ensure compliance with the particulate emission rate.

Additionally, the permittee will investigate, in a timely manner, any instance where there is cause to believe that particulate emissions in excess of the particulate limit are occurring or have occurred. These instances include but are not limited to process upsets, control device malfunctions or problems, abnormal visible emissions, complaints, etc. The permittee shall determine the cause of any exceedance, make the necessary correction, and verify that the excess emissions problem has been corrected.

Records of these verifications, investigations and corrective actions will be kept on-site for a period of 5 years and made available to Department representatives on request. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.05 grains per dscf
Reference Test Method: Method 5
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION
Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.
The initial report is due 1/30/2016.
Subsequent reports are due every 12 calendar month(s).

Condition 31: Compliance Certification
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:6 NYCRR 212.6 (a)

Item 31.1:
The Compliance Certification activity will be performed for the Facility.

Item 31.2:
Compliance Certification shall include the following monitoring:

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

Monitoring Description:

No person shall cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission point, except only the emission of uncombined water.

The permittee shall perform daily checks, when each emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit).

The observer shall document the corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions or specify the corrective actions that were taken to eliminate abnormal visible emissions.

The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time.

Records of these verifications, investigations and corrective actions will be kept on-site for a period of 5 years and made available to Department representatives on request. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: Method 9
Monitoring Frequency: DAILY
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2016.
Subsequent reports are due every 6 calendar month(s).

Condition 32: Compliance Certification
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:6 NYCRR 212.10 (c) (3)

Item 32.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 0-00002 Emission Point: 00201
Process: B01

Emission Unit: 0-00002 Emission Point: 00204
Process: B05

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

Item 32.2:
Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The permittee operates three submersion type electric arc furnaces used primarily for the production of high purity zircon. These furnaces, designated as furnaces #9, #10 and #11 are full scale single phase units which exhaust to emission point 00201 and are described in process B01. A three-phase electric arc furnace, used for research and development (emission point 00204) is described in process B05.

The electric arc furnaces, having a combined total of nitrogen oxide (NOx) emissions of 210 tons per year, are subject to the Reasonably Available Control Requirements (RACT) of 6NYCRR, Part 212.10 for major sources (greater than 100 tons) of NOx. The hourly average emission rate per furnace was based on the results of the 1998 stack tests on the three single phase furnaces. The average emission rate from the three furnaces (three runs per furnace) was 13.28 pounds per hour and this was adjusted upwards by 20% for an average hourly NOx limit of 15.9 pounds per furnace. The annual NOx emission limit was established based on a maximum operating scenario of 24 hours per day and 274 days of operation.

A RACT analysis was submitted with the initial Title V application which evaluated the technical and economic feasibility of available control technologies for electric arc furnaces. This analysis demonstrated that no feasible control technology is available and a variance from the RACT control strategy requirement was requested. This Department and the USEPA in their 11/25/98 correspondence to J. DiPronio (NYSDEC) concurred with this determination. Therefore, the RACT demonstration was submitted to the USEPA for approval as a revision to the New York State Implementation Plan (SIP).

RACT was re-evaluated as part of this renewal application and once again demonstrated that NOx control technology is not technically and economically feasible.

The special conditions to establish RACT are incorporated into this Title V permit as follows:

1. Nitrogen oxide emissions from each furnace are limited to 15.9#/hour and 210 tons per year. These emission limits correspond to an average raw material charging rate of 1550 pounds per hour per furnace as determined during stack tests conducted on February 5th and 6th and March 5th, 1998. The appropriate production recordkeeping including the amount of raw materials charged per furnace

per batch, total raw materials charged per year, and number of batches shall be maintained to demonstrate compliance with the charging rate.

2. The permittee shall continue to evaluate control technologies and other compliance strategies to reduce NOx emissions as they become available. When demonstrated as technically and economically feasible, the permittee shall implement these control strategies as RACT.

3. This RACT variance is valid for a period of five years, the term of the Title V permit. A full RACT analysis is to be completed and submitted with each permit renewal.

4. This Department reserves the right to require the permittee to evaluate and implement innovative control technology within a time frame established by the Division of Air Resources.

5. The refactory on each furnace shall be maintained according to a Best Management Practices program implemented by the facility.

The annual compliance certification shall include annual NOx emissions determined by calculations based on the raw material charging rates and furnace charges yearly.

All records to demonstrate compliance with this condition are to be retained on-site for a period of 5 years in a format acceptable to this Department and made available on request.

Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: RAW MATERIAL
Upper Permit Limit: 1550 pounds per hour
Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL CHANGE
Averaging Method: 1 HOUR MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2016.
Subsequent reports are due every 12 calendar month(s).

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

Condition 33: Emission Point Definition By Emission Unit
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 33.1:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 0-00002

Emission Point: 00201
Height (ft.): 53 Length (in.): 738 Width (in.): 36
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000162

Emission Point: 00202
Height (ft.): 29 Diameter (in.): 38
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000137

Emission Point: 00203
Height (ft.): 32 Diameter (in.): 18
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000143

Emission Point: 00204
Height (ft.): 14 Diameter (in.): 20
NYTMN (km.): 4783. NYTME (km.): 171.5 Building: 0000000115

Emission Point: 00205
Height (ft.): 36 Diameter (in.): 14
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000143

Emission Point: 00206
Height (ft.): 38 Diameter (in.): 15
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000123

Emission Point: 00207
Height (ft.): 34 Diameter (in.): 10
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000143

Emission Point: 00208
Height (ft.): 46 Diameter (in.): 12
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000011

Emission Point: 00209
Height (ft.): 46 Diameter (in.): 16
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000011

Emission Point: 00210

Height (ft.): 27 Diameter (in.): 18
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000008

Emission Point: 00211
Height (ft.): 40 Diameter (in.): 12
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000143

Emission Point: 00212
Height (ft.): 20 Diameter (in.): 10
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000018

Emission Point: 00213
Height (ft.): 27 Diameter (in.): 18
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000008

Emission Point: 00214
Height (ft.): 38 Diameter (in.): 30
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000145

Emission Point: 00215
Height (ft.): 38 Diameter (in.): 30
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000145

Emission Point: 00216
Height (ft.): 27 Diameter (in.): 9
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000123

Emission Point: 00222
Height (ft.): 14 Diameter (in.): 8
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000127

Item 33.2:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 0-00003

Emission Point: 00301
Height (ft.): 40 Diameter (in.): 12
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000123

Item 33.3:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 0-00004

Emission Point: 00401
Height (ft.): 41 Diameter (in.): 23
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000017

Emission Point: 00402
Height (ft.): 30 Diameter (in.): 8
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000017

Item 33.4:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 0-00005

Emission Point: 00501
Height (ft.): 51 Diameter (in.): 29
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000008

Emission Point: 00502
Height (ft.): 39 Diameter (in.): 12
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000008

Emission Point: 00503
Height (ft.): 37 Diameter (in.): 15
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000013

Item 33.5:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 0-00006

Emission Point: 00601
Height (ft.): 51 Diameter (in.): 30
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00602
Height (ft.): 51 Diameter (in.): 30
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00603
Height (ft.): 46 Diameter (in.): 13
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00604
Height (ft.): 37 Diameter (in.): 12
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00606
Height (ft.): 16 Diameter (in.): 10
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000147

Emission Point: 00607
Height (ft.): 36 Diameter (in.): 12
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00608
Height (ft.): 20 Diameter (in.): 8
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000147

Emission Point: 00609

Height (ft.): 20 Diameter (in.): 10
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000147

Emission Point: 00610
Height (ft.): 12 Diameter (in.): 11
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000147

Emission Point: 00611
Height (ft.): 30 Length (in.): 16 Width (in.): 12
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00612
Height (ft.): 18 Diameter (in.): 8
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000147

Emission Point: 00613
Height (ft.): 30 Diameter (in.): 6
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00614
Height (ft.): 30 Diameter (in.): 6
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00617
Height (ft.): 25 Diameter (in.): 7
NYTMN (km.): 4783. NYTME (km.): 171.6 Building: 0000000002

Emission Point: 00618
Height (ft.): 20 Diameter (in.): 10
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00619
Height (ft.): 36 Diameter (in.): 24
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000163

Emission Point: 00620
Height (ft.): 10 Diameter (in.): 12
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00621
Height (ft.): 20 Diameter (in.): 8
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00622
Height (ft.): 14 Diameter (in.): 8
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00624
Height (ft.): 19 Diameter (in.): 12
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00631

Height (ft.): 30 Diameter (in.): 6
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00635
Height (ft.): 30 Diameter (in.): 2
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00637
Height (ft.): 23 Diameter (in.): 3
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Emission Point: 00638
Height (ft.): 10 Diameter (in.): 24
NYTMN (km.): 4783.095 NYTME (km.): 171.63 Building: 0000000002

Condition 34: Process Definition By Emission Unit
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 34.1:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B01 Source Classification Code: 3-05-999-99
Process Description:
Three high temperature submersion carbon electric arc furnaces (#9, #10, & # 11) used for the smelting of zirconium silicate into high purity zircon. Amorphous silica fume dust (Si02) is released as a result of the smelting operation. Emissions from the three furnaces are exhausted to a single baghouse and then to the atmosphere thru emission point 00201. Collected silica is primarily sold for off-site re-use.

Emission Source/Control: 20100 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 21700 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 20101 - Process

Emission Source/Control: 20102 - Process

Emission Source/Control: 20103 - Process

Item 34.2:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B02 Source Classification Code: 3-05-150-02

Process Description:
Rotary gas fired 7 x 40 calciner. Emissions associated with natural gas combustion by products, along with dust generated during calcining,cooling of calcined material, and materials handling equipment and associated storage bins is exhausted through a gravity settling chamber and then to a baghouse(emission point 00202).

Emission Source/Control: 20200 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 20201 - Control
Control Type: GRAVITY COLLECTOR

Emission Source/Control: 20202 - Process

Emission Source/Control: 20203 - Process

Item 34.3:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B03 Source Classification Code: 3-05-150-02
Process Description:
Rotary gas fired 6 x 60 calciner and associated cooling system. Emissions associated with natural gas combustion by products along with generated dust are exhausted to a cyclone and through emission point 00203.

Emission Source/Control: 20300 - Control
Control Type: SINGLE CYCLONE

Emission Source/Control: 20301 - Process

Item 34.4:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B04 Source Classification Code: 3-99-999-98
Process Description:
Organics volatilized during the carbon furnace bottom bake-out process are exhausted through the 6 x 60 calciner and emission point 00203.

Emission Source/Control: 20300 - Control
Control Type: SINGLE CYCLONE

Emission Source/Control: 20302 - Process

Item 34.5:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B05 Source Classification Code: 3-05-999-99
Process Description:
A single three-phase high temperature carbon arc furnace used for the smelting of zirconium silicate. Amorphous silica (Si02) is released from the process. Emissions from the furnace are exhausted to a baghouse (emission point 00204) for collection of generated silica and emissions control. This furnace is used primarily for Research & Development.

Emission Source/Control: 20400 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 20401 - Process

Item 34.6:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B06 Source Classification Code: 3-05-150-03
Process Description:
Dust generated from the pulverizer (hammer mill) and associated materials handling system is exhausted to a baghouse (emission point 00205).

Emission Source/Control: 20500 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 20501 - Process

Item 34.7:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B07 Source Classification Code: 3-05-150-03
Process Description:
Mechanical dry mill and associated material handling system. Generated dust is exhausted to a baghouse (emission point 206).

Emission Source/Control: 20600 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 20601 - Process

Item 34.8:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B08 Source Classification Code: 3-05-150-03
Process Description:

Generated dust from the mechanical 8 x 8 dry mill and associated material handling systems is exhausted to a baghouse (emission point 00207).

Emission Source/Control: 20700 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 20701 - Process

Item 34.9:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B09 Source Classification Code: 3-05-150-03
Process Description:
Generated dust from the crushing/screening system in Building 11 used for size reduction and associated materials handling system is exhausted to a baghouse(emission point 00208).

Emission Source/Control: 20800 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 20801 - Process

Item 34.10:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B10 Source Classification Code: 3-05-150-03
Process Description:
Crushing/screening system in Building 11 used for size reduction and associated materials handling system. Generated dust from crushers, screens, and material handling equipment is exhausted to a baghouse(emission point 00209).

Emission Source/Control: 20900 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 20901 - Process

Item 34.11:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B11 Source Classification Code: 3-05-150-03
Process Description:
Generated dust from the crushing/screening system in Building 8 used for size reduction and associated materials handling system is exhausted to a baghouse(emission point 00210).

Emission Source/Control: 21000 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 21001 - Process

Item 34.12:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B12 Source Classification Code: 3-05-150-01
Process Description:
Dusts generated from the materials handling system associated with the transfer into and from storage bins and associated with the transfer to the 6 x 60 calciner located in Building 143 are exhausted to a baghouse. It also includes a blending system for materials prior to discharge into the calciner(emission point 00211).

Emission Source/Control: 21100 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 21101 - Process

Item 34.13:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B13 Source Classification Code: 3-05-150-05
Process Description:
Dust generated from the materials blending system and associated materials handling equipment located in Building 18 is exhausted to a baghouse(emission point 00212).

Emission Source/Control: 21200 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 21201 - Process

Item 34.14:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B14 Source Classification Code: 3-05-150-04
Process Description:
Dust generated from the secondary screening system (Derrick screen), materials blending, and associated materials handling equipment operated in conjunction with a crushing/screening system (process B09) is exhausted to a baghouse(emission point 00213). Located in Building 8.

Emission Source/Control: 21300 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 21301 - Process

Item 34.15:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B16 Source Classification Code: 3-05-999-99
Process Description:
Two magnetic separators used to separate magnetic and non magnetic materials as part of the ceramics processing operation. Dust generated as a result of material transfers in the process is exhausted to a baghouse emission point 00213.

Emission Source/Control: 21300 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 21302 - Process

Item 34.16:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B17 Source Classification Code: 3-05-150-03
Process Description:
Crushing/screening system for furnace slag. Large pieces of slag are crushed and screened as part of the initial size reduction processing of the material. Generated dust associated with the crushing, screening, and material handling systems is exhausted through two similar baghouses (emission points 00214 and 00215).

Emission Source/Control: 21406 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 21500 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 21401 - Process

Emission Source/Control: 21402 - Process

Item 34.17:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B21 Source Classification Code: 3-05-999-99
Process Description:
Magnetic separator for a material drying/mixing system.

Generated dust is exhausted to two similar baghouses emission point 00216.

Emission Source/Control: 21406 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 21500 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 21404 - Process

Item 34.18:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B23 Source Classification Code: 3-05-150-03
Process Description:
Process consists of a screening system (Derrick Screen) used for the size reduction of material. Dust is exhausted to a baghouse.

Emission Source/Control: 21500 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 21407 - Process

Item 34.19:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B24 Source Classification Code: 3-05-150-03
Process Description:
This process consists of a material blending system used to dry wet material (sand and processed zirconia tailings) by rotating a former concrete mix tank. The material drys by friction. Generated dust from the loading and discharge of the material is exhausted to two similar baghouses.

Emission Source/Control: 21406 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 21500 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 21800 - Process

Item 34.20:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00002
Process: B25 Source Classification Code: 3-05-150-03

Process Description:
Zirconia batch mill process: Dry milling process for zirconia powders utilizing two 48 inch vibratory SWECO screens and two Abbey mills. Emissions to a Flex-Kleen baghouse and emission point 00222.

Emission Source/Control: 22205 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 22201 - Process

Emission Source/Control: 22202 - Process

Emission Source/Control: 22203 - Process

Emission Source/Control: 22204 - Process

Item 34.21:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00003
Process: C01 Source Classification Code: 3-05-150-03
Process Description:
Generated dust from the mechanical 8 x 10 dry mill and the associated material handling system is exhausted to a baghouse(emission point 00301).

Emission Source/Control: 30100 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 30101 - Process

Item 34.22:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00004
Process: D01 Source Classification Code: 3-05-150-02
Process Description:
Gas fired rotary PT calciner in building 17. Various powders are fed into the calciner, then passing through a cooler and on to further processing. Emissions associated with natural gas combustion by products, along with dust generated during mixing, calcining, cooling and material handling are exhausted to a cyclone and then to a baghouse(emission point 00401).

Emission Source/Control: 40100 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 40102 - Control
Control Type: SINGLE CYCLONE

Emission Source/Control: 40101 - Process

Emission Source/Control: 40103 - Process

Item 34.23:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00004
Process: D02 Source Classification Code: 3-05-150-03
Process Description:
Mechanical dry milling, classifying system, pack-out and associated materials handling equipment. Generated dust is exhausted to a baghouse(emission point 00402).

Emission Source/Control: 40200 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 40201 - Process

Emission Source/Control: 40202 - Process

Item 34.24:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00005
Process: E01 Source Classification Code: 3-05-150-02
Process Description:
Gas fired rotary calciner (7 X 70) and associated cooling system. Emissions of particulates, sulfur dioxide, nitrogen oxides and carbon monoxide associated with natural gas combustion by-products along with generated dust are exhausted via natural draft through a settling chamber and into the atmosphere thru emission point 00501.

Emission Source/Control: 50100 - Control
Control Type: GRAVITY COLLECTOR

Emission Source/Control: 50101 - Process

Item 34.25:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00005
Process: E02 Source Classification Code: 3-05-150-03
Process Description:
Dust from the mechanical 8 x 8 dry mill, the 7 x 70 calciner cooler, and associated material handling systems located in Building 8 is exhausted to a baghouse and to atmosphere thru emission point 00502.

Emission Source/Control: 50200 - Control

Control Type: FABRIC FILTER

Emission Source/Control: 50201 - Process

Item 34.26:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00005
Process: E03 Source Classification Code: 3-05-150-03
Process Description:
Particulates from the mechanical 7 x 10 dry mill and material handling system located in Building 13 is exhausted to a baghouse and to atmosphere thru emission point 00503.

Emission Source/Control: 50300 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 50301 - Process

Item 34.27:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F01 Source Classification Code: 3-05-150-02
Process Description:
A slurry of raw material is fed into a gas fired 6 x 50 rotary calciner located in Building 2. After calcining, the material passes through a water cooled cooler and on to furthur processing. Natural gas combustion by-products and generated dust are exhausted via natural draft through a settling chamber and to emission point 00601. Dust generated during cooling and material transfer to discharge hopper is directed to a baghouse(emission point 00613).

Emission Source/Control: 60100 - Control
Control Type: GRAVITY COLLECTOR

Emission Source/Control: 61300 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 60101 - Process

Emission Source/Control: 61301 - Process

Item 34.28:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F02 Source Classification Code: 3-05-150-02
Process Description:

A slurry of raw material is fed into a gas fired 6 x 60 rotary calciner located in Building 2. After calcining, the material passes through a water cooled cooler and on to furthur processing. Natural gas combustion by-products and generated dust are exhausted via natural draft through a settling chamber and to emission point 00602. Dust generated during cooling and material transfer to discharge hopper is directed to a baghouse(emission point 00614).

Emission Source/Control: 60200 - Control
Control Type: GRAVITY COLLECTOR

Emission Source/Control: 61400 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 60201 - Process

Emission Source/Control: 61401 - Process

Item 34.29:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F03 Source Classification Code: 3-05-150-04
Process Description:
Material handling system associated with a belt dryer. The material handling system includes grinding equipment used for size reduction prior to final transfer of the material from the system. Dust generated from the system is exhausted to a baghouse. The product collector (Torit baghouse) discharges to emission point 00603.

Emission Source/Control: 60300 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 63200 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 60301 - Process

Item 34.30:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F04 Source Classification Code: 3-05-150-04
Process Description:
Material handling system associated with a twin drum dryer includes grinding equipment used for size reduction prior to final transfer of the material from the system. Dust generated from the system is exhausted to a baghouse. The product collector (Torit baghouse) discharges to

emission point 00604.

Emission Source/Control: 60400 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 63300 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 60401 - Process

Item 34.31:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F06 Source Classification Code: 3-05-150-03
Process Description:
Material is fed into the 20 " jet mill located in Building 147 and ground to a very fine particle size using high pressure air. Ground material is discharged directly into a product collector (baghouse) which discharges product into a hopper. Emissions are vented through the baghouse to emission point 00606.

Emission Source/Control: 60600 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 60601 - Process

Item 34.32:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F07 Source Classification Code: 3-05-150-03
Process Description:
Dust generated from the pulverizer (hammer mill) and associated material handling equipment located in Building 2 is exhausted to a baghouse and emission point 00607.

Emission Source/Control: 60700 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 60701 - Process

Item 34.33:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F08 Source Classification Code: 3-05-150-03
Process Description:
A 20" jet mill located in Building 147. Material is fed into the mill and ground to a very fine particle size using high pressure air. Ground material is discharged

directly into a product collector (baghouse) which discharges product into a hopper. Emissions from the jet mill are vented through the baghouse product collector to emission point 00608.

Emission Source/Control: 60800 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 60801 - Process

Item 34.34:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F09 Source Classification Code: 3-05-150-03
Process Description:
A 20" jet mill located in Building 147. Material is fed into the mill and ground to a very fine particle size using high pressure air. Ground material is discharged directly into a product collector (baghouse) which discharges product into a hopper. Emissions from the jet mill are vented through the baghouse product collector to the atmosphere thru emission point 00609.

Emission Source/Control: 60900 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 60901 - Process

Item 34.35:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F10 Source Classification Code: 3-05-150-03
Process Description:
Discharge hoppers for four jet mills located in Building 147. Material discharged from the product collector is dropped into a hopper. Dust generated from transfer of jet-milled material into each hopper is exhausted to a single baghouse (emission point 00610).

Emission Source/Control: 61000 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 61001 - Process

Emission Source/Control: 61002 - Process

Emission Source/Control: 61003 - Process

Emission Source/Control: 61004 - Process

Item 34.36:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F11 Source Classification Code: 3-05-150-04
Process Description:
Dust generated the filling and discharging of material from two P-K blenders located in Building 147 is exhausted to a single baghouse(emission point 00610).

Emission Source/Control: 61000 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 61005 - Process

Emission Source/Control: 61006 - Process

Item 34.37:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F12 Source Classification Code: 3-05-150-03
Process Description:
A 24" jet mill located in Building 2. Material is fed into the mill and ground to a very fine particle size using high pressure air. Ground material is discharged directly into a product collector (baghouse) which discharges product into a hopper. Emissions from the jet mill are vented through the baghouse product collector (emission point 00611).

Emission Source/Control: 61100 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 61101 - Process

Item 34.38:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F13 Source Classification Code: 3-05-150-03
Process Description:
A 20" jet mill located in Building 147. Material is fed into the mill and ground to a very fine particle size using high pressure air. Ground material is discharged directly into a product collector (baghouse) which discharges product into a hopper. Emissions from the jet mill are vented through the baghouse product collector to emission point(00612).

Emission Source/Control: 61200 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 61201 - Process

Item 34.39:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F16 Source Classification Code: 3-05-150-04
Process Description:
A local exhaust used to control dust generated during weighing of discharge product hoppers is exhausted to a baghouse (EP 00614).

Emission Source/Control: 61400 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 61007 - Process

Item 34.40:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F17 Source Classification Code: 3-05-150-05
Process Description:
Exhaust fan for control of dust during a batch mixing operation associated with the 6 x 60 calciner located in building 2. Material and a small volume of water is added to mix tank #2 and the blended material is conveyed directly to the calciner. Generated dust is exhausted directly to the atmosphere (EP 00618).

Emission Source/Control: 61702 - Process

Item 34.41:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F18 Source Classification Code: 3-05-150-05
Process Description:
Local exhaust for two mix tanks. Dust generated from the addition of solid material to the mix tanks is exhausted from the tank to the baghouse (emission point 00617).

Emission Source/Control: 63100 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 63102 - Process

Item 34.42:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006

Process: F19 Source Classification Code: 3-05-150-05
Process Description:
Dust generated from the addition of solid material to mix tank #3 is exhausted to a fabric filter exhausted inside.

Emission Source/Control: 61800 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 61801 - Process

Item 34.43:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F20 Source Classification Code: 3-05-999-99
Process Description:
Three granulators are used to break apart clumped ceramic material as part of the sagger (small ceramic containers) loading process. Dust generated from the granulation process and sagger loading is exhausted to a baghouse (emission point 00619).

Emission Source/Control: 61900 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 61901 - Process

Emission Source/Control: 61902 - Process

Emission Source/Control: 61903 - Process

Item 34.44:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F21 Source Classification Code: 3-05-150-04
Process Description:
Cone blender. No emissions are generated during blending. Dust generated during filling and discharge (pack-out) is exhausted to baghouses, emission points 00621(fill) and 00620(discharge).

Emission Source/Control: 62000 - Control
Control Type: DRY ELECTROSTATIC GRANULAR FILTER

Emission Source/Control: 62100 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 62001 - Process

Emission Source/Control: 62101 - Process

Item 34.45:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F26 Source Classification Code: 3-05-150-03
Process Description:
Dust generated during the milling and blending of material and discharged into a hopper is exhausted to a baghouse and then to emission point 00624. Process equipment consists of a 24" jet mill #6, cone blender, and pulverizer (hammer mill).

Emission Source/Control: 62400 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 62401 - Process

Emission Source/Control: 62402 - Process

Emission Source/Control: 62403 - Process

Emission Source/Control: 62404 - Process

Item 34.46:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F32 Source Classification Code: 3-05-150-02
Process Description:
Two electrically heated Harper kilns used to calcine ceramic materials. Dust and moisture generated during the calcining process are exhausted from each kiln to a baghouse and to emission point 00626.

Emission Source/Control: 62400 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 62408 - Process

Emission Source/Control: 62409 - Process

Item 34.47:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F37 Source Classification Code: 3-05-150-02
Process Description:
Process associated with the 6x60 and 6x50 calciner feed systems which discharge dust from the calciner feed into a baghouse and to emission point 00631.

Emission Source/Control: 63100 - Control

Control Type: FABRIC FILTER

Emission Source/Control: 63101 - Process

Emission Source/Control: 63102 - Process

Item 34.48:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F39 Source Classification Code: 3-05-150-03
Process Description:
A 24" Jet Mill #6 located in Building 2. Material is fed into the mill and ground to a very fine particle size using high pressure air. Ground material is discharged directly into a product collector (baghouse) which discharges into a hopper. Emissions from the jet mill are vented through the product collector (baghouse) to emission point 00635.

Emission Source/Control: 63500 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 63501 - Process

Item 34.49:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F41 Source Classification Code: 3-05-150-05
Process Description:
Material is dumped into a small Hockmeyer mixing tank for blending and subsequent processing in the Netszch Mills. Dust generated during the loading of the tank is exhausted to a baghouse and then to emission point 00637.

Emission Source/Control: 63700 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 63701 - Process

Item 34.50:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F42 Source Classification Code: 3-05-150-02
Process Description:
Dried trays of material from the Quincy dryers are dumped into a hopper for further processing. The dust generated from the tray dumping operation is exhausted to a baghouse and emission point 00637.

Emission Source/Control: 63700 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 63702 - Process

Item 34.51:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-00006
Process: F43 Source Classification Code: 3-05-150-05
Process Description:
The batch weigh DC process consists of a material blending system and associated material handling equipment consisting of two weigh pods, two bench scales and two mix tanks. Dust generated from the blending process and material handling equipment is exhausted to two similar baghouses in series and to emission point 00638.

Emission Source/Control: 63800 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 63801 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 63802 - Process

Emission Source/Control: 63803 - Process

Emission Source/Control: 63804 - Process

Emission Source/Control: 63805 - Process

Emission Source/Control: 63806 - Process

Emission Source/Control: 63807 - Process

Condition 35: Compliance Certification
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:6 NYCRR 212.4 (b)

Item 35.1:
The Compliance Certification activity will be performed for:

Emission Unit: 0-00002
Process: B04

Regulated Contaminant(s):
CAS No: 065996-93-2 PITCH, COAL TAR, HIGH-TEMP.

Item 35.2:
Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The permittee operates a furnace bottom carbon bake-out furnace. Periodically, the electric arc furnaces require the carbon shell lining to be replaced. Each furnace is made of two vertical pieces- half steel and half stainless- shell. The interior is cleaned of any heel of material, taken apart, re-welded as necessary and then lined with 6600 pounds of carbon paste. The paste is rammed into the bottom of the shell half way up, covered in a layer of sand and then baked in a bake-out furnace for 14 days at a temperature of 500 degrees F. The carbon paste, Elkem Type T cold paste consists of predominantly calcined anthracite, coal tar pitch as a binder, and creosote oil. The process emits coal tar volatiles in the 4-8% range. These volatiles are exhausted into the 6x60 calciner located in building 143 which is heated by a 5 mmbtu burner to 2450 degrees F. The residence time (through the length of the calciner) and temperature will ensure combustion of these volatiles. Products of combustion are exhausted to the calciner stack, emission point 00203.

1. The permittee shall at all times that the bake-out oven is in operation, operate the calciner at the minimum temperature of 2450 degrees F. A temperature recorder chart will document the calciner temperature over the 14 day period.

2. Notification shall be submitted 30 days in advance, of the substitution of a carbon ramming paste with specifications other than what is documented on the current Elkem T Material Data Sheet:

7-15% by weight coal tar pitch
4-8% by weight creosote oil, acenapthene
8% volatility maximum

3. The Annual Guideline Concentration (AGC) for coal tar volatiles is 0.48 ug/m3. Dispersion modeling using AERSCREEN methodology and an annual emission rate potential of 4752 pounds for 8 bake-outs demonstrated an annual impact of 0.4097 ug/m3. (Emission rate potential is determined using 6600 pounds of carbon paste and a maximum volatility of 8 percent. All volatiles are assumed to be coal tar volatiles.)

4. Records shall be kept of the number of furnace shells baked each year.

5. Records are to be kept on-site for a period of 5 years and made available to Department representatives on request.

Parameter Monitored: TEMPERATURE
Lower Permit Limit: 2450 degrees Fahrenheit
Monitoring Frequency: CONTINUOUS
Averaging Method: MINIMUM-NOT TO FALL BELOW EXCEPT DURING STARTUP/SHUTDOWN
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 36: Compliance Certification
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:40 CFR Part 64

Item 36.1:
The Compliance Certification activity will be performed for:

Emission Unit: 0-00002 Emission Point: 00201

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

Item 36.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Three high temperature carbon arc furnaces used for the melting of zirconium and designated as furnaces #9, #10 & #11, and described in emission unit 00002 are exhausted through emission point 00201. Potential emissions of particulates are greater than 100 tons per year and therefore these sources are subject to the Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64. The facility has submitted a plan for monitoring consistent with the requirements of this rule as follows:

Indicator:
1.Visible emissions (VE): from the baghouse exhaust are monitored daily during a facility survey.
2. Pressure Drop: across the baghouse is measured with a magnehelic differential pressure gauge.
3. Weekly (or between production runs or result of VE evaluation) inspection according to I/M checklist; maintenance performed as needed.

Range:
1. An average opacity of less than 20% (6-min average). Excursions trigger an inspection and corrective action per

the maintenance procedures.
2. An excursion is defined as a pressure drop less than 1 inches water column or greater than 15 inches water column. Excursions trigger the Baghouse Inspection and Maintenance (I&M) plan.

Performance Criteria:
1. Opacity is observed at the emission point during source operation. Any visible emissions require corrective action as per the I/M program.
2. Pressure drop across the baghouse is measured at the inlet and outlet. The gauge has a minimum accuracy of 2% over the instrument range.
3. Inspections are performed at the baghouses.

QA/QC:
1. Observer will be familiar with the percent opacity designation and will complete the daily log.
2. The pressure gauge is calibrated via a zero check when the baghouse is not in use. Pressure taps are checked for plugging daily.
3. Qualified personnel perform the inspection.

Monitoring Frequency:
1.Observation is performed daily during facility survey and documented by the observer. Agency reserves the right to request or conduct Method 9 evaluation.
2. Pressure drop is monitored continuously and recorded daily.
3. Weekly inspection and records are maintained to document the inspection and any required maintenance.

Additionally, the permittee will investigate, in a timely manner, any instance where there is cause to believe that particulate emissions in excess of the particulate limit are occurring or have occurred. These instances include but are not limited to process upsets, control device malfunctions or problems, abnormal visible emissions, complaints, etc. The permittee shall determine the cause of any exceedance, make the necessary correction, and verify that the excess emissions problem has been corrected.

A monitoring report must be submitted semi-annually with the required compliance certifications and which summarizes the number, duration, and cause of exceedances and corrective actions taken. This report shall also include the number, duration, and cause of the magnehelic downtime other than routine downtime for calibration

checks. All records to demonstrate compliance with this condition are to be retained on-site for a period of 5 years in a format acceptable to this Department and made available on request.
Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2016.
Subsequent reports are due every 6 calendar month(s).

Condition 37: Compliance Certification
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable Federal Requirement:40 CFR Part 64

Item 37.1:
The Compliance Certification activity will be performed for:

Emission Unit: 0-00005 Emission Point: 00503

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

Item 37.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
The 7 x 10 mill, located in emission unit 00005 and having potential emissions of particulates greater than 100 tons per year, is therefore subject to the Compliance Assurance Monitoring (CAM) rule. Emissions are controlled by a baghouse collector and exhaust to the atmosphere through emission point 00503.

A plan has been submitted and accepted for monitoring consistent with the requirements of the rule as follows:

Indicator:
1. Visible emissions (VE): from the baghouse exhaust are monitored daily during a facility survey.

2. Pressure Drop: across the baghouse is measured with a magnehelic differential pressure gauge.
3. Weekly (or between production runs or result of a VE evaluation) inspection according to Inspection & Maintenance (I/M) checklist; maintenance performed as needed.

Range:
1. An average opacity of less than 20% (6-min average). Excursions trigger an inspection and corrective action per the maintenance procedures.
2. An excursion is defined as a pressure drop less than 1 inches water column or greater than 15 inches water column. Excursions trigger implementation of the inspection and maintenance plan protocol.

Performance Criteria:
1. Opacity is observed at the emission point during source operation. Any visible emissions require corrective action as per the baghouse I/M program.
2. Pressure drop across the baghouse is measured at the inlet and outlet. The gauge has a minimum accuracy of 2% over the instrument range.
3. Inspections are performed at the baghouses.

QA/QC:
1. Observer will be familiar with the percent opacity designation and will complete the daily log.
2. The permittee shall maintain and calibrate a pressure monitoring device in accordance in accordance with the manufacturer's specifications and shall be calibrated annually and be accurate to within a range of ± 0.5 inches water gauge pressure or a span of ± 0.5%. Pressure taps are checked for plugging daily.
3. Qualified personnel perform the inspection.

Monitoring Frequency:
1. Observation is performed daily during facility survey and documented by the observer. Agency reserves the right to request or conduct Method 9 evaluation.
2. Pressure drop is monitored continuously and recorded daily.
3. Weekly inspection and records are maintained to document the inspection and any required maintenance.

A monitoring report must be submitted semi-annually with the required compliance certifications and which summarizes the number, duration, and cause of exceedances and corrective actions taken. This report shall also include the number, duration, and cause of the magnehelic

downtime other than routine downtime for calibration checks. These records are to be be retained on-site for a period of 5 years in a format acceptable to this Department and made available on request. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Reference Test Method: Method 5
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2016.
Subsequent reports are due every 6 calendar month(s).

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 38: Contaminant List
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable State Requirement:ECL 19-0301

Item 38.1:
Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 065996-93-2
Name: PITCH, COAL TAR, HIGH-TEMP.

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

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

Condition 39: Malfunctions and start-up/shutdown activities
Effective between the dates of 08/14/2015 and 08/13/2020

Applicable State Requirement:6 NYCRR 201-1.4

Item 39.1:
(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

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

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

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

(e) A violation of any applicable emission standard resulting from start-up, shutdown, or malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.