



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 9-2940-00030/02001
Effective Date: 06/14/2016 Expiration Date: 06/13/2021

Permit Issued To: PYROTEK INC
705 W 1st Ave
SPOKANE, WA 99201

Contact: KEVIN SCOTT
METAULLICS SYSTEMS DIV OF PYROTEK INC
2040 CORY RD
SANBORN, NY 14132
(716) 731-3221

Facility: METAULLICS SYSTEMS DIVISION OF PYROTEK INC
2040 CORY RD
SANBORN, NY 14132-9633

Contact: ANDREW HALLNAN
Metaullics Systems Div of Pyrotek Inc
2040 Cory Rd
Sanborn, NY 14132
(716) 731-6724

Description:
Metaullics Division of Pyrotek located in Sanborn, New York is an existing industrial facility that manufactures graphite, carbon and ceramic products for industrial applications. Typical products are graphite tubes and rods used in aluminum and chemical industry. Ceramic components used in high temperature industrial applications and bonded particle filters used to purify aluminum are also produced at the facility. Current operations consist of mixing of raw carbonaceous materials; extrusion, baking of extruded shapes, pitch/resin impregnation, machining, and graphitizing using electrically heated furnaces. Control equipment consists of baghouse dust collectors for mixing, machining, packing and loading operations. Emissions from the carbon/graphite baking operations are controlled by natural gas fired incinerators.

The facility emits greater than 100 tons of carbon monoxide emissions per year and is therefore a major source subject to 40 CFR Part 70 Title V permitting requirements. This Title V permit represents the monitoring requirements for the current process sources and also includes a prototype dust collection system to



control emissions from the existing carbon bake furnaces now controlled by the a fume incinerator and directed to emission point 001-3.

The existing requirements are summarized as follows:

6NYCRR, Part 212.4(c) for the control of particulate emissions for process sources and dust collectors associated with handling, cleaning, and machining operations. Particulate emissions are not to exceed 0.05 gr/dscf from the associated emission points.

6NYCRR, Part 212.6(a) limits opacity from all process emission sources to less than 20 percent during any six consecutive minutes.

6NYCRR, Part 212.4(a) requires 99% control efficiency for emission sources which emit "A" rated, high toxicity contaminants in excess of 1 pound per hour. Volatile emissions of polycyclic aromatic hydrocarbons are emitted from impregnation and baking operations. Those process emission sources are controlled by a fume incinerator and venting to emission points 001-3 and 002-3. A minimum operating temperature has been established and a stack test verified the destruction efficiency.

6NYCRR, Part 212.10(c)(4) establishes RACT(Reasonably Available Control Technology) for major sources of volatile organic compounds greater than 50 tons per year and requires xylene emissions from the stabilization process to be controlled to a minimum 81%. The design efficiency of the condenser is established at 90% and will be operated at temperatures established in the permit to maintain this efficiency.

6NYCRR 212.11 requires the monitoring of the condenser outlet temperature and those of the thermal incinerators identified as emission points 001-3 and 002-3.

Work practices are also incorporated to minimize emissions from the impregnation and autoclave operations. Maintenance programs for the incinerators and baghouse have also been incorporated into this permit.

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.

New York State Department of Environmental Conservation
Facility DEC ID: 9294000030



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 renewal application at least 180 days before expiration of permits for both Title V and 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

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: PYROTEK INC
705 W 1st Ave
SPOKANE, WA 99201

Facility: METALLICS SYSTEMS DIVISION OF PYROTEK INC
2040 CORY RD
SANBORN, NY 14132-9633

Authorized Activity By Standard Industrial Classification Code:
3624 - CARBON AND GRAPHITE PRODUCTS

Permit Effective Date: 06/14/2016

Permit Expiration Date: 06/13/2021



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 6 NYCRR 202-1.1: Required Emissions Tests
 - 19 40 CFR Part 68: Accidental release provisions.
 - 20 40CFR 82, Subpart F: Recycling and Emissions Reduction
 - 21 6 NYCRR Subpart 201-6: Emission Unit Definition
 - 22 6 NYCRR 201-6.4 (d) (4): Progress Reports Due Semiannually
 - 23 6 NYCRR 211.1: Air pollution prohibited
 - 24 6 NYCRR 212.4 (c): Compliance Certification
 - 25 6 NYCRR 212.4 (c): Compliance Certification
 - 26 6 NYCRR 212.6 (a): Compliance Certification
 - 27 6 NYCRR 212.11 (b): Compliance Certification
 - 28 40CFR 60, NSPS Subpart IIII: Compliance Certification
 - 29 40CFR 63, Subpart ZZZZ: Compliance Certification
- Emission Unit Level**
- 30 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
 - 31 6 NYCRR Subpart 201-6: Process Definition By Emission Unit

EU=0-00001

- 32 6 NYCRR 212.4 (b): Compliance Certification

EU=0-00002,Proc=0PP

- 33 6 NYCRR 212.4 (a): Compliance Certification

EU=0-00002,EP=001-3,Proc=0P1

- 34 6 NYCRR 212.4 (a): Compliance Certification
- 35 6 NYCRR 212.4 (a): Compliance Certification
- 36 6 NYCRR 212.4 (a): Compliance Certification



EU=0-00003,Proc=0P4

37 6 NYCRR 212.4 (a): Compliance Certification

EU=0-00003,EP=002-3,Proc=0P5

38 6 NYCRR 212.4 (a): Compliance Certification

39 6 NYCRR 212.4 (a): Compliance Certification

EU=0-00004,EP=001-6

40 6 NYCRR 212.4 (b): Compliance Certification

EU=0-00005,Proc=0P7

41 6 NYCRR 212.10 (c) (4) (i): Compliance Certification

42 6 NYCRR 212.11 (b): Compliance Certification

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

43 ECL 19-0301: Contaminant List

44 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: 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 B: 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 C: 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 D: 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 E: 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 F: 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 G: 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 H: 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 I: 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 J: 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



Condition 5: Compliance Certification
Effective between the dates of 06/14/2016 and 06/13/2021

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 7/30/2016.
Subsequent reports are due every 6 calendar month(s).

Condition 6: Compliance Certification
Effective between the dates of 06/14/2016 and 06/13/2021

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

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



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 20: Recycling and Emissions Reduction
Effective between the dates of 06/14/2016 and 06/13/2021

Applicable Federal Requirement:40CFR 82, Subpart F

Item 20.1:

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

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

Condition 21: Emission Unit Definition
Effective between the dates of 06/14/2016 and 06/13/2021

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 21.1:

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

Emission Unit: 0-00001

Emission Unit Description:

This emission unit consists of twenty-three electrically heated furnaces used to graphitize various carbonaceous materials. Five furnaces are located in building 5 which exhaust through existing twin emission points 001-4 and 001-5. Ten furnaces are located in building 6 and exhaust to 003-1, 003-2, 003-3, and 003-4. The remaining eight proposed furnaces, two will be in building 6 (emission point 003-4) and six will be in building 7 with three exhaust to emission point 003-5 and three to emission point 003-6.

Dust collector emissions from a graphite handling system located in building 6 is directed to EP 003-7.

A central vacuum system services the graphite furnaces and



the pack handling system located in building #6 and exhausts to emission point 03-15.

Building(s): 5
6
7
8

Item 21.2:

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

Emission Unit: 0-00002

Emission Unit Description:

Seventeen electrically heated furnaces used to bake various carbonaceous materials. All seventeen existing furnaces are located in building 5 and exhaust through a natural gas fired incinerator and to emission point 001-3. Emission point 001-7 is the exhaust stack from a bag house dust collector used to control emissions from a pack sand screening/storage/handling process. The pack sand is used to pack product in the baking furnaces. When the baking process is complete, the sand is removed, screened and placed back into a storage tank ready for re-use.

This emission unit also describes a prototype baghouse emission control system to control emissions from the baking furnaces as an alternative to the incinerator directed to emission point 001-3.

Building(s): 5

Item 21.3:

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

Emission Unit: 0-00003

Emission Unit Description:

Carbon/graphite stock impregnation, re-baking, along with a mechanical cleaning operation are located in the impregnation department in building #5. Emissions are vented to atmosphere through (3) three emission points: EP 002-6-baghouse dust collector for mechanical cleaning of exterior surfaces of product; EP 002-5-roof mounted fan for ventilation of impregnation department; EP 02-3, a natural gas fired incinerator used to control emissions from the re-baking and pellet curing processes.

Building(s): 5

Item 21.4:

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

Emission Unit: 0-00004

Emission Unit Description:

Existing carbon/graphite stock mixing/extrusion and machining operations located building #5. Emissions are

New York State Department of Environmental Conservation

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Facility DEC ID: 9294000030



vented to a fabric filter dust collector ant through
emission point 001-6.

Building(s): 5

Item 21.5:

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

Emission Unit: 0-00005

Emission Unit Description:

Graphite loading & unloading system loading & unloading
systems in building #8. Emissions from this emission unit
vent to atmosphere as follows:

EP 003-8: volatile organic compound emissions from
graphite stabilization operation that pass first through a
condenser and then an activated carbon adsorption
drum;

EP 003-9 baghouse dust collector for the graphite loading
system;

EP 03-10 baghouse dust collector for graphite unloading
system and blending/bagging/screening

EP 03-11 dust collector for the stabilization
process

EP 03-12 stabilization central vacuum system vent services
stabilization process and incoming raw material storage
area

EP 03-13 south central vacuum system vent services capsule
loading processes and the stabilized material storage
system

RP 03-14 north central vacuum system vent services capsule
unloading processes-blending/bagging/screening processes
and the stabilized material storage area.

Building(s): 6
8

Condition 22: Progress Reports Due Semiannually
Effective between the dates of 06/14/2016 and 06/13/2021

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

Item 22.1:

Progress reports consistent with an applicable schedule of compliance are to be submitted at
least semiannually, or at a more frequent period if specified in the applicable requirement or by
the department. Such progress reports shall contain the following:



Monitoring Description:

Particulate emissions from the following process operations are directed to a baghouse dust collector and then to an individual emission point. Particulate emissions are not to exceed 0.05 gr/dscf and compliance with this standard will be maintained through the proper operation and maintenance of the dust collector.

Emission unit 00001: emission point 003-7-Graphite Pack Handling System dust collector

Emission unit 00002: emission point 001-7-Baking Department Packing Operations dust collector

Emission unit 00003: emission point 002-6-Tube & Rod Stock Cleaning dust collector

Emission unit 00005: emission points 003-9-Capsule loading dust collector and 03-10-Capsule Unloading dust collector.

The permittee shall develop a baghouse maintenance program that shall include but is not limited to:

Daily, visible emissions observations of the stack shall be conducted when these processes are in operation;

Daily monitoring of the pressure drop across the baghouse to ensure the pressure drop is within the normal operating range identified in the baghouse maintenance plan;

Monthly check of bag cleaning mechanisms for proper functioning through visual inspection or equivalent means;

Weekly confirmation that the baghouse dust is being removed from the baghouse hoppers through visual inspection, or equivalent means of ensuring the proper functioning of removal mechanisms;

Quarterly inspections of the physical integrity of the baghouse structure through visual inspection of the baghouse interior for air leaks are to be conducted.

Semi-annual inspection of the fan for wear, material buildup, and corrosion through visual inspection, vibration detectors, or equivalent means.

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



These dust collectors are to be maintained according to the facility maintenance program. As part of the maintenance plan, the permittee must develop and implement corrective action procedures to be followed in the case of the observation of visible emissions from the baghouse, or indication through the periodic baghouse system inspections that the system is not operating properly. The permittee will investigate, in a timely manner, any instance where there is cause to believe that particulate emissions exceeding 0.050 gr/dscf are occurring or have occurred. The permittee must initiate corrective action as soon as practicable after the occurrence of the observation or event indicating a problem. The permittee shall determine the cause of any exceedance, make the necessary correction, and verify that the excess emissions problem has been corrected. These instances include but are not limited to process upsets, control device malfunctions or problems, abnormal visible emissions, complaints, etc.

The Department reserves the right to perform or require the performance of a Method 5 emissions test to determine the particulate emission rate.

Records of these verifications, investigations and corrective actions will be kept on-site for a period of five years.

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: 40 CFR 60 Method 5
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2016.
Subsequent reports are due every 6 calendar month(s).

Condition 25: Compliance Certification
Effective between the dates of 06/14/2016 and 06/13/2021

Applicable Federal Requirement: 6 NYCRR 212.4 (c)

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



Item 25.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: ONY075-00-0 PARTICULATES

Item 25.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Daily, the permittee shall record the pressure drop across each baghouse in a log book. Readings outside the normal operating range of 1 to 6 inches of water shall require an investigation of the control equipment to determine the cause of the deviation. Operating ranges may need to be re-established as a result of filter bag changes, and must be noted in the log and reported in the annual/semi-annual compliance reports.

Equipment to monitor pressure drop shall be installed, calibrated, operated, and maintained in accordance with the manufacturer recommendations, instructions, and operating manual(s).

The manometer or magnehelic gauge for each baghouse is to be calibrated every six months and the date recorded in the operating log and made available to Department representatives on request.

Parameter Monitored: PRESSURE DROP

Lower Permit Limit: 1 inches of water

Upper Permit Limit: 6 inches of water

Reference Test Method: Method 5

Monitoring Frequency: DAILY

Averaging Method: RANGE-NOT TO FALL OUTSIDE OF STATED
RANGE EXCEPT DURING STARTUP/SHUTDOWN

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2016.

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

Condition 26: Compliance Certification

Effective between the dates of 06/14/2016 and 06/13/2021

Applicable Federal Requirement:6 NYCRR 212.6 (a)

Item 26.1:

The Compliance Certification activity will be performed for the Facility.

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



Item 26.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

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

Daily, the permittee shall conduct a survey of facility emission points and immediately investigate any instance where there is cause to believe that visible emissions above those that are normal and in compliance are occurring or have occurred. The permittee shall determine the cause, make necessary corrections, and verify that the visible emissions problem has been corrected.

Records of these observations and investigations which result in corrective actions are to be kept on-site in a format acceptable to the Department and made available on request.

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

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 7/30/2016.

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

Condition 27: Compliance Certification

Effective between the dates of 06/14/2016 and 06/13/2021

Applicable Federal Requirement: 6 NYCRR 212.11 (b)

Item 27.1:

The Compliance Certification activity will be performed for the Facility.

Item 27.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:



Owners and/or operators of any source equipped with the following emissions control equipment must install continuous monitors and data recorders for the required parameter by June 1, 1995. Continuous monitors must be operated at all times when the associated process equipment is operating except during any quality assurance and routine maintenance activities. Each monitor must be operated according to a quality assurance program approved by the Department. Alternative monitoring methods may be employed subject to Department approval.

- (1) The exhaust gas temperature must be monitored from thermal or catalytic incinerators.
- (2) The temperature rise across catalytic incinerator beds must be monitored.
- (3) The volatile organic compound outlet concentrations must be monitored from fixed-bed carbon adsorption units.
- (4) The outlet gas temperature must be monitored from refrigerated condensers.
- (5) Other parameters must be monitored if required by conditions on an issued permit.

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 7/30/2016.

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

Condition 28: Compliance Certification
Effective between the dates of 06/14/2016 and 06/13/2021

Applicable Federal Requirement:40CFR 60, NSPS Subpart IIII

Item 28.1:

The Compliance Certification activity will be performed for the Facility.

Item 28.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The permittee owns/operates ICE affected compression injection emergency engine located in building 6 and having an engine displacement greater than 30 liters/cylinder and installed in 2010. The permittee must comply with the monitoring and testing requirements of



Subparts 40 CFR Subpart IIII for Compression Ignition engines.

The engine must meet the definition of emergency engines in 40 CFR 63 ZZZZ.

60.4205(d) Owners and operators of emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (d)(1) and (3) of this section.

(d) (1) For engines installed prior to January 1, 2012, limit the emissions of NOX in the stationary CI internal combustion engine exhaust to the following:

- (i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii) $45 \cdot n - 0.2$ g/KW-hr ($34 \cdot n - 0.2$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and
- (iii) 9.8 g/kW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

60.4207 (d) Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder and must use fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm)

60.4209(a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

60.4211(a) (1) Conduct an initial performance test to demonstrate initial compliance with the emission standards as specified in the test methods section of the subpart.

(2) Establishing operating parameters to be monitoring continuously to ensure the stationary ICE continues to meet the emission standards. The owner/operator must petition the Administrator for this approval.

60.4214(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. If the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

- (1) Must operate and maintain the engine and control device according to the manufacturer's written instructions or procedures developed by the owner/operator that are approved by the engine manufacturer.
- (2) Meet the requirements for 40 CFR Parts 89, 94, and/or 1068, as they apply to you.
- (3) Must install a non-resettable hour meter prior to startup of the engine.
- (4) If you are an owner/operator of an engine equipped with a diesel particulate filter, the filter must be installed with a backpressure monitor that notifies the owner/operator when the high backpressure limit of the engines is approaching.
- (5) May be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing is limited to 100 hours per year.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 29: Compliance Certification
Effective between the dates of 06/14/2016 and 06/13/2021

Applicable Federal Requirement:40CFR 63, Subpart ZZZZ

Item 29.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

Item 29.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The permittee owns/operates three RICE affected emergency engines and must comply with the monitoring and testing requirements of Subparts 40 CFR 63 Subpart ZZZZ NESHAP for Internal Combustion Engines.

A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new



if you commenced construction of the stationary RICE on or after December 19, 2002. An initial notification is required.

Building #6 Generator: 1474 HP 32 cylinder displacement diesel Compression Injection -2010

A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is existing if you commenced construction of the stationary RICE before June 12, 2006.

Building # 5 generator: 330 HP 6L cylinder displacement diesel Compression Injection-1960
Office Generator 126 HP Natural Gas Spark Ignition Engine-02/2004

If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions you must install a non-resettable hour meter if one is not already installed.

The permittee must operate the emergency stationary RICE according to the requirements in 63.6640 paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, beyond 100 hours per year.

(iii) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per year in non-emergency situations. The 50 hours are counted towards



the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Existing CI and SI engines < 500 HP at a major source must:

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first;
- b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Existing CI and SI engines < 500 HP at a major source must: implement the following work practices management plan:

Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

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

**Condition 30: Emission Point Definition By Emission Unit
Effective between the dates of 06/14/2016 and 06/13/2021**

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 30.1:

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

Emission Unit: 0-00001

Emission Point: 001-4

Height (ft.): 41

Diameter (in.): 24

NYTMN (km.): 4782.72

NYTME (km.): 179.429

Building: 5

New York State Department of Environmental Conservation
Permit ID: 9-2940-00030/02001 Facility DEC ID: 9294000030



Emission Point: 001-5
Height (ft.): 41 Diameter (in.): 24
NYTMN (km.): 4782.72 NYTME (km.): 179.429 Building: 5

Emission Point: 003-1
Height (ft.): 45 Diameter (in.): 36
NYTMN (km.): 4782.72 NYTME (km.): 179.429 Building: 6

Emission Point: 003-2
Height (ft.): 45 Diameter (in.): 36
NYTMN (km.): 4782.72 NYTME (km.): 179.429 Building: 6

Emission Point: 003-3
Height (ft.): 45 Diameter (in.): 36
NYTMN (km.): 4782.72 NYTME (km.): 179.429 Building: 6

Emission Point: 003-4
Height (ft.): 45 Diameter (in.): 36
NYTMN (km.): 4782.72 NYTME (km.): 179.429 Building: 6

Emission Point: 003-5
Height (ft.): 45 Diameter (in.): 36
NYTMN (km.): 4782.72 NYTME (km.): 179.429 Building: 7

Emission Point: 003-6
Height (ft.): 45 Diameter (in.): 36
NYTMN (km.): 4782.72 NYTME (km.): 179.429 Building: 7

Emission Point: 003-7
Height (ft.): 33 Diameter (in.): 24
NYTMN (km.): 4782.72 NYTME (km.): 179.429 Building: 6

Item 30.2:

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

Emission Unit: 0-00002

Emission Point: 001-3
Height (ft.): 36 Diameter (in.): 24
NYTMN (km.): 4782.72 NYTME (km.): 179.429 Building: 5

Emission Point: 001-7
Height (ft.): 15 Diameter (in.): 12
NYTMN (km.): 4782.72 NYTME (km.): 179.429 Building: 5

Emission Point: 01-7A
Height (ft.): 40 Diameter (in.): 29
NYTMN (km.): 4782.885 NYTME (km.): 179.491 Building: 5

Item 30.3:

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



New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030

Emission Unit: 0-00003

Emission Point: 002-3

Height (ft.): 29 Diameter (in.): 11
NYTMN (km.): 4782.72 NYTME (km.): 179.429 Building: 5

Emission Point: 002-5

Height (ft.): 44 Diameter (in.): 30
NYTMN (km.): 4782.72 NYTME (km.): 179.429 Building: 5

Emission Point: 002-6

Height (ft.): 19 Length (in.): 12 Width (in.): 10
NYTMN (km.): 4782.72 NYTME (km.): 179.429 Building: 5

Item 30.4:

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

Emission Unit: 0-00004

Emission Point: 001-6

Height (ft.): 24 Diameter (in.): 26
NYTMN (km.): 4782.72 NYTME (km.): 179.429 Building: 5

Item 30.5:

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

Emission Unit: 0-00005

Emission Point: 003-8

Height (ft.): 45 Diameter (in.): 12
NYTMN (km.): 4782.72 NYTME (km.): 179.792 Building: 8

Emission Point: 003-9

Height (ft.): 33 Diameter (in.): 20
NYTMN (km.): 4782.72 NYTME (km.): 179.72 Building: 8

Emission Point: 03-10

Height (ft.): 33 Diameter (in.): 20
NYTMN (km.): 4782.72 NYTME (km.): 179.79 Building: 8

**Condition 31: Process Definition By Emission Unit
Effective between the dates of 06/14/2016 and 06/13/2021**

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 31.1:

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

Emission Unit: 0-00001

Process: 0D1

Source Classification Code: 3-99-999-89

Process Description:

Five existing graphitizing furnaces. Material (i.e.



graphite/carbon tubes/rods & graphite powders) to be graphitized is placed in graphite capsules. These capsules are slowly pushed by mechanical means through the graphitizing furnace where the material is exposed to high temperature for a period of time graphitizing the material. Emissions from the process are directed to a hood and ductwork to atmosphere through emission points 001-4 and 001-5. The furnaces discharge through one emission point at a time to allow for maintenance on the stack that is not in operation.

Emission Source/Control: 0S1-4 - Process

Item 31.2:

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

Emission Unit: 0-00001

Process: 0D2

Source Classification Code: 3-99-999-89

Process Description:

Dust collector emissions from the graphite pack handling system (i.e. screening and material handling) to be located in bldg #6. The dust collector discharges to atmosphere through emission point 003-7. Pack material used in the proposed graphitizing expansion furnaces will be processed for re-use.

Emission Source/Control: 003-7 - Control

Control Type: FABRIC FILTER

Emission Source/Control: 0037A - Process

Item 31.3:

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

Emission Unit: 0-00001

Process: 0D3

Source Classification Code: 3-99-999-89

Process Description:

Eighteen electrically heated furnaces used to graphitize various carbonaceous materials in a nitrogen atmosphere. Emissions from the process are collected via a hood and ductwork and vented to atmosphere through a fan and stack arrangement. These furnaces are located in buildings 6 and 7.

Emission Source/Control: 003-1 - Process

Emission Source/Control: 003-2 - Process

Emission Source/Control: 003-3 - Process

Emission Source/Control: 003-4 - Process



Emission Source/Control: 003-5 - Process

Emission Source/Control: 003-6 - Process

Item 31.4:

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

Emission Unit: 0-00001

Process: 0D4

Source Classification Code: 3-99-999-89

Process Description:

Six graphitizing furnaces, 18 through 20, located in building 7 vent to emission point 003-5. Furnaces #21 thru #23 exhaust through emission point 003-6.

Emission Source/Control: 003-5 - Process

Emission Source/Control: 003-6 - Process

Item 31.5:

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

Emission Unit: 0-00002

Process: 0P1

Source Classification Code: 3-99-999-89

Process Description:

A total of (17) seventeen electrically heated furnaces are used to bake various carbonaceous materials consisting of small diameter tubes and rods of various lengths. The tubes and rods are placed in a furnace utilizing a packing sand & sager system. Once the furnace is loaded, the furnace is energized or fired in order to bake the product. After the baking process is completed, the furnace is allowed to cool naturally and product is then removed along with the packing sand. Exhaust gases generated from this baking process are collected via a ductwork collection system and directed to a natural-gas fired incinerator prior to discharge to atmosphere via emission point 001-3. An emergency incinerator by-pass stack is identified as 01-7A.

This emission unit also includes bake re-bake furnaces #21 and #22 and can include drying of stock and curing of pellets.

Emission Source/Control: 0S1-3 - Control

Control Type: THERMAL OXIDATION

Emission Source/Control: 0S2-1 - Process

Emission Source/Control: 0S2-3 - Process

Emission Source/Control: 0S2-4 - Process



Item 31.6:

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

Emission Unit: 0-00002

Process: OP2

Source Classification Code: 3-99-999-89

Process Description:

The packing sand is then screened and conveyed to a storage tank ready for re-use in the next baking cycle. A bag house dust collector is used to control emissions from this pack sand handling system. The baghouse dust collector discharges to atmosphere via emission point 001-7.

Emission Source/Control: 0S1-7 - Control

Control Type: FABRIC FILTER

Emission Source/Control: 0S2-2 - Process

Item 31.7:

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

Emission Unit: 0-00002

Process: OPP

Source Classification Code: 3-99-999-91

Process Description:

A prototype baghouse emission control system to control fumes from the baking furnaces. In this system carbon/graphite dust would be injected via a metering valve into the exhaust from the carbon baking furnaces. The carbon/graphite dust would combine with the pitch 'fumes' in the exhaust creating a larger carbon/graphite particle which would be then captured by the baghouse. Collected material would be re-utilized in the manufacturing process so as to eliminate waste for off-site disposal. The existing incinerator control system will remain in place and operational in the event of a prototype system malfunction.

Emission Source/Control: 0S1-P - Control

Control Type: FABRIC FILTER

Emission Source/Control: 0S2-1 - Process

Item 31.8:

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

Emission Unit: 0-00003

Process: OP3

Source Classification Code: 3-99-999-89

Process Description:

Mechanical cleaning of exterior surfaces of small diameter carbon/graphite tubes. Emissions from two machines are collected by a baghouse vented to emission



point 002-6.

Emission Source/Control: 0S2-6 - Control
Control Type: FABRIC FILTER

Emission Source/Control: S2-6A - Process

Item 31.9:

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

Emission Unit: 0-00003

Process: 0P4

Source Classification Code: 3-99-999-89

Process Description:

Pitch Impregnation: Typically baskets containing small diameter graphite/carbon tubes or rods are loaded into a vertical autoclave using an overhead monorail hoist. Heated petroleum pitch from a dedicated working/melt tank is introduced into autoclave #3 via vacuum. The autoclave is then pressurized with nitrogen gas for several hours. When the process is complete, the vacuum is released and the pitch is forced back into the working tank. The autoclave is then opened releasing pitch volatiles to the surrounding area within the building. These volatiles are released to atmosphere via emission point 2-5 which is a roof mounted building fan. Volatiles from the melt/working tank are vented through a pipe directly into the building.

Emission Source/Control: S2-5B - Process

Item 31.10:

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

Emission Unit: 0-00003

Process: 0P5

Source Classification Code: 3-99-999-89

Process Description:

Rebake: Carbon and graphite tubes or rods are loaded via an overhead monorail hoist into an electrically heated furnace. The furnace is then energized to complete the pre-heating and/or rebaking processes. Emissions from pre-heater/re-bake furnaces #1 and #2 are collected via ductwork system and vented to atmosphere through emission point 002-3 after 1st passing through a natural gas fired incinerator. In the event of over capacity in the bake department (emission point 001-3) re-bake and curing of pellets will occur in these furnaces.

Emission Source/Control: S2-3A - Control
Control Type: THERMAL OXIDATION

Emission Source/Control: 002-9 - Process



Emission Source/Control: 0S2-8 - Process

Item 31.11:

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

Emission Unit: 0-00003
Process: OPH Source Classification Code: 3-85-001-20
Process Description:
Pre-heat furnace used to heat furan resin impregnated stock.

Emission Source/Control: S2-3A - Control
Control Type: THERMAL OXIDATION

Emission Source/Control: 0S2-8 - Process

Item 31.12:

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

Emission Unit: 0-00003
Process: OPR Source Classification Code: 3-99-999-89
Process Description:
Resin Impregnation: Small diameter graphite/carbon tubes or rods are loaded into a vertical autoclave using an overhead monorail hoist. Heated furfural resin from a dedicated working/melt tank is introduced into autoclave #1 via vacuum. The autoclave is then pressurized with nitrogen gas for several hours. When the process is complete, the vacuum is released and the resin is forced back into the melt tank. After this process is completed the stock is moved to autoclave #2 where it is heated for the curing step. The autoclave is then opened releasing resin in vapor form to the surrounding area within the building. The resin vapors are vented to atmosphere via emission point 2-5 which is a roof mounted building fan. Volatiles from the melt/working tank are vented through a pipe directly into the building.

Emission Source/Control: 0S2-5 - Process

Emission Source/Control: S2-5A - Process

Item 31.13:

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

Emission Unit: 0-00004
Process: OP6 Source Classification Code: 3-99-999-89
Process Description:
Typically various carbonaceous materials along with pitch are placed in one of two 100 pound small steam heated mixer. After mixing, the mix is air cooled using a small cooler/mixer. The cooled mix is then extruded into small



Control Type: FABRIC FILTER

Emission Source/Control: 03-15 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 03-16 - Process

Item 31.16:

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

Emission Unit: 0-00005
Process: 0P7 Source Classification Code: 3-99-999-89
Process Description:

Graphite stabilization is a proposed operation in which graphitized powder is introduced into a system in a nitrogen atmosphere in which heat is added electrically. This operation will be located in proposed building #8. Xylene emissions from this operation will be vented to atmosphere through emission point 003-8 after 1st passing through a water cooled condenser and then an activated carbon adsorption filter drum.

Emission Source/Control: 0S3-8 - Process

Emission Source/Control: S3-8A - Process

Item 31.17:

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

Emission Unit: 0-00005
Process: 0P9 Source Classification Code: 3-99-999-89
Process Description:

Emissions from the two graphite loading and unloading operations located in building 8 will be vented to atmosphere through emission points 003-9 and 03-10 after 1st passing a bag house dust collector. Emissions from each operation will be directed to a dedicated dust collector.

Emission Source/Control: 0S3-9 - Control
Control Type: FABRIC FILTER

Emission Source/Control: S3-10 - Control
Control Type: FABRIC FILTER

Emission Source/Control: S3-9A - Process

Condition 32: Compliance Certification
Effective between the dates of 06/14/2016 and 06/13/2021

Applicable Federal Requirement:6 NYCRR 212.4 (b)

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



Item 32.1:

The Compliance Certification activity will be performed for:

Emission Unit: 0-00001

Regulated Contaminant(s):

CAS No: 000074-90-8	HYDROCYANIC ACID
CAS No: 007446-09-5	SULFUR DIOXIDE
CAS No: 007647-01-0	HYDROGEN CHLORIDE
CAS No: 007783-06-4	HYDROGEN SULFIDE
CAS No: 130498-29-2	POLYCYCLIC AROMATIC HYDROCARBONS

Item 32.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emissions from the electric graphitizing furnaces used to process graphite objects and powders in enclosed capsules are discharged to either emission points in buildings #5, #6, and #7. These emissions include polycyclic aromatic hydrocarbons (PAH), hydrogen chloride, hydrogen cyanide, hydrogen sulfide and sulfur dioxide.

Hydrogen cyanide and PAH's are assigned an 'A' environmental rating. The permittee shall submit current emission rate potential calculations along with results of air dispersion modeling to this Department within 180 days from the permit issuance demonstrating emission impacts in comparison to the annual and short-term AGC/SGC guideline concentrations. If results indicate an exceedance of the AGC/SGC guidelines, an analysis of best available control technology to reduce emissions will also be required.

If odor complaints are received, emissions of sulfur compounds shall be modeled for odor impacts using AERSCREEN and the Short-term Guideline Concentration (SGC) for hydrogen sulfide of 14 ug/m³. The results shall be submitted to this Department and an odor abatement program required if the results indicate off-site impacts in excess of the SGC.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 0 days after the reporting period.

The initial report is due 6/30/2016.

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

Condition 33: Compliance Certification
Effective between the dates of 06/14/2016 and 06/13/2021



Applicable Federal Requirement:6 NYCRR 212.4 (a)

Item 33.1:

The Compliance Certification activity will be performed for:

Emission Unit: 0-00002
Process: OPP

Regulated Contaminant(s):

CAS No: 007782-42-5	GRAPHITE
CAS No: 068334-31-6	PETROLEUM PITCH
CAS No: 130498-29-2	POLYCYCLIC AROMATIC HYDROCARBONS
CAS No: 065996-93-2	PITCH, COAL TAR, HIGH-TEMP.

Item 33.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The permittee has submitted a proposal to install and operate a prototype baghouse during an estimated 4-6 week trial period. The proposed baghouse/carbon graphite dust injection system is intended to control fumes from the baking furnace which are now directed to the fume incinerator, emission point 001-3. If successful, the permittee will submit to this Department a stack test protocol to demonstrate compliance with 6NYCRR, Part 212-2.1(a) with testing to be completed within 90 days from the end of the trial period.

The proposed prototype baghouse is required to achieve (and the source test to demonstrate) a control efficiency of 99% as stipulated by Table 4 of 6NYCRR, Part 212-2.3(b) for 'A' rated high toxicity contaminant polycyclic organic matter as represented by coal tar pitch volatiles, petroleum pitch and the constituents, BAP, chrysene, and other polynuclear aromatic hydrocarbons.

During the source test permittee will record baghouse operational and maximum production parameters such as pressure drop which will be utilized to demonstrate continuous compliance. These monitoring parameters will be then incorporated into this permit through a permit modification as enforceable permit conditions.

The facility will notify this Department of the expected start and end date of the trial run.

The existing fume incinerator will remain in place and utilized in the event of a baghouse system malfunction.

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



Parameter Monitored: DEGREE OF AIR CLEANING

Lower Permit Limit: 99 percent degree of air cleaning or greater

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2016.

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

Condition 34: Compliance Certification
Effective between the dates of 06/14/2016 and 06/13/2021

Applicable Federal Requirement: 6 NYCRR 212.4 (a)

Item 34.1:

The Compliance Certification activity will be performed for:

Emission Unit: 0-00002

Emission Point: 001-3

Process: OP1

Regulated Contaminant(s):

CAS No: 0NY998-00-0

VOC

CAS No: 130498-29-2

POLYCYCLIC AROMATIC HYDROCARBONS

Item 34.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Within 90 days from permit issuance, the permittee shall submit an operations and preventative maintenance and inspection program for the bake incinerator which is to include employee procedures for shut-down and start-up of the incinerator.

An annual inspection of the incinerator shall be conducted which includes at a minimum, the following:

- the burner removed and cleaned,
- thermocouples inspected and replaced if necessary,
- refractory and insulation inspected and replaced if necessary,
- fan drive and bearings inspected for wear and corrosion and repaired as necessary,

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



- control valves inspected for wear and proper operation,
- spark plugs and ignition eyes cleaned and replaced

Inspection dates shall be maintained in logs (written or electronic), along with any corrective action taken as a result. These reports shall be made available to Department representatives on request.

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 7/30/2016.

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

Condition 35: Compliance Certification
Effective between the dates of 06/14/2016 and 06/13/2021

Applicable Federal Requirement:6 NYCRR 212.4 (a)

Item 35.1:

The Compliance Certification activity will be performed for:

Emission Unit: 0-00002
Process: OP1

Emission Point: 001-3

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

CAS No: 068334-31-6

PETROLEUM PITCH

CAS No: 130498-29-2

POLYCYCLIC AROMATIC HYDROCARBONS

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 emission rate potential from the bake furnaces located in building 5 and used to bake carbon/graphite products containing petroleum impregnation pitch and coal tar pitch as a binder emit volatiles as polycyclic aromatic hydrocarbons (PAH) constituents. Pitch is considered 100% polycyclic organic matter (POM) and coal tar pitch volatiles is designated a hazardous air pollutant. These emissions are required to be directed to an air cleaning device(emission point 001-3) having a



minimum control efficiency of 99 percent as required by Table 2 of 6NYCRR, Part 212.9(b) for 'A' rated contaminants. The fume incinerator associated with these bake furnaces is to be operated at the minimum operating temperature of 1450 degrees F. established in the May 2010 stack test.

The permittee shall continuously monitor and record the combustion chamber temperature of the fume incinerator using a programmable logic controller to ensure operation at a minimum temperature of 1450 degrees F. The temperature monitor/recorder shall be calibrated at a minimum of twice per year and as per the facility QA/QC program and the dates of the calibration maintained in a log book.

The combustion chamber temperature shall be recorded on a continuous paper chart or electronically at least once every 15 minutes. For any instance in which the device operates below this temperature, the permittee shall immediately identify, correct or repair any malfunction and record in a log book the cause of the problem and the corrective action initiated to remedy operation outside the acceptable range.

A procedure shall be in place to ensure the incinerator is not shut down until it is determined that furnaces are no longer baking and do not have the potential to enter the volatile range of 200 degrees C.

The permittee shall physically verify the operation of the temperature recording device at least once each operating day to verify that it is working and recording properly. A written record of the daily verifications shall be maintained in a log.

The permittee shall record all bypasses of the fume incinerator. The bypass cause, duration and corrective action taken shall be recorded and reported to the NYSDEC Region 9 office. Such bypasses do not include initial start-up of control equipment.

The permittee shall conduct annual inspections of the external structural integrity of the incinerator and corresponding ductwork to ensure proper operation, and the permittee shall conduct annual inspections of the internal structural integrity of the incinerator including the valves to ensure proper functioning.

Upon the annual inspection and replacement, as necessary, of the thermocouple used to measure the temperature, its condition with respect to its ability to accurately



measure the temperature shall be described in writing and included in a log book to be provided to any Department representative in accordance with these permit conditions. The replacement of the thermocouple shall also be noted and reported accordingly.

The permittee shall maintain on-site multiple replacement thermocouples.

The permittee shall semi-annually calibrate the audible alarm to the minimum temperature set point and records maintained of the dates of calibration.

The alarm silence switch shall be a timed silence alarm and interlocked so that it reverts to the "on" position after any incinerator re-start.

Each excursion resulting in the temperature falling below the minimum required, except during startup and shut down periods, shall be reported including date and time, cause, and corrective action taken, shall be recorded and kept on site. Reports of these excursions shall be included in the semi-annual deviation report.

In the event of an incinerator outage, the permittee shall notify this Department as soon as possible during normal business hours but no later than 24 hours after an event. The permittee shall document and submit a written report describing the outage, cause, duration, the number of furnaces in the volatile range during the outage, and the calculated emissions and the corrective action. Reports of these excursions shall be included in the semi-annual deviation report.

Emissions shall be calculated during an outage and if requested impacts modeled using methods acceptable to this Department. If the results indicate a exceedance of the short-term guideline concentrations (SGC) or annual guideline concentrations (AGC) of any emitted contaminant, further corrective action to prevent future incidents will be required.

Records required are to be maintained on site for five (5) years from the date generated and shall be made available to Department personnel upon request. The readings shall be maintained in logs (written, when noted, or electronic (i.e., computerized data system).

Parameter Monitored: TEMPERATURE
Lower Permit Limit: 1450 degrees Fahrenheit
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



DESCRIPTION
Averaging Method: MINIMUM - NOT TO FALL BELOW STATED
VALUE AT ANY TIME
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2016.
Subsequent reports are due every 6 calendar month(s).

Condition 36: Compliance Certification
Effective between the dates of 06/14/2016 and 06/13/2021

Applicable Federal Requirement: 6 NYCRR 212.4 (a)

Item 36.1:

The Compliance Certification activity will be performed for:

Emission Unit: 0-00002
Process: 0P1

Emission Point: 001-3

Regulated Contaminant(s):

CAS No: 007446-09-5	SULFUR DIOXIDE
CAS No: 068334-31-6	PETROLEUM PITCH
CAS No: 130498-29-2	POLYCYCLIC AROMATIC HYDROCARBONS
CAS No: 065996-93-2	PITCH, COAL TAR, HIGH-TEMP.

Item 36.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Volatile emissions from impregnation pitch and coal tar pitch used as a binder consist of polycyclic aromatic hydrocarbons (PAH) constituents which are emitted during graphite bake/re-bake operations. Pitch is considered 100% PAH and includes hazardous air pollutant constituents such as coal tar volatiles. These contaminants have been assigned an 'A' environmental rating and are required to be controlled by an air cleaning device having a minimum control efficiency of 99 percent as specified in Table 2 of 6NYCRR, Part 212.9(b). The May 2010 stack test demonstrated the fume incinerator control efficiency to be 99.7 percent.

In the event of an incinerator malfunction, the permittee shall identify and submit in a report to this Department:

- the total number of furnaces fired;
- the number of furnaces in the volatile range;
- the number of furnaces processing petroleum pitch impregnated materials;
- total pitch in product

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



- calculation of total volatiles released as coal tar volatiles and petroleum pitch volatiles;
- hourly calculated release rate.
- the corrective action to be taken to prevent future malfunctions
- length of time the incinerator is down
- air dispersion modeling to demonstrate the maximum offsite concentration will be required at the request of the Department

Calculations to determine volatile emissions from an incinerator failure shall also include emission factors previously used for the impregnation incinerator(emission point 0002-3) since pitch re-bake is now conducted in the bake furnaces.

Incinerator malfunctions shall be included in the annual and semi-annual deviations report.

Consistent with 6 NYCRR 201-6.4 (c)(3) (ii), for those outages which exceed one hour, this information shall be submitted to this Department within 24 hours of the incident. Records of all outages shall be kept on-site regardless of the duration and made available to Department representatives on request.

Parameter Monitored: DEGREE OF AIR CLEANING

Lower Permit Limit: 99 percent

Reference Test Method: EPA Method 25/Method 25A

Monitoring Frequency: SINGLE OCCURRENCE

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE AT ANY TIME

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 37: Compliance Certification
Effective between the dates of 06/14/2016 and 06/13/2021

Applicable Federal Requirement:6 NYCRR 212.4 (a)

Item 37.1:

The Compliance Certification activity will be performed for:

Emission Unit: 0-00003

Process: OP4

Regulated Contaminant(s):

CAS No: 130498-29-2

POLYCYCLIC AROMATIC HYDROCARBONS

CAS No: 068334-31-6

PETROLEUM PITCH

Item 37.2:

Compliance Certification shall include the following monitoring:

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



Emission Unit: 0-00003
Process: OP5

Emission Point: 002-3

Regulated Contaminant(s):

CAS No: 065996-93-2

PITCH, COAL TAR, HIGH-TEMP.

CAS No: 130498-29-2

POLYCYCLIC AROMATIC HYDROCARBONS

Item 38.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Volatile emissions from impregnation pitch and coal tar pitch as a binder consist of polycyclic aromatic hydrocarbons constituents and are emitted during graphite baking/re-baking operations. Pitch is considered 100% polycyclic organic matter (POM) and includes hazardous air pollutant constituents such as coal tar volatiles. These contaminants have been assigned an 'A' environmental rating and are required to be controlled by an air cleaning device having a minimum control efficiency of 99 percent as specified in Table 2 of 6NYCRR, Part 212.9(b).

In the event of an incinerator malfunction, the permittee shall identify and submit in a report to this Department:

- total pitch in product
- calculation of total volatiles released as coal tar volatiles and petroleum pitch volatiles;
- hourly calculated release rate.
- the corrective action to be taken to prevent future malfunctions
- length of time the incinerator is down

Consistent with 6 NYCRR 201-6.4 (c)(3) (ii), for those outages which exceed one hour, this information shall be submitted to this Department within 24 hours of the incident. Records of all outages shall be kept on-site regardless of the duration and made available to Department representatives on request.

Parameter Monitored: DEGREE OF AIR CLEANING

Lower Permit Limit: 99 percent reduction

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED
VALUE - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



Reports due 30 days after the reporting period.
The initial report is due 7/30/2016.
Subsequent reports are due every 6 calendar month(s).

Condition 39: Compliance Certification
Effective between the dates of 06/14/2016 and 06/13/2021

Applicable Federal Requirement: 6 NYCRR 212.4 (a)

Item 39.1:

The Compliance Certification activity will be performed for:

Emission Unit: 0-00003
Process: 0P5

Emission Point: 002-3

Regulated Contaminant(s):

CAS No: 065996-93-2

PITCH, COAL TAR, HIGH-TEMP.

CAS No: 130498-29-2

POLYCYCLIC AROMATIC HYDROCARBONS

Item 39.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The permittee shall continuously monitor and record the combustion chamber temperature of the fume incinerator using a programmable logic controller to ensure operation at the minimum temperature of 1450 degrees F. The temperature monitor/recorder shall be calibrated at a minimum of twice per year and as per the facility QA/QC program and the dates of the calibration maintained in a log book.

The combustion chamber temperature will be recorded on a continuous paper chart or electronically at least once every 15 minutes. For any instance in which the device operates below this temperature, the permittee shall immediately identify, correct or repair any malfunction and record in a log book the cause of the problem and the corrective action initiated to remedy operation outside the acceptable range.

The permittee shall physically verify the operation of the temperature recording device at least once each operating day to verify that it is working and recording properly. A written record of the daily verifications shall be maintained in a log.

The permittee shall record all bypasses of the fume incinerator. The bypass cause, duration and corrective action taken shall be recorded and reported to the NYSDEC



Region 9 office. Such bypasses do not include initial start-up of control equipment.

The permittee shall conduct annual inspections of the external structural integrity of the incinerator and corresponding ductwork. The permittee shall conduct annual inspections of the internal structural integrity of the incinerator including the valves to ensure proper functioning.

Upon the annual inspection and replacement, as necessary, of the thermocouple used to measure the temperature, its condition with respect to its ability to accurately measure the temperature shall be described in writing and included in a log book to be provided to any Department representative in accordance with these permit conditions. The replacement of the thermocouple shall also be noted and reported accordingly.

The permittee shall maintain on-site multiple replacement thermocouples.

The permittee shall semi-annually calibrate the audible alarm to the minimum temperature set point and records maintained of the dates of calibration. The alarm silence switch shall be interlocked so that it reverts to the "on" position after any incinerator re-start.

Each excursion resulting in the temperature falling below the minimum required, except during startup and shut down periods, shall be reported including date and time, cause, and corrective action taken, shall be recorded and kept on site. Reports of these excursions shall be included in the semi-annual deviation report.

In the event of an incinerator outage, the permittee shall notify this Department as soon as possible during normal business hours but no later than 24 hours after an event. The permittee shall document and submit a written report describing the outage, cause, duration, the number of furnaces in the volatile range during the outage, and the calculated emissions and the corrective action. Reports of these excursions shall be included in the semi-annual deviation report.

Emissions shall be calculated during an outage and if requested impacts modeled using methods acceptable to this Department. If the results indicate a exceedance of the short-term guideline concentrations (SGC) or annual guideline concentrations (AGC) of any emitted contaminant, further corrective action to prevent future incidents will be required.

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



If the unit is re-built or re-placed, the permittee shall comply with the requirements of this Subpart and demonstrate compliance with the air cleaning requirements of Table 4 of Part 212-2.3(b) for 'A' rated contaminants based on the emission rate potential of Polycyclic Aromatic Hydrocarbons(PAH).

Prior to modification or replacement of this incinerator unit, the permittee shall evaluate and submit potential emission calculations, air dispersion modeling to determine cumulative maximum off-site concentrations in comparison with annual and short-term AGC/SGC guideline concentrations, and demonstrate compliance with the control efficiency requirement(s) of Table 4.

After replacement or modification of the existing unit, a stack test will be required to demonstrate the control efficiency of the new/modified unit at maximum production. A test protocol shall be submitted to this Department 60 days prior to testing. Operating parameters and minimum temperature limits will be established during the tests at worst case scenarios.

Records required are to be maintained on site for five (5) years from the date generated and shall be made available to Department personnel upon request. The readings shall be maintained in logs (written, when noted, or electronic (i.e., computerized data system).

Parameter Monitored: TEMPERATURE

Lower Permit Limit: 1450 degrees Fahrenheit

Reference Test Method: Method 25A

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2016.

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

Condition 40: Compliance Certification

Effective between the dates of 06/14/2016 and 06/13/2021

Applicable Federal Requirement:6 NYCRR 212.4 (b)

Item 40.1:

The Compliance Certification activity will be performed for:

Emission Unit: 0-00004

Emission Point: 001-6

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



Regulated Contaminant(s):

CAS No: 130498-29-2 POLYCYCLIC AROMATIC HYDROCARBONS
CAS No: 0NY075-00-0 PARTICULATES

Item 40.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

During the mixing and extrusion process, carbon is mixed with coal tar pitch in a steam heated mixer, cooled and then extruded in a steam heated extrusion press.

Particulate emissions are ducted along with those from the machining operation and vented to a dust collector and then to emission point 001-6. Emissions of particulate from the mixing operation are to be assigned an 'A' environmental rating for polycyclic aromatic hydrocarbon (PAH) and coal tar volatiles (CTV). Particulates emitted from the machining operation alone cannot exceed 0.05 gr/dscf as specified by 6NYCRR, Part 212.4(c).

This Department may require that emissions from the mixing operation be evaluated and an Air Dispersion impact model be performed to demonstrate that off-site air concentration is less than the AGC for CTV of 0.481 ug/m³. If these off-site impacts are not less than the AGC, the control device will be required to demonstrate 99% minimum control efficiency.

Daily monitoring of the pressure drop across the baghouse to ensure the pressure drop is within the normal operating range identified in the baghouse maintenance plan;

Monthly check of bag cleaning mechanisms for proper functioning through visual inspection or equivalent means;

Weekly confirmation that the baghouse dust is being removed from the baghouse hoppers through visual inspection, or equivalent means of ensuring the proper functioning of removal mechanisms;

Quarterly inspections of the physical integrity of the baghouse structure through visual inspection of the baghouse interior for air leaks are to be conducted.

Semi-annual inspection of the fan for wear, material buildup, and corrosion through visual inspection,



vibration detectors, or equivalent means.

These dust collectors are to be maintained according to the facility maintenance program. As part of the maintenance plan, the permittee must develop and implement corrective action procedures to be followed in the case of the observation of visible emissions from the baghouse, or indication through the periodic baghouse system inspections that the system is not operating properly. The permittee will investigate, in a timely manner, any instance where there is cause to believe that particulate emissions exceeding 0.050 gr/dscf are occurring or have occurred. The permittee must initiate corrective action as soon as practicable after the occurrence of the observation or event indicating a problem. The permittee shall determine the cause of any exceedance, make the necessary correction, and verify that the excess emissions problem has been corrected. These instances include but are not limited to process upsets, control device malfunctions or problems, abnormal visible emissions, complaints, etc.

The Department reserves the right to perform or require the performance of a Method 5 emissions test to determine the particulate emission rate.

Records of these verifications, investigations and corrective actions will be kept on-site for a period of five years.

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: POLYCYCLIC AROMATIC HYDROCARBONS

Lower Permit Limit: 99 percent

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2016.

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

Condition 41: Compliance Certification
Effective between the dates of 06/14/2016 and 06/13/2021



Applicable Federal Requirement: 6 NYCRR 212.10 (c) (4) (i)

Item 41.1:

The Compliance Certification activity will be performed for:

Emission Unit: 0-00005

Process: OP7

Regulated Contaminant(s):

CAS No: 001330-20-7 XYLENE, M, O & P MIXT.

CAS No: 0NY998-00-0 VOC

Item 41.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The facility having emissions of potential volatile organic compounds (VOC) greater than 50 tons per year is subject to the reasonably available control technology (RACT) requirements of 6NYCRR, Part 212-3 for major VOC sources.

The emission rate potential of Xylene, a VOC, emitted from the graphite stabilization process and associated Wyssmont dryer at a rate of 6.3 pounds per hour, is required by 6NYCRR, Part 212-3(a)(4)(i) to be controlled to a minimum of 81%. The condenser system associated with the dryer is vented to emission point 003-8 and is designed to achieve a minimum VOC reduction of 90%. This process equipment will be operated at established inlet/outlet temperatures of 50 and 90 degrees F. respectively, to provide this efficiency.

Volatile organic compound (VOC) vapors then pass through an activated carbon adsorption filter drum before being discharged to atmosphere.

This Department can at anytime request a stack test to demonstrate the overall efficiency of the dryer/condenser system.

Parameter Monitored: DEGREE OF AIR CLEANING

Lower Permit Limit: 81 percent degree of air cleaning or
greater

Reference Test Method: Method 25A

Monitoring Frequency: CONTINUOUS

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED
VALUE AT ANY TIME

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



The initial report is due 7/30/2016.
Subsequent reports are due every 6 calendar month(s).

Condition 42: Compliance Certification
Effective between the dates of 06/14/2016 and 06/13/2021

Applicable Federal Requirement: 6 NYCRR 212.11 (b)

Item 42.1:

The Compliance Certification activity will be performed for:

Emission Unit: 0-00005
Process: 0P7

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC
CAS No: 001330-20-7 XYLENE, M, O & P MIXT.

Item 42.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The condenser associated with the electrically heated Wyssmont dryer is designed to control xylene emissions to 90 percent or greater. The inlet coolant temperature will not exceed a maximum temperature of 50 degrees F. and the exit coolant temperature will not exceed a maximum temperature of 90 degrees F. Volatile organic compound (VOC) vapors then pass through an activated carbon adsorption filter drum before being discharged to atmosphere.

The condenser inlet and outlet temperature (s) shall be continuously monitored when the dryer/condenser is in operation.

A program shall be developed to monitor the carbon drums for breakthrough and based on those results and the frequency of the process operation, a routine maintenance schedule be established for drum changeout.

Temperature gauges shall be calibrated every six months.

At any time, this Department can request stack testing to demonstrate the efficiency of the condenser.

Records are to be kept on-site for a minimum of 5 years in a format easily accessible and made available to Department representatives on request.

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



Parameter Monitored: TEMP. DIFF. BETWEEN INTAKE AND DISCHARGE

Lower Permit Limit: 50 degrees Fahrenheit

Upper Permit Limit: 90 degrees Fahrenheit

Monitoring Frequency: CONTINUOUS

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 7/30/2016.

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: 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: 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 43: Contaminant List
Effective between the dates of 06/14/2016 and 06/13/2021

Applicable State Requirement:ECL 19-0301

Item 43.1:

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

CAS No: 000074-90-8
Name: HYDROCYANIC ACID

CAS No: 001330-20-7
Name: XYLENE, M, O & P MIXT.

CAS No: 007440-44-0
Name: CARBON

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

CAS No: 007647-01-0
Name: HYDROGEN CHLORIDE

CAS No: 007782-42-5
Name: GRAPHITE

CAS No: 007783-06-4
Name: HYDROGEN SULFIDE

New York State Department of Environmental Conservation

Permit ID: 9-2940-00030/02001

Facility DEC ID: 9294000030



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.

