PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 8-2614-00888/00001
Effective Date: 06/14/2019 Expiration Date: 06/13/2024

Permit Issued To: ROCHESTER SILVER WORKS LLC
725 W RIDGE RD
PO BOX 15397
ROCHESTER, NY 14615-5397

Facility: ROCHESTER SILVER WORKS
EASTMAN BUSINESS PARK|BUILDINGS 101, 110, 117, 138, 143, 144, 145, & 156
145, & 156
Rochester, NY 14652-3639

Contact: GARY WINBURN
ROCHESTER SILVER WORKS LLC
PO BOX 15397
ROCHESTER, NY 14615-5397
(585) 743-1622

Description: Renewal for Title V permit for Rochester Silver Works LLC for silver recovery and silver nitrate production operations occurring in eight Buildings in Eastman Business Park, Buildings 101, 110, 117, 138, 143, 144, 145, and 156. No significant changes in operations are proposed.

Silver recovery and silver nitrate production operations are subject to Title V regulations due to potential emissions of individual Hazardous Air Pollutant (HAP) compounds greater than 10 tons per year each, total HAP potential emissions greater than 25 tons per year, and potential emissions of oxides of nitrogen (NOX), particulate matter (PM), particulates smaller than 10 microns (PM-10), sulfur dioxide (SO2), and volatile organic compounds (VOC), greater than 100 tons per year each.

Rochester Silver Works proposes to maintain the three previously approved variances.

A Part 212.10 VOC Reasonably Available Control Technology (RACT) variance with a 30.02 tons per year limit on VOC emissions from the Cowles Washers, a caustic process which recovers silver film emulsion from film scrap;
Facility DEC ID: 8261400888

A Part 212.4(a) Toxic Best Available Control Technology (T-BACT) variance limiting Cowles Washer emissions of dichloromethane, acetone, butanol, and cyclohexane to a total of 37.04 tons per year and the A-rated HAP dichloromethane to a total of 3.14 tons per year; and

A Part 212.10 NOX RACT and 40 CFR 52 PSD variance with a 10.5 ton per year limit on NOX emissions from the Silver Roaster, which burns off the extracted film emulsion to produce a silver-rich ash for further refining.

The renewal includes minor changes to the permit to reflect the Department’s revisions to 6NYCRR Part 212. Department approved operational flexibility for the removal of a bag house and changes to the differential pressure on the scrubber to increase particulate removal are also included.

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

Permit Administrator: KIMBERLY A MERCHANT
6274 E AVON LIMA RD
AVON, NY 14414-9519

Authorized Signature: _________________________________ Date: ___ / ___ / _____

DEC Permit Conditions
Renewal 1/FINAL
Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

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

Item B: Permittee's Contractors to Comply with Permit

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

Item C: Permittee Responsible for Obtaining Other Required Permits

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

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

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

<table>
<thead>
<tr>
<th>PAGE</th>
<th>DEC GENERAL CONDITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Provisions</td>
</tr>
<tr>
<td>4 1</td>
<td>Facility Inspection by the Department</td>
</tr>
<tr>
<td>4 2</td>
<td>Relationship of this Permit to Other Department Orders and Determinations</td>
</tr>
<tr>
<td>4 3</td>
<td>Applications for permit renewals, modifications and transfers</td>
</tr>
<tr>
<td>5 4</td>
<td>Permit modifications, suspensions or revocations by the Department</td>
</tr>
<tr>
<td>5 5</td>
<td>Submission of application for permit modification or renewal-REGION 8 HEADQUARTERS</td>
</tr>
</tbody>
</table>
DEC GENERAL CONDITIONS

**** General Provisions ****
For the purpose of your Title V permit, the following section contains state-only enforceable terms and conditions.
GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1: Facility Inspection by the Department
Applicable State Requirement: ECL 19-0305

Item 1.1:
The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

Item 1.2:
The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

Item 1.3:
A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Condition 2: Relationship of this Permit to Other Department Orders and Determinations
Applicable State Requirement: ECL 3-0301 (2) (m)

Item 2.1:
Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Condition 3: Applications for permit renewals, modifications and transfers
Applicable State Requirement: 6 NYCRR 621.11

Item 3.1:
The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item 3.2:
The permittee must submit a renewal application at least 180 days before the expiration of permits for 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 8 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 8 Headquarters
Division of Environmental Permits
6274 Avon-Lima Road
Avon, NY 14414-9519
(585) 226-2466
Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: ROCHESTER SILVER WORKS LLC
725 W RIDGE RD
PO BOX 15397
ROCHESTER, NY 14615-5397

Facility: ROCHESTER SILVER WORKS
EASTMAN BUSINESS PARK|BUILDINGS 101, 110, 117, 138, 143, 144, 145, & 156
Rochester, NY 14652-3639

Authorized Activity By Standard Industrial Classification Code:
3341 - SECONDARY NONFERROUS METALS

Permit Effective Date: 06/14/2019
Permit Expiration Date: 06/13/2024
PAGE LOCATION OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

8 1 6 NYCRR 200.6: Acceptable Ambient Air Quality
9 2 6 NYCRR 201-6.4 (a) (7): Fees
9 3 6 NYCRR 201-6.4 (c): Recordkeeping and Reporting of Compliance Monitoring
9 4 6 NYCRR 201-6.4 (c) (2): Records of Monitoring, Sampling, and Measurement
10 5 6 NYCRR 201-6.4 (c) (3) (ii): Compliance Certification
12 6 6 NYCRR 201-6.4 (e): Compliance Certification
14 7 6 NYCRR 202-2.1: Compliance Certification
14 8 6 NYCRR 202-2.5: Recordkeeping requirements
14 9 6 NYCRR 215.2: Open Fires - Prohibitions
16 10 6 NYCRR 200.7: Maintenance of Equipment
16 11 6 NYCRR 201-1.7: Recycling and Salvage
16 12 6 NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
16 13 6 NYCRR 201-3.2 (a): Exempt Sources - Proof of Eligibility
17 14 6 NYCRR 201-3.3 (a): Trivial Sources - Proof of Eligibility
17 15 6 NYCRR 201-6.4 (a) (4): Requirement to Provide Information
17 16 6 NYCRR 201-6.4 (a) (8): Right to Inspect
18 17 6 NYCRR 201-6.4 (f) (6): Off Permit Changes
18 18 6 NYCRR 202-1.1: Required Emissions Tests
19 20 40 CFR 82, Subpart F: Recycling and Emissions Reduction
19 21 6 NYCRR Subpart 201-6: Emission Unit Definition
20 22 6 NYCRR 201-6.4 (d) (4): Progress Reports Due Semiannually
20 23 6 NYCRR 201-6.4 (f): Compliance Certification
24 24 6 NYCRR Part 207: Submittal of Episode Action Plans
25 25 6 NYCRR 211.2: Visible Emissions Limited
25 26 6 NYCRR 212-1.6 (a): Compliance Certification
27 27 6 NYCRR Subpart 212-2: Compliance Certification
28 28 6 NYCRR 212-2.4 (b): Compliance Certification
30 29 6 NYCRR 231-11.2 (b): Compliance Certification
31 30 40 CFR 61, NESHAP Subpart M: National Emission Standard for Asbestos
31 31 40 CFR 64.7: Compliance Certification
33 32 40 CFR 64.8: Compliance Certification
34 33 40 CFR 64.9: Compliance Certification

Emission Unit Level

35 34 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
37 35 6 NYCRR Subpart 201-6: Process Definition By Emission Unit

EU=F-AC001
41 36 6 NYCRR Part 226: Compliance Certification

43 37 6 NYCRR 212-3.1 (c) (3): Compliance Certification
44 38 6 NYCRR 212-3.1 (c) (3): Compliance Certification
EU=U-00063,EP=10105,Proc=H31,ES=10112
44 39 6 NYCRR 212-2.4 (b): Compliance Certification

EU=U-00063,EP=10105,Proc=H31,ES=101AB
45 40 6 NYCRR 212-2.4 (b): Compliance Certification

EU=U-00063,EP=101A2,Proc=H29,ES=10115
46 41 6 NYCRR 212-2.4 (b): Compliance Certification
48 42 6 NYCRR 212-2.4 (b): Compliance Certification

48 43 6 NYCRR Subpart 212-2: Compliance Certification
50 44 6 NYCRR 212-3.1 (c) (3): Compliance Certification
51 45 6 NYCRR 212-3.1 (c) (4) (i): Compliance Certification
52 46 40CFR 52.21, Subpart A: Compliance Certification
52 47 40CFR 52.21, Subpart A: Compliance Certification
53 48 40CFR 52.21, Subpart A: Compliance Certification
54 49 40CFR 52.21, Subpart A: Compliance Certification
55 50 40CFR 63.7540(a), Subpart DDDDD: Compliance Certification

57 51 6 NYCRR 212-2.4 (b): Compliance Certification

58 52 6 NYCRR 212-1.6 (a): Compliance Certification

EU=U-00063,EP=11002,Proc=H33,ES=11003
59 53 6 NYCRR 212-3.1 (c) (3): Compliance Certification

EU=U-00078,EP=110C6,Proc=H38,ES=110AQ
60 54 6 NYCRR 212-1.5 (d): Compliance Certification
61 55 6 NYCRR 212-3.1 (c) (4) (iii): Compliance Certification

EU=U-00078,EP=110D0,Proc=H43,ES=11009
62 56 6 NYCRR 212-2.4 (b): Compliance Certification

EU=U-00078,EP=110D1,Proc=H43,ES=11006
62 57 6 NYCRR 212-2.4 (b): Compliance Certification

EU=U-00078,EP=110D2,Proc=H43,ES=11007
63 58 6 NYCRR 212-2.4 (b): Compliance Certification

64 59 6 NYCRR 212-2.4 (b): Compliance Certification

STATE ONLY ENFORCEABLE CONDITIONS
Facility Level
66 60 ECL 19-0301: Contaminant List
69 61 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
70 62 6 NYCRR 211.1: Air pollution prohibited
70 63 6 NYCRR 231-11.2 (c): Compliance Demonstration

Air Pollution Control Permit Conditions
Renewal 1 Page 3 FINAL
Emission Unit Level

<table>
<thead>
<tr>
<th>EU=U-00063, EP=101A2, Proc=H29, ES=10102</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU=U-00063, EP=101A2, Proc=H29, ES=10115</td>
</tr>
<tr>
<td>EU=U-00063, EP=110A1, Proc=H34, ES=11005</td>
</tr>
<tr>
<td>EU=U-00063, EP=110A1, Proc=H34, ES=110AE</td>
</tr>
</tbody>
</table>

| 72 | 64 | 6 NYCRR 212-2.3 (b): Compliance Demonstration |
| 73 | 65 | 6 NYCRR 212-2.3 (b): Compliance Demonstration |
| 73 | 66 | 6 NYCRR 212-2.3 (b): Compliance Demonstration |
| 74 | 67 | 6 NYCRR 212-2.3 (b): Compliance Demonstration |
| 75 | 68 | 6 NYCRR 212-2.3 (b): Compliance Demonstration |
| 75 | 69 | 6 NYCRR 212-2.1: Compliance Demonstration |
| 77 | 70 | 6 NYCRR 212-2.3 (b): Compliance Demonstration |
| 77 | 71 | 6 NYCRR 212-2.3 (b): Compliance Demonstration |
| 78 | 72 | 6 NYCRR 212-2.3 (b): Compliance Demonstration |
| 80 | 73 | 6 NYCRR 212-2.3 (b): Compliance Demonstration |
| 80 | 74 | 6 NYCRR 212-2.3 (b): Compliance Demonstration |
| 81 | 75 | 6 NYCRR 212-2.3 (b): Compliance Demonstration |
| 82 | 76 | 6 NYCRR 212-2.3 (b): Compliance Demonstration |
| 83 | 77 | 6 NYCRR 212-2.3 (b): Compliance Demonstration |
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. When additional applicable requirements under the act become applicable to a title V facility with a remaining permit term of 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 the 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 section 201-6.6 of this Subpart.

ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

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

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

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

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

**Item K: Permit Exclusion - ECL 19-0305**
The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

**Item L: Federally Enforceable Requirements - 40 CFR 70.6 (b)**
All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

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

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

**Condition 1: Acceptable Ambient Air Quality**
Effective between the dates of 06/14/2019 and 06/13/2024

**Applicable Federal Requirement: 6 NYCRR 200.6**

**Item 1.1:**
Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where
contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

**Condition 2:** Fees  
**Effective between the dates of 06/14/2019 and 06/13/2024**

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

**Item 2.1:**  
The owner and/or operator of a stationary source shall pay fees to the Department consistent with the fee schedule authorized by ECL 72-0303.

**Condition 3:** Recordkeeping and Reporting of Compliance Monitoring  
**Effective between the dates of 06/14/2019 and 06/13/2024**

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

**Item 3.1:**  
The following information must be included in any required compliance monitoring records and reports:

(i) The date, place, and time of sampling or measurements;

(ii) The date(s) analyses were performed;

(iii) The company or entity that performed the analyses;

(iv) The analytical techniques or methods used including quality assurance and quality control procedures if required;

(v) The results of such analyses including quality assurance data where required; and

(vi) The operating conditions as existing at the time of sampling or measurement.

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

**Condition 4:** Records of Monitoring, Sampling, and Measurement  
**Effective between the dates of 06/14/2019 and 06/13/2024**

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

**Item 4.1:**  
Compliance monitoring and recordkeeping shall be conducted according to the terms and conditions contained in this permit and shall follow all quality assurance requirements found in applicable regulations. Records of all monitoring data and support information must be retained for a period of at least 5 years from the date of the monitoring, sampling, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all
reports required by the permit.

**Condition 5: Compliance Certification**

**Effective between the dates of 06/14/2019 and 06/13/2024**

**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 60 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.

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
The initial report is due 8/29/2019.
Subsequent reports are due every 6 calendar month(s).

**Condition 6: Compliance Certification**
**Effective between the dates of 06/14/2019 and 06/13/2024**

**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 60 days after the anniversary date of four consecutive calendar quarters. The first report is due 60 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 – Air Compliance Branch
USEPA Region 2 DECA/ACB
290 Broadway, 21st Floor
New York, NY 10007

The address for the RAPCE is as follows:

Regional Air Pollution Control Engineer
NYSDEC Region 8 Headquarters
6274 East Avon-Lima Road
Avon, NY 14414-9519

The address for the BQA is as follows:

NYSDEC
Bureau of Quality Assurance
Condition 7: Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 202-2.1

Item 7.1:
The Compliance Certification activity will be performed for the Facility.

Item 7.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year. Statements are to be mailed to: New York State Department of Environmental Conservation, Division of Air Resources, Bureau of Air Quality Planning, 625 Broadway, Albany NY 12233-3251

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due by April 15th for previous calendar year

Condition 8: Recordkeeping requirements
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 202-2.5

Item 8.1:
(a) The following records shall be maintained for at least five years:

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

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

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

Condition 9: Open Fires - Prohibitions
Effective between the dates of 06/14/2019 and 06/13/2024
Applicable Federal Requirement: 6 NYCRR 215.2

Item 9.1:
Except as allowed by Title 6 NYCRR Section 215.3, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

Item 9.2
Per Section 215.3, burning in an open fire, provided it is not contrary to other law or regulation, will be allowed as follows:
(a) On-site burning in any town with a total population less than 20,000 of downed limbs and branches (including branches with attached leaves or needles) less than six inches in diameter and eight feet in length between May 15th and the following March 15th. For the purposes of this subdivision, the total population of a town shall include the population of any village or portion thereof located within the town. However, this subdivision shall not be construed to allow burning within any village.
(b) Barbecue grills, maple sugar arches and similar outdoor cooking devices when actually used for cooking or processing food.
(c) Small fires used for cooking and camp fires provided that only charcoal or untreated wood is used as fuel and the fire is not left unattended until extinguished.
(d) On-site burning of agricultural wastes as part of a valid agricultural operation on contiguous agricultural lands larger than five acres actively devoted to agricultural or horticultural use, provided such waste is actually grown or generated on those lands and such waste is capable of being fully burned within a 24-hour period.
(e) The use of liquid petroleum fueled smudge pots to prevent frost damage to crops.
(f) Ceremonial or celebratory bonfires where not otherwise prohibited by law, provided that only untreated wood or other agricultural products are used as fuel and the fire is not left unattended until extinguished.
(g) Small fires that are used to dispose of a flag or religious item, and small fires or other smoke producing process where not otherwise prohibited by law that are used in connection with a religious ceremony.
(h) Burning on an emergency basis of explosive or other dangerous or contraband materials by police or other public safety organization.
(i) Prescribed burns performed according to Part 194 of this Title.
(j) Fire training, including firefighting, fire rescue, and fire/arson investigation training, performed under applicable rules and guidelines of the New York State Department of State's Office of Fire Prevention and Control. For fire training performed on acquired structures, the structures must be emptied and stripped of any material that is toxic, hazardous or likely to emit toxic smoke (such as asbestos, asphalt shingles and vinyl siding or other vinyl products) prior to burning and must be at least 300 feet from other occupied structures. No more than one structure per lot or within a 300 foot radius (whichever is bigger) may be burned in a training exercise.
(k) Individual open fires as approved by the Director of the Division of Air Resources as may be required in response to an outbreak of a plant or animal disease upon request by the commissioner of the Department of Agriculture and Markets, or for the destruction of invasive plant and insect species.
(l) Individual open fires that are otherwise authorized under the environmental conservation law, or by rule or regulation of the Department.

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

The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements only if effectuated during the reporting period. [NOTE: The corresponding annual compliance certification for those conditions not effectuated during the reporting period shall be specified as "not applicable".]

Condition 10: Maintenance of Equipment
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 200.7

Item 10.1:
Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications, required to operate such device effectively.

Condition 11: Recycling and Salvage
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 201-1.7

Item 11.1:
Where practical, the owner or operator of an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of the ECL.

Condition 12: Prohibition of Reintroduction of Collected Contaminants to the air
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 201-1.8

Item 12.1:
No person shall unnecessarily remove, handle or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

Condition 13: Exempt Sources - Proof of Eligibility
Effective between the dates of 06/14/2019 and 06/13/2024

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

Item 13.1:
The owner or operator of an emission source or activity that is listed as being exempt may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all records necessary for demonstrating compliance with this Subpart on-site for a period of five years, and make them available to representatives of the department upon request.
Condition 14: Trivial Sources - Proof of Eligibility  
Effective between the dates of 06/14/2019 and 06/13/2024  
Applicable Federal Requirement: 6 NYCRR 201-3.3 (a)  

Item 14.1:  
The owner or operator of an emission source or activity that is listed as being trivial in this Section may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all required records on-site for a period of five years and make them available to representatives of the department upon request.

Condition 15: Requirement to Provide Information  
Effective between the dates of 06/14/2019 and 06/13/2024  
Applicable Federal Requirement: 6 NYCRR 201-6.4 (a) (4)  

Item 15.1:  
The owner and/or operator shall furnish to the department, within a reasonable time, any information that the department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permitee shall also furnish to the department copies of records required to be kept by the permit or, for information claimed to be confidential, the permitee may furnish such records directly to the administrator along with a claim of confidentiality, if the administrator initiated the request for information or otherwise has need of it.

Condition 16: Right to Inspect  
Effective between the dates of 06/14/2019 and 06/13/2024  
Applicable Federal Requirement: 6 NYCRR 201-6.4 (a) (8)  

Item 16.1:  
The department or an authorized representative shall be allowed upon presentation of credentials and other documents as may be required by law to:  

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

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

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

(iv) sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
Condition 17: Off Permit Changes
Effective between the dates of 06/14/2019 and 06/13/2024

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

Item 17.1:
No permit revision will be required for operating changes that contravene an express permit term, provided that such changes would not violate applicable requirements as defined under this Part or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting, or compliance certification permit terms and conditions. Such changes may be made without requiring a permit revision, if the changes are not modifications under any provision of title I of the act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions) provided that the facility provides the administrator and the department with written notification as required below in advance of the proposed changes within a minimum of seven days. The facility owner or operator, and the department shall attach each such notice to their copy of the relevant permit.

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

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

Condition 18: Required Emissions Tests
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 202-1.1

Item 18.1:
For the purpose of ascertaining compliance or non-compliance with any air pollution control code, rule or regulation, the commissioner may require the person who owns such air contamination source to submit an acceptable report of measured emissions within a stated time.

Condition 19: Accidental release provisions.
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 40 CFR Part 68

Item 19.1:
If a chemical is listed in Tables 1,2,3 or 4 of 40 CFR §68.130 is present in a process in quantities greater than the threshold quantity listed in Tables 1,2,3 or 4, the following requirements will apply:

a) The owner or operator shall comply with the provisions of 40 CFR Part 68 and;
b) The owner or operator shall submit at the time of permit issuance (if not previously submitted) one of the following, if such quantities are present:

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

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

Risk Management Plan Reporting Center  
C/O CSC  
8400 Corporate Dr  
Carrollton, Md.  20785

Condition 20: Recycling and Emissions Reduction  
Effective between the dates of 06/14/2019 and 06/13/2024

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 06/14/2019 and 06/13/2024

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: F-AC001  
Emission Unit Description:  
FACILITY EMISSION UNIT FOR SOLVENT METAL PARTS CLEANERS, AND ASSOCIATED FUGITIVE EMISSIONS.

Building(s): 110  
143

Item 21.2: The facility is authorized to perform regulated processes under this permit for:  
Emission Unit: U-00019  
Emission Unit Description:  
SILVER FLOW SILVER NITRATE OPERATIONS AND
ASSOCIATED FUGITIVE EMISSIONS

Building(s): 143

**Item 21.3:**
The facility is authorized to perform regulated processes under this permit for:

- **Emission Unit:** U-00063
- **Emission Unit Description:**
  SILVER FLOW REFINING AND PURIFICATION OPERATIONS WITH ASSOCIATED FUGITIVE EMISSIONS

  Building(s): 101
  110

**Item 21.4:**
The facility is authorized to perform regulated processes under this permit for:

- **Emission Unit:** U-00078
- **Emission Unit Description:**
  SILVER FLOW WASHING, DRYING AND WATER TREATMENT OPERATIONS AND ASSOCIATED FUGITIVE EMISSIONS

  Building(s): 110
  156

**Condition 22:**  Progress Reports Due Semiannually
Effective between the dates of 06/14/2019 and 06/13/2024

**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:

(i) dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

(ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

**Condition 23:**  Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

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

**Item 23.1:**
The Compliance Certification activity will be performed for the Facility.

**Item 23.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description: Operational Flexibility Plan

I. Protocol Objective

The objective of this condition is to maximize operational flexibility for the facility by building into the Title V Permit the capability to make certain changes using a protocol. As provided under 6 NYCRR Part 201-6.4(f)(2), changes made under an approved protocol are not subject to the Title V permit modification provisions under 6 NYCRR Part 201-6.6.

II. Applicability

A. The following types of changes may be reviewed under this protocol, except as prohibited under II.B or III.A.c below:

1. New emission sources,
2. 6 NYCRR Part 200 "modifications",
3. Emission point relocations, and
4. Changes that otherwise could be handled under the minor permit modification process in 6 NYCRR Part 201-6.6.

B. This protocol does not apply to the following changes:

1. Any project defined as major in 6NYCRR 621.4(g);
2. Any significant permit modification as that term is defined in 6 NYCRR 201-6.6(d); or
3. Any change that would exceed the emissions allowable under the permit whether expressed as a rate or in terms of total emissions.

III. Protocol

A. Criteria

1. The facility shall evaluate changes reviewed under this protocol in accordance with the following criteria:

   a. All underlying federal and state requirements with which the new or changed emission source must comply must exist in the Title V permit. The new or changed source will be associated with an existing emissions unit, process, emission source or emission point that has the
necessary regulatory citations. Existing permit conditions may be amended to reference or include the new or changed emission source and any related information, and/or, subject to DEC approval, new conditions proposed, to provide the appropriate monitoring parameters.

b. Any new or changed emission source shall not be part of a source project that results in a significant net emissions increase that exceeds the NSR thresholds identified in 6 NYCRR Part 231-2 or 40 CFR 52.21. The facility will submit documentation of major NSR program non-applicability for NYSDEC review and approval consistent with the advance notification provisions of Section III.B. below.

c. The facility shall not use the protocol to make physical changes or changes in the method of operation of existing emission sources that would require a new federally enforceable cap either to avoid major New Source Review requirements or to address and comply with other Clean Air Act requirements such as RACT. Such changes must be addressed via the significant permit modification provisions.

B. Notification Requirements for Changes Reviewed under Protocol

1. The facility shall notify the Department in writing at least 30 calendar days in advance of making any changes reviewed under the protocol which meet the criteria above. When the change is to a source subject to a federally applicable requirement, the EPA administrator shall be notified in a similar manner.

2. Notifications made in accordance with this protocol will include the following documentation:

   a. Identification of the Title V permit emission unit, process(es), emission sources, and emission points affected by the proposed change with applicable revisions shown in a revised Emission Unit Matrix;

   b. Description of the proposed change;

   c. If appropriate, the identification and description of emissions control technology and compliance terms;

   d. Documentation of the project's or emission source's compliance with respect to all state and/or federally applicable requirements according to an established procedure which includes the following steps:
i. For new emission sources, identify all contaminants and calculate the emission rate potential and maximum projected actual annual emission rates after the proposed change. For changes to existing emission sources, emission rate potential and maximum projected actual annual emission rates shall be provided for all contaminants affected by the change.

ii. Indicate the environmental rating for each contaminant identified in III.B.2.d.i as previously established by the Department or proposed based on the current DAR-1 Ambient Guideline Concentration Table or toxicological review.

iii. Provide the rationale for determining that major NSR does not apply which may include: 1) an explanation that the change is not a source project or modification under 40 CFR 52.21, 2) calculations that demonstrate that the emissions increase from the project alone is not significant or, 3) calculations that demonstrate that the net emissions increase for the contemporaneous period is not significant.

iv. Provide the necessary information for a facility-wide ambient impact analysis, including the maximum projected actual annual emission rates consistent with the permit.

v. Identify and evaluate the applicability of all regulations likely to be triggered by the new or changed emission source, using the emissions information, environmental ratings, modeling results and knowledge of operations.

e. Any other relevant information used for the evaluation of the proposed project or emission source under the Protocol.

C. Review and Approval of Changes

1. The facility will be permitted to proceed with the change 30 days from the Department's receipt of the notification and/or additional information upon prior Departmental approval, whichever is first, unless the Department determines that a more detailed review (in accordance with #3 below) or a permit modification (in accordance with #2 below) is required.
2. The Department may require a permit modification, in order to impose new applicable requirements or additional permit conditions if it determines that changes proposed pursuant to notification do not meet the criteria under III.A or that the change may have a significant air quality impact or be otherwise potentially significant under SEQRA (6NYCRR Part 617).

3. The Department may require that the permittee not undertake the proposed change until the Department completes a more detailed review of the proposed change, which may include potential air quality impacts and/or applicable requirements. The Department's determination shall include a listing of information required for further review, if necessary.

4. The Department shall respond to the permittee in writing with a determination under #2 or 3 above within 15 days of receipt of the notification and/or additional information from the permittee.

D. Additional Compliance Obligations for Changes Made Under this Protocol

1. Upon commencement of the change, the facility shall comply with all applicable requirements and permit conditions, including any amended or proposed conditions in accordance with III.A.1.a above.

2. On a semi-annual basis, the facility shall provide a summary of the changes made in accordance with this protocol during the corresponding period and a statement of the compliance status of each.

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 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

Condition 24: Submittal of Episode Action Plans
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR Part 207

Item 24.1:
An episode action plan must be submitted for approval by the Department in accordance with the requirements of 6NYCRR Part 207. The plan shall contain detailed steps which will be taken by the facility to reduce air contaminant emissions during each stage of an air pollution episode. Once approved, the facility shall take whatever actions are prescribed by the episode
Condition 25: Visible Emissions Limited
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 211.2

Item 25.1:
Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

Condition 26: Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 212-1.6 (a)

Item 26.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Process</th>
<th>Emission Point</th>
<th>Emission Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>U-00019</td>
<td>H39</td>
<td>14303</td>
<td>143AB</td>
</tr>
<tr>
<td>U-00063</td>
<td>H29</td>
<td>101A2</td>
<td>101AJ</td>
</tr>
<tr>
<td>U-00063</td>
<td>H31</td>
<td>10109</td>
<td>101AD</td>
</tr>
<tr>
<td>U-00063</td>
<td>H32</td>
<td>101A1</td>
<td>101AF</td>
</tr>
<tr>
<td>U-00063</td>
<td>H33</td>
<td>11002</td>
<td>110AC</td>
</tr>
<tr>
<td>U-00063</td>
<td>H34</td>
<td>110A1</td>
<td>110AE</td>
</tr>
<tr>
<td>U-00078</td>
<td>H30</td>
<td>15602</td>
<td>156AA</td>
</tr>
<tr>
<td>U-00078</td>
<td>H37</td>
<td>110C7</td>
<td>110AR</td>
</tr>
<tr>
<td>U-00078</td>
<td>H43</td>
<td>110D0</td>
<td>110AU</td>
</tr>
<tr>
<td>U-00078</td>
<td>H43</td>
<td>110D1</td>
<td>110AV</td>
</tr>
</tbody>
</table>
Item 26.2:
Compliance Certification shall include the following monitoring:

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

Monitoring Description:
No person shall cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source, except only the emission of uncombined water. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time during facility operation.

The permittee will conduct observations of visible emissions from the emission unit, process, etc. to which this condition applies at the monitoring frequency stated below while the process is in operation. The permittee will investigate, in a timely manner, any instance where there is cause to believe that visible emissions have the potential to exceed the opacity standard.

The permittee shall investigate the cause, make any necessary corrections, and verify that the excess visible emissions problem has been corrected. If visible emissions with the potential to exceed the standard continue, the permittee will conduct a Method 9 assessment within the next operating day of the sources associated with the potential noncompliance to determine the degree of opacity and will notify the NYSDEC if the method 9 test indicates that the opacity standard is not met.

Records of visible emissions observations (or any follow-up method 9 tests), investigations and corrective actions will be kept on-site. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: Method 9
Monitoring Frequency: SEMI-ANNUALLY
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

Condition 27: Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR Subpart 212-2

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

Emission Unit: U-00019

Emission Unit: U-00063

Emission Unit: U-00078

Item 27.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
For emissions of non-criteria air contaminants not specifically identified in this permit, the facility owner or operator shall meet the requirements specified in Subdivision 212-2.3(b), Table 4 “Degree of Air Cleaning Required for Non-Criteria Air Contaminants” or Subdivision 212-2.2 Table 2 “High Toxicity Air Contaminant List” (HTAC) as described below:

1. Contaminants that have been given an Environmental Rating of “C”, shall be limited to an emission rate potential (ERP) less than 10 lbs/hr., have predicted ambient maximum off-site air concentrations less than the respective annual and short-term guideline concentrations (AGC & SGC) or, if listed as an HTAC, do not exceed the Mass Emission Limits in 212-2.2 Table 2.

2. Contaminants that have been given an Environmental Rating of “B”, shall be limited to an emission rate potential (ERP) less than 10 lbs/hr., have predicted ambient maximum off-site air concentrations less than the respective annual and short-term guideline concentrations (AGC & SGC) or, if listed as an HTAC, do not exceed the Mass Emission Limits in 212-2.2 Table 2.

3. Contaminants that have been given an Environmental
Rating of “A”, shall be limited to an emission rate potential (ERP) less than 0.1 lbs/hr., have predicted ambient maximum off-site air concentrations less than the respective annual and short-term guideline concentrations (AGC & SGC) or, if listed as an HTAC, do not exceed the Mass Emission Limits in 212-2.2 Table 2.

Based on air dispersion modeling performed for the Title V renewal application the facility shall, on an annual basis, review all process operations to determine if any changes have occurred that would warrant an update to the approved modeling analysis. If an update to the prior Department approved modeling analysis is not necessary, a letter communicating such a determination shall be submitted to the Department.

The facility must maintain records to demonstrate that none of these contaminants have had an increase in their ERP or actual annual emissions. Any such increase may require a re-evaluation of its environmental rating and review of the facility wide AGC & SGC.

A Department approved modeling analysis shall include at a minimum the following information:

- Emission Unit:
- Emission Point
- Contaminant
- CAS number
- Environmental Rating
- The Department's stated limits for the AGC and SGC values
- ERP (Emission Rate Potential)
- Annual Emission Rate
- Maximum offsite AGC and SGC concentrations

Monitoring Frequency: ANNUALLY
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 28:** Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

**Applicable Federal Requirement:** 6 NYCRR 212-2.4 (b)

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

- Emission Unit: U-00019 Emission Point: 14302
  Process: H39 Emission Source: 143AB
  Emission Unit: U-00019 Emission Point: 14303
Regulated Contaminant(s):
   CAS No: 0NY075-00-0  PARTICULATES

Item 28.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
For Solid Particulates that have been given an environmental rating of B or C, no person will cause or allow emissions of solid particulates that exceed 0.050 grains of particulates per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis. The Department reserves the right to perform or require the performance of a Method 5 emissions evaluation at any time. The permittee will conduct compliance verifications at the monitoring frequency stated below. These
verifications include review of pertinent information
relating to particulate emissions of the source, including
but not limited to production rate, process material, air
flow rate, control equipment parameters, visible
emissions, etc. and any impact they may have in how the
environmental rating of B or C was
determined.

Additionally, the permittee will investigate, in a timely
manner, any instance where there is cause to believe that
particulate emissions above 0.050 gr/dscf are occurring or
have occurred. These instances include but are not limited
to process upsets, control device malfunctions or
problems, abnormal visible emissions, complaints, etc. The
permittee shall determine the cause of any exceedance,
make the necessary correction, and verify that the excess
emissions problem has been corrected.

Records of these verifications, investigations and
corrective actions will be kept on-site and made available
to the Department upon request.

Reference Test Method: Method 5
Monitoring Frequency: ANNUALLY
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 29: Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 231-11.2 (b)

Item 29.1:
The Compliance Certification activity will be performed for the Facility.

Item 29.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
For a modification where the projected actual annual
emissions (rather than the potential to emit) is used to
determine the project emission potential, and (1) the
project emission potential is less than 50 percent of the
applicable significant project threshold in Table 3, Table
4 or Table 6 of Subpart 231-13 of Part 231, or (2) the
project emission potential when added to emissions
excluded in accordance with 231-4.1(b)(40)(i)(c) is less
than 50 percent of the applicable significant project
threshold in Table 3, Table 4 or Table 6 of Subpart
231-13, the facility owner or operator, in addition to
complying with any requirements under 6 NYCRR Part 201,
must maintain the following information for a minimum of
five years:

(1) A description of the modification.

(2) An identification of each new or modified emission source(s) including the associated processes and emission unit.

(3) The calculation of the project emission potential for each modified emission source(s) including supporting documentation.

(4) The date the modification commenced operation.

These recordkeeping requirements apply to exempt and trivial activities but do not affect their exempt or trivial permitting status under 6 NYCRR Part 201-3. The facility must submit these records to the Department, upon the Department's request.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 30: National Emission Standard for Asbestos
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 40CFR 61, NESHAP Subpart M

Item 30.1: The permittee shall comply with all applicable provisions of 40 CFR Part 61, Subpart M.

Condition 31: Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 40 CFR 64.7

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

Item 31.2: Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
(a) Commencement of operation. Rochester Silver Works shall conduct the monitoring required under this part upon issuance of the Title V Permit.

(b) Proper maintenance. At all times, the facility shall maintain the monitoring, including but not limited to,
maintaining necessary parts for routine repairs of the monitoring equipment.

(c) Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), Rochester Silver Works shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. Rochester Silver Works shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(d) Response to excursions or exceedances.
   (1) Upon detecting an excursion or exceedance, the facility shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

   (2) Determination of whether Rochester Silver Works has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device,
associated capture system, and the process.

(e) Documentation of need for improved monitoring. If the facility identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: ANNually (CALendar)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 12 calendar month(s).

Condition 32: Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 40 CFR 64.8

Item 32.1:
The Compliance Certification activity will be performed for the Facility.

Item 32.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Based on the results of a determination made under §64.7(d)(2), the Administrator or the permitting authority may require Rochester Silver Works to develop and implement a Quality Improvement Plan (QIP) in accordance with the requirements of §64.8.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: ANNually (CALendar)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 12 calendar month(s).

Condition 33: Compliance Certification
Air Pollution Control Permit Conditions
Renewal 1 Page 34 FINAL

Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 40 CFR 64.9

Item 33.1:
The Compliance Certification activity will be performed for the Facility.

Item 33.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Rochester Silver Works shall submit monitoring reports to the permitting authority in accordance with 40 CFR 70.6(a)(3)(iii). A report for monitoring shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable:

(i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(iii) A description of the actions taken to implement a Quality Improvement Plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

Rochester Silver Works shall comply with the recordkeeping requirements specified in 40 CFR 70.6(a)(3)(ii). The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche,
provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 12 calendar month(s).

**** Emission Unit Level ****

Condition 34: Emission Point Definition By Emission Unit
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 34.1:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-00019

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Height (ft)</th>
<th>Diameter (in)</th>
<th>NYTMN (km)</th>
<th>NYTME (km)</th>
<th>Building</th>
</tr>
</thead>
<tbody>
<tr>
<td>14302</td>
<td>85</td>
<td>3</td>
<td>4786.321</td>
<td>283.129</td>
<td>143</td>
</tr>
<tr>
<td>14303</td>
<td>72</td>
<td>9</td>
<td>4786.321</td>
<td>283.129</td>
<td>143</td>
</tr>
</tbody>
</table>

Item 34.2:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-00063

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Height (ft)</th>
<th>Diameter (in)</th>
<th>NYTMN (km)</th>
<th>NYTME (km)</th>
<th>Building</th>
</tr>
</thead>
<tbody>
<tr>
<td>10105</td>
<td>97</td>
<td>30</td>
<td>4786.321</td>
<td>293.129</td>
<td>101</td>
</tr>
<tr>
<td>10109</td>
<td>77</td>
<td>28</td>
<td>4786.321</td>
<td>283.129</td>
<td>101</td>
</tr>
<tr>
<td>101A1</td>
<td>9</td>
<td>20</td>
<td>4786.321</td>
<td>283.129</td>
<td>101</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Height (ft)</th>
<th>Diameter (in)</th>
<th>NYTMN (km)</th>
<th>NYTME (km)</th>
<th>Building</th>
</tr>
</thead>
<tbody>
<tr>
<td>101A2</td>
<td>96</td>
<td>30</td>
<td>4786.321</td>
<td>283.129</td>
<td>101</td>
</tr>
</tbody>
</table>
Item 34.3:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit:     U-00078

Emission Point:     11004
Height (ft.): 10          Diameter (in.): 24
NYTMN (km.): 4786.321   NYTME (km.): 283.129 Building: 110

Emission Point:     110B7
Height (ft.): 29          Diameter (in.): 48
NYTMN (km.): 4786.321   NYTME (km.): 283.129 Building: 110
Removal Date: 11/05/2013

Emission Point:     110C0
Height (ft.): 20          Diameter (in.): 3
NYTMN (km.): 4786.321   NYTME (km.): 283.129 Building: 110

Emission Point:     110C5
Height (ft.): 37          Diameter (in.): 6
NYTMN (km.): 4786.321   NYTME (km.): 283.129 Building: 110

Emission Point:     110C6
Height (ft.): 36          Diameter (in.): 22
NYTMN (km.): 4786.321   NYTME (km.): 283.129 Building: 110

Emission Point:     110C7
Height (ft.): 24          Diameter (in.): 2
NYTMN (km.): 4786.321   NYTME (km.): 283.129 Building: 110

Emission Point:     110C8
Height (ft.): 22          Diameter (in.): 2
NYTMN (km.): 4786.321   NYTME (km.): 283.129 Building: 110

Emission Point:     110C9
Air Pollution Control Permit Conditions

Condition 35: Process Definition By Emission Unit
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 35.1:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: F-AC001
Process: 226
Source Classification Code: 4-01-003-36
Process Description:
SOLVENT METAL CLEANING MACHINES WITH 6
NYCRR PART 226 APPLICABILITY WHICH WOULD
OTHERWISE BE EXEMPT OR TRIVIAL CONSISTENT
WITH PART 201-3.

Emission Source/Control: F0226 - Process

Item 35.2:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00019
Process: H39
Source Classification Code: 3-16-120-01
Process Description:
SILVER NITRATE MANUFACTURING AND
PURIFICATION OPERATIONS

Emission Source/Control: 14303 - Control
Control Type: WET SCRUBBER
Item 35.3:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00063
Process: H29  Source Classification Code: 3-16-150-01
Process Description:
SILVER RECOVERY ROASTING AND SMELTING
PROCESS SUBJECT TO NOX RACT

Emission Source/Control: 10102 - Control
Control Type: DIRECT FLAME AFTERBURNER
Removal Date: 11/21/2017

Emission Source/Control: 10104 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 10115 - Control
Control Type: WET SCRUBBER

Emission Source/Control: 101AI - Process
Emission Source/Control: 101AJ - Process

Item 35.4:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00063
Process: H31  Source Classification Code: 3-16-150-01
Process Description: SLAG MOLD POURING/Cooling, AND SILVER CASTING

Emission Source/Control: 10111 - Control
Control Type: MIST ELIMINATOR

Emission Source/Control: 10112 - Control
Control Type: WET SCRUBBER

Emission Source/Control: 101AB - Process
Emission Source/Control: 101AD - Process

Item 35.5:
This permit authorizes the following regulated processes for the cited Emission Unit:
Emission Unit: U-00063
Process: H32
Source Classification Code: 3-16-140-02
Process Description: SILVER CONTAINING ASH CONVEYANCE SYSTEM

Item 35.6:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00063
Process: H33
Source Classification Code: 3-16-160-02
Process Description: ELECTROLYTIC CELLS AND ASSOCIATED PROCESS TANKS USED IN THE RECOVERY OF SILVER WITH NOX.

Item 35.7:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00063
Process: H34
Source Classification Code: 3-16-160-03
Process Description: SILVER RECOVERY INDUCTION FURNACE OPERATIONS

Item 35.8:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00078
Process: H30
Source Classification Code: 5-03-007-02
Process Description: WATER TREATMENT OPERATIONS ASSOCIATED WITH SILVER RECOVERY WITH MISCELLANEOUS FUGITIVE EMISSION INCLUDING OPEN BASINS AND EMISSION SOURCES WITH VOC ERP < 3 LB/HR.
Emission Source/Control: 110AP - Process
Emission Source/Control: 110AT - Process
Emission Source/Control: 156AA - Process

**Item 35.9:**
This permit authorizes the following regulated processes for the cited Emission Unit:

- Emission Unit: U-00078
- Process: H37
- Source Classification Code: 3-16-130-02
- Process Description: NON-VOLATILE RAW MATERIAL STORAGE TANKS

Emission Source/Control: 110AL - Process
Emission Source/Control: 110AR - Process
Emission Source/Control: 110AS - Process

**Item 35.10:**
This permit authorizes the following regulated processes for the cited Emission Unit:

- Emission Unit: U-00078
- Process: H38
- Source Classification Code: 3-16-150-01
- Process Description: FILM WASH OPERATIONS. THESE WASHERS REMOVE COATINGS & EMULSIONS FROM FILM SCRAP PRODUCTS

Emission Source/Control: 110AQ - Process

**Item 35.11:**
This permit authorizes the following regulated processes for the cited Emission Unit:

- Emission Unit: U-00078
- Process: H41
- Source Classification Code: 3-16-150-04
- Process End Date: 11/5/2013
- Process Description:
  - EXHAUST HOOD ASSOCIATED WITH SILVER RECOVERY SAMPLING & DISPOSITION FROM PHOTOGRAPHIC OPERATIONS WITH VOC EMISSION RATE POTENTIAL (ERP) < 3 LBS/HR

Emission Source/Control: 110AJ - Process
Removal Date: 11/05/2013

**Item 35.12:**
This permit authorizes the following regulated processes for the cited Emission Unit:

- Emission Unit: U-00078
- Process: H43
- Source Classification Code: 3-16-050-04
- Process Description: FILM DRYING OPERATIONS EQUIPPED WITH DUST CONTROL
Emission Source/Control:   11006 - Control
Control Type: MAT OR PANEL FILTER

Emission Source/Control:   11007 - Control
Control Type: MAT OR PANEL FILTER

Emission Source/Control:   11008 - Control
Control Type: MAT OR PANEL FILTER

Emission Source/Control:   11009 - Control
Control Type: MAT OR PANEL FILTER

Emission Source/Control:   110AU - Process

Emission Source/Control:   110AV - Process

Emission Source/Control:   110AW - Process

Emission Source/Control:   110AX - Process

**Condition 36: Compliance Certification**

**Effective between the dates of 06/14/2019 and 06/13/2024**

**Applicable Federal Requirement:** 6 NYCRR Part 226

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

Emission Unit: F-AC001

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

**Item 36.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Requirements for Cold Cleaning Degreasers

A. Equipment Specifications
The following types of control equipment must be used when conducting cold cleaning degreasing, solvent metal cleaning when the internal volume of the unit is greater than 2 gallons:

(1) A cover which can be operated easily.
(2) An internal drainage facility (under cover), if practical. When cleaning a part that isn't practical to drain under cover, the part shall be drained in a way which minimizes emissions of VOC.
(3) A control system that limits VOC emissions to
those achievable with equipment having a freeboard ratio greater than or equal to 0.5, or a water cover when the solvent is insoluble in and heavier than water. This does not apply to remote reservoir degreasers.

(4) Solvent with a vapor pressure of 1.0 mm Hg, or less, at 20 C.

B. Operating Requirements:
When cold cleaning, the clean parts must be drained at least 15 seconds or until dripping ceases.

C. General Requirements:
A Person conducting solvent metal cleaning must:
(1) Store solvent in covered containers and transfer or dispose of waste solvent in such a manner that less than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere.
(2) Maintain equipment to minimize leaks and fugitive emissions.
(3) Display at the equipment location a conspicuous summary of proper operating procedures consistent with minimizing emissions of VOCs.
(4) Keep the degreaser cover closed except when:
   (a) parts are being placed into or being removed from the degreaser;
   (b) adding or removing solvent from the degreaser;
   (c) no solvent is in the degreaser; or
   (d) when manually cleaning metal parts in the cold cleaning degreaser.
(5) Create and retain a record of solvent consumption for five years. This record must be made available to the Department upon request.
(6) Not clean sponges, fabric, wood, leather, paper products and other absorbent materials in a degreaser.
(7) If using a cold cleaning degreaser that is subject to paragraph 226.3(a)(4), retain a record of the following three items for five years and provide these records to the Department upon request. An invoice, a bill of sale, a certificate covering multiple sales, a Material Safety Data Sheet (MSDS), or other appropriate documentation acceptable to the Department may be used to comply with this requirement.
   (a) the name and address of the solvent supplier;
   (b) the type of solvent including the product or vendor identification number; and
   (c) the vapor pressure of the solvent measured in mm Hg at 20 °C (68 °F).

D. Record Keeping Requirements:
Deviations from these requirements shall be recorded in a log maintained for this purpose within the corresponding
operating area and shall be appropriately identified in the semi-annual monitoring report. In addition, the log must note whether the cold cleaner is equipped with an internal drain as specified in item A(2) above.

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 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

Condition 37: Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 212-3.1 (c) (3)

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

Emission Unit: U-00019  Emission Point: 14302
Process: H39  Emission Source: 14303
Regulated Contaminant(s):
CAS No: 0NY210-00-0  OXIDES OF NITROGEN

Item 37.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
In order to ensure compliance with Part 212 NOx RACT and 40 CFR 64 CAM (Compliance Assurance Monitoring) requirements, this source shall not operate without the use of the aqueous NOx scrubber (Control Device 14303), which shall be operated with a water flow rate at or above 60 liters per minute. This setpoint shall be alarmed and when the water flow rate falls below 60 liters per minute, feed to the process shall be stopped immediately. Records of the specified alarms shall be kept on site and made available to the Department upon request. Monitoring devices shall be calibrated and maintained per manufacturer's recommendations and local operating procedures.

Parameter Monitored: VOLUMETRIC FLOW RATE
Lower Permit Limit: 60  liters per minute
Monitoring Frequency: CONTINUOUS
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 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

**Condition 38: Compliance Certification**
Effective between the dates of 06/14/2019 and 06/13/2024

**Applicable Federal Requirement:** 6 NYCRR 212-3.1 (c) (3)

**Item 38.1:**
The Compliance Certification activity will be performed for:

- Emission Unit: U-00019
- Emission Point: 14302
- Process: H39
- Emission Source: 14303

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

**Item 38.2:**
Compliance Certification shall include the following monitoring:

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

Monitoring Description:
In order to ensure compliance with Part 212 NOx RACT and 40 CFR 64 CAM (Compliance Assurance Monitoring) requirements, this source shall not operate without the use of the aqueous NOx scrubber (Control Device 14303), which shall be operated at a pressure drop equal to or less than 7.5 kPA. This setpoint shall be alarmed and when the pressure drop exceeds 7.5 kPA, feed to the process shall be stopped immediately. Records of the specified alarms shall be kept on site and made available to the Department upon request. Monitoring devices shall be calibrated and maintained per manufacturer's recommendations and local operating procedures.

Manufacturer Name/Model Number: Croll Reynold's 20T-14NOx
Parameter Monitored: PRESSURE DROP
Upper Permit Limit: 7.5 1000 newtons/square meter (kilopascals)
Monitoring Frequency: CONTINUOUS
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 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

**Condition 39: Compliance Certification**
Effective between the dates of 06/14/2019 and 06/13/2024
Applicable Federal Requirement: 6 NYCRR 212-2.4 (b)

Item 39.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-00063  Emission Point: 10105
Process: H31  Emission Source: 10112

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

Item 39.2:
Compliance Certification shall include the following monitoring:

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

Monitoring Description:
In order to maintain compliance with the 0.050 gr/dscf particulate limit, the venturi scrubber (Control Device 10112) shall be cleaned and maintained quarterly to ensure proper performance. When pouring slag, the pressure drop across the venturi shall be monitored and maintained at or above 9 inches of water. If the pressure drop falls below this level, the equipment shall be evaluated and maintenance performed as necessary. Venturi maintenance records shall be maintained on site and made available to the Department upon request.

Parameter Monitored: PRESSURE DROP
Lower Permit Limit: 9 inches of water
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING 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 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

Condition 40: Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 212-2.4 (b)

Item 40.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-00063  Emission Point: 10105
Process: H31  Emission Source: 101AB

Regulated Contaminant(s):
Item 40.2:
Compliance Certification shall include the following monitoring:

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

Monitoring Description:
In order to maintain compliance with the 0.050 gr/dscf particulate limit as demonstrated during 1998 stack tests, opacity from EP 10105 shall be limited to 20%. During the slag pouring process, the opacity shall be continuously monitored. If, during the slag pour, the 6 minute opacity average reaches 15%, the operator shall stop pouring. Pouring shall resume only after the 6 minute average opacity falls below 10%. At no point shall the 6 minute average opacity exceed 20%. For quality assurance of the opacity monitor, the facility shall follow the procedures of the approved monitoring plan and the opacity monitor shall be calibrated every 3 months. Records of the opacity monitoring and opacity monitor calibration shall be maintained on site and made available to the Department upon request.

Parameter Monitored: **OPACITY**
Upper Permit Limit: 20 percent
Reference Test Method: Method 9
Monitoring Frequency: **CONTINUOUS**
Averaging Method: **6-MINUTE AVERAGE (METHOD 9)**
Reporting Requirements: **SEMI-ANNUALLY (CALENDAR)**
Reports due 30 days after the reporting period.
The initial report is due 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

**Condition 41: Compliance Certification**
**Effective between the dates of 06/14/2019 and 06/13/2024**

**Applicable Federal Requirement:** 6 NYCRR 212-2.4 (b)

**Item 41.1:**
The Compliance Certification activity will be performed for:

<table>
<thead>
<tr>
<th>Emission Unit: U-00063</th>
<th>Emission Point: 101A2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process: H29</td>
<td>Emission Source: 10115</td>
</tr>
</tbody>
</table>

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

**Item 41.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: **RECORD KEEPING/MAINTENANCE PROCEDURES**
Monitoring Description:

In order to maintain compliance with the 0.050 grains/dscf particulate standard and 40 CFR 52.21 PSD (Prevention of Significant Deterioration) requirements when the roaster (ES 101AJ) is operating, the scrubber (ES 10115) shall be operated and maintained according to manufacturer's recommendations.

The permittee will conduct compliance verifications at the monitoring frequency stated below. These verifications include review of pertinent information relating to particulate emissions of the source, including but not limited to production rate, process material, air flow rate, control equipment parameters, visible emissions, opacity readings etc. The permittee will confirm that during source operation all pertinent parameters (whether used to directly calculate particulate emission rate, or as surrogates) are within ranges that ensure compliance with the particulate emission rate.

Additionally, the permittee will investigate, in a timely manner, any instance where there is cause to believe that particulate emissions above 0.050 gr/dscf are occurring or have occurred. These instances include but are not limited to process upsets, control device malfunctions or problems, abnormal visible emissions, complaints, high in-line opacity readings etc. The permittee shall determine the cause of any exceedance, make the necessary correction, and verify that the excess emissions problem has been corrected.

Records of these verifications, investigations and corrective actions will be kept on-site. In addition, records of equipment inspections, maintenance, calibration and other quality assurance procedures, shall be maintained on site and made available to the Department upon request.

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

The Department reserves the right to perform or require the performance of a Method 5 emissions evaluation at any time.

Reference Test Method: Method 5
Monitoring Frequency: SEMI-ANNUALLY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

**Condition 42: Compliance Certification**
Effective between the dates of 06/14/2019 and 06/13/2024

**Applicable Federal Requirement:** 6 NYCRR 212-2.4 (b)

**Item 42.1:**
The Compliance Certification activity will be performed for:

- Emission Unit: U-00063
- Process: H29
- Emission Point: 101A2
- Emission Source: 10115

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

**Item 42.2:**
Compliance Certification shall include the following monitoring:

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

**Monitoring Description:**
In order to satisfy the requirements 6 NYCRR Part 212-2.3(b), the facility shall maintain the hourly average scrubber (ES 10115) venturi pressure drop at or above 16 inches of water. The venturi pressure drop shall be alarmed to the control room. If an alarm is received, an inspection will be made to determine the cause of the alarm. If the pressure drop is determined to be too low, the source will be shutdown and necessary repairs shall be made before resuming operation. Records of hourly pressure drop, alarms, follow-up investigations and repairs shall be maintained on site for a period of 5 years and made available to the Department upon request. Monitoring devices shall be calibrated and maintained according to the manufacturer's recommendations and local operating procedures.

- **Parameter Monitored:** PRESSURE DROP
- **Lower Permit Limit:** 16 inches of water
- **Reference Test Method:** Method 5
- **Monitoring Frequency:** CONTINUOUS
- **Averaging Method:** 1-HOUR AVERAGE
- **Reporting Requirements:** UPON REQUEST BY REGULATORY AGENCY

**Condition 43: Compliance Certification**
Effective between the dates of 06/14/2019 and 06/13/2024

**Applicable Federal Requirement:** 6 NYCRR Subpart 212-2
Item 43.1:
The Compliance Certification activity will be performed for:

- **Emission Unit: U-00063**
- **Emission Point: 101A2**
- **Process: H29**
- **Emission Source: 101AJ**

Item 43.2:
Compliance Certification shall include the following monitoring:

- **Monitoring Type:** RECORD KEEPING/MAINTENANCE PROCEDURES
- **Monitoring Description:**

  In order to demonstrate compliance with 6NYCRR Part 212-2 the facility must follow the following new material acceptance criteria:

1. Material Must be aqueous based in composition

2. Material Must contain greater than 0.01 troy ounces silver per pound of material

3. Material base Must be cellulose (paper), cellulose triacetate and/or polyethylene terephthalate. If the material does not contain cellulose (paper) cellulose triacetate and/or polyethylene terephthalate as a base material further investigation and Department approval will be required.

4. A representative sample from each lot of material received for processing shall be submitted to laboratory ashing at 550 degrees Celsius for 12-24 hours to produce a residual ash capable of further silver reclamation

5. Analyze each lot sample of residual ash for "A" rated metal contaminants to determine compliance with the approved feed rate. The established feed rate shall fall between the upper (12 pounds per minute) and lower (1 pound per minute) permit limits.

6. Trial the new material in the roaster for 12-24 hours and verify that there are no negative Roaster process issues such as unacceptable afterburner or scrubber temperatures, slagging, quench flow, scrubber flow or pressure differential

7. New material is acceptable for processing and classified as a "save-all".

The material will be rejected if it does not meet all of the new material acceptance criteria without Department approval. Records of new roaster material analysis and testing shall be kept on site for five years and made available to the Department upon request.
Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL
CHANGE
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 44: Compliance Certification**

Effective between the dates of 06/14/2019 and 06/13/2024

**Applicable Federal Requirement:** 6 NYCRR 212-3.1 (c) (3)

**Item 44.1:**
The Compliance Certification activity will be performed for:

- Emission Unit: U-00063
- Emission Point: 101A2
- Process: H29
- Emission Source: 101AJ

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

**Item 44.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

In order to comply with 6 NYCRR Part 212 Reasonably Available Control Technology (RACT) and 40 CFR 52.21 Prevention of Significant Deterioration (PSD) requirements for emissions of Nitrogen Oxides (NOx), the total NOx emissions from the #2 Roaster (ES 101AJ) shall not exceed 10.5 tons per year on a rolling twelve month basis. The NOx emissions shall be calculated using operating records of the hours of operation and the NOx emission rate, 2.4 lb/hr, established during testing conducted in 2005 and 2006.

In addition, the #2 Roaster afterburner shall be equipped with low NOx burners.

Records shall be kept on site for five years and made available to the Department upon request. This RACT determination is based on the most recent
Permit ID: 8-2614-00888/00001         Facility DEC ID: 8261400888

Division of Air Resources

Air Pollution Control Permit Conditions

Renewal 1  Page 51  FINAL

re-evaluation,
dated May 2017, and shall be re-evaluated and submitted
no later than September 1, 2022.

Monitoring Frequency: MONTHLY
Averaging Method: 12-MONTH TOTAL, ROLLED MONTHLY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

**Condition 45: Compliance Certification**

**Effective between the dates of 06/14/2019 and 06/13/2024**

**Applicable Federal Requirement:** 6 NYCRR 212-3.1 (c) (4) (i)

**Item 45.1:**
The Compliance Certification activity will be performed for:

- Emission Unit: U-00063
- Emission Point: 101A2
- Process: H29
- Emission Source: 101AJ

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

**Item 45.2:**
Compliance Certification shall include the following monitoring:

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

Monitoring Description:
In order to ensure compliance with the 6 NYCRR Part 212 Reasonably Available Control Technology (RACT) requirement for overall removal efficiency of at least 81% for Volatile Organic Compounds (VOC) and 40 CFR 52.21 Prevention of Significant Deterioration (PSD), the afterburner (Control Device 10102) shall be operated at a minimum temperature of 1650 degrees F. The afterburner outlet gas temperature shall be monitored continuously and an hourly average temperature maintained above 1650 degrees F. This limit only applies when the roaster is processing sludge and is not starting up or shutting down. The afterburner temperature shall be alarmed to the control room. If an alarm is received, an inspection will be made to determine the cause of the alarm. If the temperature is determined to be too low, the source will be shutdown and necessary repairs shall be made before resuming operation. Records of hourly afterburner temperature, alarms, follow-up investigations and repairs shall be kept for a period of 5 years and made available.
to the Department upon request.

Parameter Monitored: TEMPERATURE
Lower Permit Limit: 1650  degrees Fahrenheit
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

Condition 46:  Compliance Certification
Effective between the dates of  06/14/2019 and 06/13/2024

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 46.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-00063  Emission Point: 101A2

Regulated Contaminant(s):
CAS No: 007664-93-9  SULFURIC ACID
CAS No: 007446-09-5  SULFUR DIOXIDE

Item 46.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
In order to satisfy the requirements of 40 CFR 52.21
Prevention of Significant Deterioration (PSD) and to comply with 40 CFR 64 Compliance Assurance Monitoring (CAM), the facility shall visually inspect the scrubber demister pad on an annual basis to ensure proper operation.  This condition is based on the results of emission tests conducted in July 2005 and November 2006. Inspection records shall be maintained on site for a period of 5 years and made available to the Department upon request. Records shall contain the date(s) of all inspections, inspection findings and a listing of all pad repairs and replacements.

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 12 calendar month(s).

Condition 47:  Compliance Certification
Effective between the dates of  06/14/2019 and 06/13/2024
Applicable Federal Requirement: 40 CFR 52.21, Subpart A

Item 47.1:
The Compliance Certification activity will be performed for:

<table>
<thead>
<tr>
<th>Emission Unit: U-00063</th>
<th>Emission Point: 101A2</th>
</tr>
</thead>
</table>

Regulated Contaminant(s):
- CAS No: 007446-09-5 SULFUR DIOXIDE
- CAS No: 007664-93-9 SULFURIC ACID

Item 47.2:
Compliance Certification shall include the following monitoring:

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

Monitoring Description:
In order to satisfy the requirements of 40 CFR 52.21 Prevention of Significant Deterioration (PSD) and to comply with 40 CFR 64 Compliance Assurance Monitoring (CAM), the facility shall maintain the hourly average scrubber (ES 10115) venturi pressure drop at or above 16 inches of water. This condition is based on the results of emission tests conducted in July 2005, November 2006 and July 2017. The venturi pressure drop shall be alarmed to the control room. If an alarm is received, an inspection will be made to determine the cause of the alarm. If the pressure drop is determined to be too low, the source will be shutdown and necessary repairs shall be made before resuming operation. Records of hourly pressure drop, alarms, follow-up investigations and repairs shall be maintained on site for a period of 5 years and made available to the Department upon request.

Monitoring devices shall be calibrated and maintained according to the manufacturer's recommendations and local operating procedures.

Parameter Monitored: PRESSURE CHANGE
Lower Permit Limit: 16 inches of water
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

Condition 48: Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024
Applicable Federal Requirement: 40CFR 52.21, Subpart A

**Item 48.1:**
The Compliance Certification activity will be performed for:

- Emission Unit: U-00063
- Emission Point: 101A2
- Process: H29
- Emission Source: 101AJ

Regulated Contaminants:
- CAS No: 007446-09-5 SULFUR DIOXIDE
- CAS No: 007664-93-9 SULFURIC ACID

**Item 48.2:**
Compliance Certification shall include the following monitoring:

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

Monitoring Description:
In order to satisfy the requirements of 40 CFR 52.21 Prevention of Significant Deterioration (PSD) and to comply with 40 CFR 64 Compliance Assurance Monitoring (CAM), the facility shall maintain the hourly average scrubber tray recirculation pH at or above 6. This condition is based on the results of emission tests conducted in July 2005 and November 2006. The tray recirculation pH shall be alarmed to the control room. If an alarm is received, an inspection will be made to determine the cause of the alarm. If the pH is determined to be too low, the source will be shutdown and necessary repairs shall be made before resuming operation. Records of hourly scrubber tray recirculation pH, alarms, follow-up investigations and repairs shall be maintained on site for a period of 5 years and made available to the Department upon request.

Monitoring devices shall be calibrated and maintained according to the manufacturer's recommendations and local operating procedures.

Parameter Monitored: ACIDITY/ALKALINITY
Lower Permit Limit: 6 pH (STANDARD) units
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

**Condition 49:** Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024
Item 49.1:
The Compliance Certification activity will be performed for:

- Emission Unit: U-00063
- Emission Point: 101A2
- Process: H29
- Emission Source: 101AJ

Regulated Contaminant(s):
- CAS No: 007446-09-5  SULFUR DIOXIDE
- CAS No: 007664-93-9  SULFURIC ACID

Item 49.2:
Compliance Certification shall include the following monitoring:

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

Monitoring Description:
In order to satisfy the requirements of 40 CFR 52.21 Prevention of Significant Deterioration (PSD) and to comply with 40 CFR 64 Compliance Assurance Monitoring (CAM), the facility shall maintain the hourly average scrubber quench temperature at or below 175 degrees F. This condition is based on the results of emission tests conducted in July 2005 and November 2006. The quench temperature shall be alarmed to the control room. If an alarm is received, an inspection will be made to determine the cause of the alarm. If the temperature is determined to be too high, the source will be shutdown and necessary repairs shall be made before resuming operation. Records of hourly scrubber quench temperature, alarms, follow-up investigations and repairs shall be maintained on site for a period of 5 years and made available to the Department upon request.

Monitoring devices shall be calibrated and maintained according to the manufacturer's recommendations and local operating procedures.

Parameter Monitored: TEMPERATURE
Upper Permit Limit: 175 degrees Fahrenheit
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

Condition 50: Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 40CFR 63.7540(a), Subpart D/DDDD
Item 50.1:
The Compliance Certification activity will be performed for:

- Emission Unit: U-00063
- Process: H29
- Emission Point: 101A2
- Emission Source: 101AJ

Item 50.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
The Building 101 Roaster (Emission Source 101AJ) main burner, auxiliary burner and direct flame afterburner (Control Device 10103) are subject to the Boiler MACT tune-up requirements identified in Table 3 specified in 63.7540(a)(12) for process heaters with a natural gas heat input capacity of less than 5 mmbtu/hr. Tune-ups shall be conducted every 5 years as follows:

(i) Inspect the burner and clean or replace any components of the burner as necessary;
(ii) Inspect the flame pattern, as applicable and adjust the burner as necessary to optimize the flame pattern. The adjustments should be consistent with the manufacturer's specifications if available;
(iii) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly;
(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications and with any NOx requirement to which the unit is subject;
(v) Measure the concentrations in the effluent stream of CO in parts per million, by volume and oxygen in volume percent before and after the adjustments are made (measurements may be either on a dry or wet basis as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer;
(vi) Maintain on-site a tune-up report with the following information:

(A) The concentrations of CO in the effluent stream in parts per million by volume and oxygen in volume percent, measured a high fire or typical operating load, before and after the tune-up of the boiler or process heater;
(B) A description of any corrective actions taken as a part of the tune-up. In addition, as specified in Item #4 of Table 3 a one time energy assessment performed by a qualified energy assessor is required as follows:

a. A visual inspection of the boiler or process heater
b. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures and unusual operating constraints.

c. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler process heater owner/operator.

d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs and fuel use.

e. A review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, if identified.

f. A list of cost-effective energy conservation measures that are within the facility's control.

g. A list of the energy savings potential of the energy conservation measures identified.

h. A comprehensive report detailing he ways to improve efficiency, the cost of specific improvements, benefits and the time frame for recouping those investments.

The initial Subpart DDDDD tune-up and the one-time energy assessment must be conducted by January 31, 2016.
Tune-ups shall be conducted every five years thereafter. Associated records and reports shall be retained on-site for five years and made available to the Department upon request.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 51: Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 212-2.4 (b)

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

<table>
<thead>
<tr>
<th>Emission Unit: U-00063</th>
<th>Emission Point: 101A3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process: H29</td>
<td>Emission Source: 10104</td>
</tr>
</tbody>
</table>

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

Item 51.2:
Compliance Certification shall include the following monitoring:
Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:
In order to maintain compliance with the 0.050 grains/dscf particulate standard when the #4 smelter (ES101AI) is operating, the baghouse (Control Device 10104) shall be operated and maintained according to manufacturer's specifications. To provide an indicator of baghouse performance, opacity shall be monitored continuously and maintained below 20%. A six minute average opacity reading of 10% or greater shall result in the operator stopping the feed to the smelter in a controlled manner. Prior to resuming operation of the smelter, the opacity meter and baghouses shall be inspected as necessary, and appropriate maintenance performed. In addition, bags shall be inspected every six months and replaced as necessary. For quality assurance of the opacity monitor, the facility shall follow the manufacturer's recommended operation, calibration and maintenance procedures. Records of six minute average opacity readings, calibrations and other quality assurance procedures, and baghouse maintenance shall be maintained on site and made available to the Department upon request.

Manufacturer Name/Model Number: Durag Model R-D 290
Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: Method 9
Monitoring Frequency: CONTINUOUS
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

Condition 52: Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 212-1.6 (a)

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

   Emission Unit: U-00063   Emission Point: 101A3
   Process: H29            Emission Source: 101AI
   Regulated Contaminant(s):
   CAS No: 0NY075-00-0      PARTICULATES
Item 52.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)
Monitoring Description:
The average opacity during any consecutive six minutes shall be maintained below 20%. Compliance with this limit shall be demonstrated with a continuous opacity monitor located in the ductwork of the EP 101A3 stack after the smelter (ES 101AI). For quality assurance of the opacity monitor, the facility shall follow the manufacturer's recommended operation, calibration and maintenance procedures. Records of six minute average opacity readings, calibrations and other quality assurance procedures and baghouse maintenance shall be maintained on site and made available to the Department upon request.

Manufacturer Name/Model Number: Durag Model D_R 290
Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: Method 9
Monitoring Frequency: CONTINUOUS
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

Condition 53:  Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 212-3.1 (c) (3)

Item 53.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-00063  Emission Point: 11002
Process: H33  Emission Source: 11003

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

Item 53.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
In order to comply with 6 NYCRR Part 212 Reasonably Available Control Technology (RACT) requirements for emissions of Nitrogen Oxides (NOx), the demister associated with Emission Source 110AC (Control Device...
11003), shall be operated at a flow rate at or above 3 gallons per minute. The flow rate shall be verified on a weekly basis. Maintenance records shall be kept on site and made available to the Department upon request.

Parameter Monitored: FLOW RATE
Lower Permit Limit: 3 gallons per minute
Monitoring Frequency: WEEKLY
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 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

Condition 54: Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 212-1.5 (d)

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

| Emission Unit: U-00078 | Emission Point: 110C6 |
| Process: H38 | Emission Source: 110AQ |

Regulated Contaminant(s):
- CAS No: 000071-36-3 BUTANOL
- CAS No: 000075-07-0 ACETALDEHYDE
- CAS No: 000075-09-2 DICHLOROMETHANE
- CAS No: 000078-87-5 PROPANE, 1,2-DICHLORO
- CAS No: 000109-86-4 2-METHOXYETHANOL
- CAS No: 000110-82-7 CYCLOHEXANE
- CAS No: 000067-64-1 DIMETHYL KETONE

Item 54.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
In order to maintain compliance with 6 NYCRR Part 212 Table 4 or Toxic - Best Available Control Technology (T-BACT) requirements, emission limits have been established in accordance with Part 212-1.5(d) for this source. Based on the T-BACT re-evaluation, dated April 2, 2018 the total emissions of dichloromethane, acetone (dimethyl ketone), butanol and cyclohexane are limited to 37.04 tons per year on a rolling twelve month basis. Emissions shall be calculated monthly and incorporated into a 12 month rolling total. Included in the 37.04 limit is a subset of emissions for A-rated compounds, H-TAC's (High Toxicity Air Contaminant's) and Dichloromethane that
will be limited to 3.14 tons per year on a rolling twelve month basis. Emissions calculations shall be based on the quantities of unwashed film processed by type, amount of residual contaminants in each type and a total contaminant emissions calculated by multiplying the above parameters. Records shall be kept on site for five years and made available to the Department upon request. This T-BACT determination is to be re-evaluated every five years. The next re-evaluation shall be submitted by May 31, 2022.

Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 55: Compliance Certification**

*Effective between the dates of 06/14/2019 and 06/13/2024*

**Applicable Federal Requirement:** 6 NYCRR 212-3.1 (c) (4) (iii)

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

- Emission Unit: U-00078
- Emission Point: 110C6
- Process: H38
- Emission Source: 110AQ

Regulated Contaminant(s):

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

**Item 55.2:**
Compliance Certification shall include the following monitoring:

**Monitoring Type:** RECORD KEEPING/MAINTENANCE PROCEDURES

**Monitoring Description:**
The Cowles Washers (ES 110AQ) are subject to 6 NYCRR Part 212.3.1 Reasonably Available Control Technology (RACT) requirements for emissions of Volatile Organic Compounds (VOC). The RACT determination is to be re-evaluated every five years. Based on the most recent re-evaluation, dated November 3, 2017, annual emissions of VOC from EP 110C6, which vents the Cowles Washers (ES 110AQ), shall not exceed 30.02 tpy on a rolling 12-month basis. VOC emissions shall be calculated monthly and incorporated into a 12-month rolling total. VOC emissions calculations shall be based on the quantities of unwashed film processed by type, amount of residual VOC in each type, and a total of VOC emissions calculated by multiplying the above two parameters. Records shall be kept on site for five years and made available to the Department upon request. The next re-evaluation of this RACT determination shall be submitted by August 31, 2022.

Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

**Condition 56:** Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

**Applicable Federal Requirement:** 6 NYCRR 212-2.4 (b)

**Item 56.1:**
The Compliance Certification activity will be performed for:

<table>
<thead>
<tr>
<th>Emission Unit: U-00078</th>
<th>Emission Point: 110D0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process: H43</td>
<td>Emission Source: 11009</td>
</tr>
</tbody>
</table>

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

**Item 56.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
In order to demonstrate compliance with the 0.050 grains/dscf particulate standard, the panel filter (Emission Control Device 11009) will be inspected weekly and replaced if necessary. Records of filter changes shall be retained on site for five years and made available to the Department upon 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 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

**Condition 57:** Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

**Applicable Federal Requirement:** 6 NYCRR 212-2.4 (b)

**Item 57.1:**
The Compliance Certification activity will be performed for:

<table>
<thead>
<tr>
<th>Emission Unit: U-00078</th>
<th>Emission Point: 110D1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process: H43</td>
<td>Emission Source: 11006</td>
</tr>
</tbody>
</table>

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES
Item 57.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
In order to demonstrate compliance with the 0.050 grains/dscf particulate standard, the panel filter (Emission Control Device 11006) will be inspected weekly and replaced if necessary. Records of filter changes shall be retained on site for five years and made available to the Department upon 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 7/30/2019.
Subsequent reports are due every 6 calendar month(s).

Condition 58: Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 212-2.4 (b)

Item 58.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-00078
Emission Point: 110D2
Process: H43
Emission Source: 11007

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

Item 58.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
In order to demonstrate compliance with the 0.050 grains/dscf particulate standard, the panel filter (Emission Control Device 11007) will be inspected weekly and replaced if necessary. Records of filter changes shall be retained on site for five years and made available to the Department upon 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 7/30/2019.
Subsequent reports are due every 6 calendar month(s).
Condition 59: Compliance Certification
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable Federal Requirement: 6 NYCRR 212-2.4 (b)

Item 59.1:
The Compliance Certification activity will be performed for:

- Emission Unit: U-00078
- Emission Point: 110D3
- Process: H43
- Emission Source: 11008

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

Item 59.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
- In order to demonstrate compliance with the 0.050 grains/dscf particulate standard, the panel filter (Emission Control Device 11008) will be inspected weekly and replaced if necessary. Records of filter changes shall be retained on site for five years and made available to the Department upon 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 7/30/2019.
  - 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 60: Contaminant List
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable State Requirement:ECL 19-0301

Item 60.1:
Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 000067-64-1
Name: DIMETHYL KETONE

CAS No: 000071-36-3
Name: BUTANOL

CAS No: 000074-82-8
Name: METHANE

CAS No: 000074-83-9
Name: METHYL BROMIDE

CAS No: 000074-87-3
Name: METHYL CHLORIDE

CAS No: 000075-00-3
Name: ETHANE, CHLORO

CAS No: 000075-01-4
Name: VINYL CHLORIDE
<table>
<thead>
<tr>
<th>CAS No</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>000075-07-0</td>
<td>ACETALDEHYDE</td>
</tr>
<tr>
<td>000075-09-2</td>
<td>DICHLOROMETHANE</td>
</tr>
<tr>
<td>000075-15-0</td>
<td>CARBON DISULFIDE</td>
</tr>
<tr>
<td>000078-87-5</td>
<td>PROPANE, 1,2-DICHLORO</td>
</tr>
<tr>
<td>000091-20-3</td>
<td>NAPHTHALENE</td>
</tr>
<tr>
<td>000091-57-6</td>
<td>2-METHYL NAPHTHALENE</td>
</tr>
<tr>
<td>000100-42-5</td>
<td>STYRENE</td>
</tr>
<tr>
<td>000108-88-3</td>
<td>TOLUENE</td>
</tr>
<tr>
<td>000108-90-7</td>
<td>CHLOROBENZENE</td>
</tr>
<tr>
<td>000109-86-4</td>
<td>2-METHOXYETHANOL</td>
</tr>
<tr>
<td>000110-02-1</td>
<td>THIOPHENE</td>
</tr>
<tr>
<td>000110-82-7</td>
<td>CYCLOHEXANE</td>
</tr>
<tr>
<td>000463-58-1</td>
<td>CARBONYL SULFIDE</td>
</tr>
<tr>
<td>001330-20-7</td>
<td>XYLENE, M, O &amp; P MIXT.</td>
</tr>
<tr>
<td>007439-92-1</td>
<td>LEAD</td>
</tr>
<tr>
<td>007439-96-5</td>
<td>MANGANESE</td>
</tr>
<tr>
<td>007439-97-6</td>
<td>MERCURY</td>
</tr>
</tbody>
</table>
CAS No: 007440-02-0  
Name: NICKEL METAL AND INSOLUBLE COMPOUNDS

CAS No: 007440-22-4  
Name: SILVER

CAS No: 007440-28-0  
Name: THALLIUM

CAS No: 007440-36-0  
Name: ANTIMONY

CAS No: 007440-38-2  
Name: ARSENIC

CAS No: 007440-39-3  
Name: BARIUM

CAS No: 007440-41-7  
Name: BERYLLIUM

CAS No: 007440-43-9  
Name: CADMIUM

CAS No: 007440-47-3  
Name: CHROMIUM

CAS No: 007440-48-4  
Name: COBALT

CAS No: 007440-50-8  
Name: COPPER

CAS No: 007440-66-6  
Name: ZINC

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

CAS No: 007553-56-2  
Name: IODINE

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

CAS No: 007664-39-3  
Name: HYDROGEN FLUORIDE

CAS No: 007664-41-7  
Name: AMMONIA

CAS No: 007664-93-9
Name: SULFURIC ACID
CAS No: 007726-95-6
Name: BROMINE
CAS No: 007782-49-2
Name: SELENIUM
CAS No: 007782-50-5
Name: CHLORINE
CAS No: 007783-06-4
Name: HYDROGEN SULFIDE
CAS No: 010034-85-2
Name: IODIDE
CAS No: 010035-10-6
Name: HYDROGEN BROMIDE
CAS No: 010102-43-9
Name: NITRIC OXIDE
CAS No: 0NY075-00-0
Name: PARTICULATES
CAS No: 0NY210-00-0
Name: OXIDES OF NITROGEN
CAS No: 0NY998-00-0
Name: VOC

Condition 61: Malfunctions and start-up/shutdown activities
Effectiive between the dates of 06/14/2019 and 06/13/2024

Applicable State Requirement: 6 NYCRR 201-1.4

Item 61.1:
(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

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

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

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

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

Condition 62: Air pollution prohibited
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable State Requirement: 6 NYCRR 211.1

Item 62.1:
No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

Condition 63: Compliance Demonstration
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable State Requirement: 6 NYCRR 231-11.2 (c)

Item 63.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 63.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
For a modification where the projected actual emissions
(rather than the potential to emit) is used to determine the project emission potential, and (1) the project emission potential is less than 50 percent of the applicable significant project threshold in Table 3, Table 4 or Table 6 of 6 NYCRR Part 231-13, but equals or exceeds 50 percent of the applicable significant project threshold when emissions excluded in accordance with 231-4.1(b)(40)(i)(c) are added, or (2) the project emission potential equals or exceeds 50 percent of the applicable significant project threshold in Table 3, Table 4 or Table 6 of 6 NYCRR Part 231-13, the facility owner or operator must submit an application to modify the facility permit under the minor permit provisions of 6 NYCRR Part 201-6 or obtain a preconstruction permit under the provisions of Subpart 201-6, and must:

(1) maintain the following information for a minimum of five years:

(i) a description of the modification.

(ii) an identification of each new or modified emission source(s) including the associated processes and emission unit.

(iii) the calculation of the project emission potential for each modified emission source(s) including supporting documentation.

(iv) the date the modification commenced operation.

(2) monitor the emissions of each regulated New Source Review (NSR) contaminant from the emission source(s) that will increase as a result of the modification, and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five years following resumption of regular operations after the modification, or for a period of 10 years following resumption of regular operations after the change if the modification increases the design capacity of or potential to emit the regulated NSR contaminant at such emission source(s).

(3) submit a report to the department within 30 days after the end of each year during which records must be generated in accordance with 6 NYCRR 231-11.2(c)(2). The report must contain:

(i) the name, address, and telephone number of the major facility.

(ii) the annual emissions as calculated pursuant to 6 NYCRR 231-11.2(c)(2).
(iii) a comparison of actual annual emissions to the projected actual emissions and, if applicable, an explanation as to why the actual annual emissions exceeded the projected actual emissions.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**** Emission Unit Level ****

Condition 64: Compliance Demonstration
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable State Requirement: 6 NYCRR 212-2.3 (b)

Item 64.1:
The Compliance Demonstration activity will be performed for:

- Emission Unit: U-00063
- Emission Point: 101A2
- Process: H29
- Emission Source: 10102

Item 64.2:
Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:
In order to maintain compliance with 6 NYCRR Part 212-2.3(b) control requirements for organic compounds, the afterburner (Control Device 10102) shall be operated at a minimum temperature of 1650 degrees F. The afterburner outlet gas temperature shall be monitored continuously and an hourly average temperature maintained above 1650 degrees F. This limit only applies when the roaster is processing sludge and is not starting up or shutting down. The afterburner temperature shall be alarmed to the control room. If an alarm is received, an inspection will be made to determine the cause of the alarm. If the temperature is determined to be too low, the source will be shutdown and necessary repairs shall be made before resuming operation. Records of hourly afterburner temperature, alarms, follow-up investigations and repairs shall be kept for a period of 5 years and made available to the Department upon request.

Parameter Monitored: TEMPERATURE
Lower Permit Limit: 1650 degrees Fahrenheit
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 65: Compliance Demonstration
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable State Requirement: 6 NYCRR 212-2.3 (b)

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

Emission Unit: U-00063
Process: H29

Emission Point: 101A2
Emission Source: 10115

Item 65.2:
Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:
In order to satisfy the requirements of 6 NYCRR Part 212-2.3(b), the facility shall maintain the hourly average scrubber quench temperature (control 10115) at or below 175 degrees F. The quench temperature shall be alarmed to the control room. If an alarm is received, an inspection will be made to determine the cause of the alarm. If the temperature is determined to be too high, the source will be shutdown and necessary repairs shall be made before resuming operation. Records of hourly scrubber quench temperature, alarms, follow-up investigations and repairs shall be maintained on site for a period of 5 years and made available to the Department upon request. Monitoring devices shall be calibrated and maintained according to the manufacturer's recommendations and local operating procedures.

Parameter Monitored: TEMPERATURE
Upper Permit Limit: 175 degrees Fahrenheit
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 66: Compliance Demonstration
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable State Requirement: 6 NYCRR 212-2.3 (b)

Item 66.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: U-00063
Process: H29

Emission Point: 101A2
Emission Source: 10115
Item 66.2:
Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:
In order to satisfy the requirements of 6 NYCRR Part 212-2.3(b) table 4, the facility shall maintain the hourly average scrubber tray (control 10115) recirculation pH at or above 6. The tray recirculation pH shall be alarmed to the control room. If an alarm is received, an inspection will be made to determine the cause of the alarm. If the pH is determined to be too low, the source will be shutdown and necessary repairs shall be made before resuming operation. Records of hourly scrubber tray recirculation pH, alarms, follow-up investigations and repairs shall be maintained on site for a period of 5 years and made available to the Department upon request.

Monitoring devices shall be calibrated and maintained according to the manufacturer's recommendations and local operating procedures.

Parameter Monitored: PH
Lower Permit Limit: 6   pH (STANDARD) units
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 67: Compliance Demonstration
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable State Requirement: 6 NYCRR 212-2.3 (b)

Item 67.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: U-00063   Emission Point: 101A2
Process: H29             Emission Source: 10115

Item 67.2:
Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:
In order to satisfy the requirements 6 NYCRR Part 212-2.3(b), the facility shall maintain the hourly average scrubber venturi pressure drop at or above 16 inches of water. The venturi pressure drop shall be alarmed to the control room. If an alarm is received, an inspection will
be made to determine the cause of the alarm. If the pressure drop is determined to be too low, the source will be shutdown and necessary repairs shall be made before resuming operation. Records of hourly pressure drop, alarms, follow-up investigations and repairs shall be maintained on site for a period of 5 years and made available to the Department upon request. Monitoring devices shall be calibrated and maintained according to the manufacturer's recommendations and local operating procedures.

Parameter Monitored: PRESSURE DROP
Lower Permit Limit: 16 inches of water
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 68: Compliance Demonstration
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable State Requirement: 6 NYCRR 212-2.3 (b)

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

<table>
<thead>
<tr>
<th>Emission Unit: U-00063</th>
<th>Emission Point: 101A2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process: H29</td>
<td>Emission Source: 10115</td>
</tr>
</tbody>
</table>

Item 68.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
In order to satisfy the requirements of 6 NYCRR Part 212-2.3(b), the facility shall visually inspect the scrubber demister pad (control 10115) on an annual basis to ensure proper operation. Inspection records shall be maintained on site for a period of 5 years and made available to the Department upon request. Records shall contain the date(s) of all inspections, inspection findings and a listing of all pad repairs and replacements.

Monitoring Frequency: ANNUALLY
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 69: Compliance Demonstration
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable State Requirement: 6 NYCRR 212-2.1

Item 69.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: U-00063  Emission Point: 101A2

Item 69.2:
Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:
In order to demonstrate compliance with 6NYCRR Part 212-2.2 Table 2 and 212-2.3(b) Table 4 the facility must maintain the roaster feed rate at or above the lower permit limit of 1 pound per minute except during periods of startup, shutdown or malfunction and limit roaster material feed rates to the feed rates established during testing conducted in October 2015. The weight of the feed hopper shall be continuously monitored and the feed rate to the roaster calculated by weight-lost over time.

Feed rate data that is skewed low during periods of hopper re-loading can be considered invalid and not included in the 1-hour rolling average rolled every 1-minute. Only date collected during the hopper re-loading can be excluded.

The facility shall not fall outside the material feed rate ranges for the following operating scenarios:

1. 1-12 pounds per minute when roasting mud.
2. 1-2 pounds per minute of save-alls and up to 6 pounds per minute of mud for a total of 8 pounds per minute when roasting a combination of mud and save-alls.
3 1-4 pounds per minute when roasting save-alls.

Records of roaster material, operating scenario and feed rates shall be kept on site for five years and made available to the Department upon request.

Parameter Monitored: FEED RATE
Lower Permit Limit: 1  pounds per minute
Upper Permit Limit: 12  pounds per minute
Monitoring Frequency: CONTINUOUS
Averaging Method: 1 HOUR ROLLING AVERAGE ROLLED EVERY 1 MINUTE
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION
Condition 70: Compliance Demonstration
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable State Requirement: 6 NYCRR 212-2.3 (b)

Item 70.1:
The Compliance Demonstration activity will be performed for:

- **Emission Unit:** U-00063
- **Emission Point:** 101A2
- **Process:** H29
- **Emission Source:** 101AJ

**Regulated Contaminant(s):**
- CAS No: 007439-92-1 LEAD
- CAS No: 007439-96-5 MANGANESE
- CAS No: 007439-97-6 MERCURY
- CAS No: 007440-02-0 NICKEL METAL AND INSOLUBLE COMPOUNDS
- CAS No: 007440-41-7 BERYLLIUM
- CAS No: 007440-43-9 CADMIUM
- CAS No: 007440-47-3 CHROMIUM
- CAS No: 007440-38-2 ARSENIC

Item 70.2:
Compliance Demonstration shall include the following monitoring:

- **Monitoring Type:** RECORD KEEPING/MAINTENANCE PROCEDURES

**Monitoring Description:**
Facility owner or operator shall not allow emissions of the air contaminant(s) listed above to exceed the requirements specified in Subdivision 212-2.3(b), Table 4 – Degree of Air Cleaning Required for Non-Criteria Air Contaminants. The above listed contaminants have been given an Environmental Rating of “A” for the associated process emission source. The listed contaminants have been demonstrated to have an emission rate potential (ERP) less than 0.1 pounds per hour and require ambient maximum off site air concentrations less than the annual and short-term guideline concentrations (AGC & SGC).

The facility must maintain records to demonstrate that none of the listed contaminants have had an increased ERP. Any increase in the ERP of a contaminant will require a reevaluation of its off site ambient impacts and percent control required.

- **Monitoring Frequency:** ANNUALLY
- **Reporting Requirements:** UPON REQUEST BY REGULATORY AGENCY

Condition 71: Compliance Demonstration
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable State Requirement: 6 NYCRR 212-2.3 (b)
Item 71.1:
The Compliance Demonstration activity will be performed for:

- Emission Unit: U-00063
- Process: H29
- Emission Point: 101A2
- Emission Source: 101AJ

Regulated Contaminant(s):
- CAS No: 000075-00-3 ETHANE, CHLORO
- CAS No: 000108-88-3 TOLUENE
- CAS No: 007440-66-6 ZINC
- CAS No: 007553-56-2 IODINE
- CAS No: 007647-01-0 HYDROGEN CHLORIDE
- CAS No: 010035-10-6 HYDROGEN BROMIDE
- CAS No: 000067-64-1 DIMETHYL KETONE

Item 71.2:
Compliance Demonstration shall include the following monitoring:

- Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
- Monitoring Description:

  Facility owner or operator shall not allow emissions of the air contaminant(s) listed above to exceed the requirements specified in Subdivision 212-2.3(b), Table 4 – Degree of Air Cleaning Required for Non-Criteria Air Contaminants. The above listed contaminants have been given an Environmental Rating of “C” for the associated process emission source. The listed contaminants have been demonstrated to have an emission rate potential (ERP) less than 10 pounds per hour. Contaminants with ERP's less than 10 pounds per hour require that the ambient maximum off site air concentrations are less than the annual and short-term guideline concentrations (AGC & SGC).

  The facility must maintain records to demonstrate that none of the listed contaminants have had an increased ERP. Any increase in the ERP of a contaminant will require a reevaluation of its off site ambient impacts and percent control required.

- Monitoring Frequency: ANNUALLY
- Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 72: Compliance Demonstration
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable State Requirement: 6 NYCRR 212-2.3 (b)

Item 72.1:
The Compliance Demonstration activity will be performed for:

- Emission Unit: U-00063
- Emission Point: 101A2
Process: H29  
Emission Source: 101AJ

Regulated Contaminant(s):
- CAS No: 000074-82-8  METHANE
- CAS No: 000074-87-3  METHYL CHLORIDE
- CAS No: 000075-15-0  CARBON DisULFIDE
- CAS No: 000091-20-3  NAPHTHALENE
- CAS No: 000100-42-5  STYRENE
- CAS No: 000108-90-7  CHLOROBENZENE
- CAS No: 000463-58-1  CARBONYL SULFIDE
- CAS No: 001330-20-7  XYLENE, M, O & P MIXT.
- CAS No: 007440-22-4  SILVER
- CAS No: 007440-28-0  THALLIUM
- CAS No: 007440-36-0  ANTIMONY
- CAS No: 007440-39-3  BARIUM
- CAS No: 007440-48-4  COBALT
- CAS No: 007440-50-8  COPPER
- CAS No: 007664-39-3  HYDROGEN FLUORIDE
- CAS No: 007664-93-9  SULFURIC ACID
- CAS No: 007726-95-6  BROMINE
- CAS No: 007782-49-2  SELENIUM
- CAS No: 007782-50-5  CHLORINE
- CAS No: 007783-06-4  HYDROGEN SULFIDE
- CAS No: 010034-85-2  IODIDE
- CAS No: 010102-43-9  NITRIC OXIDE
- CAS No: 000091-57-6  2-METHYL NAPHTHALENE
- CAS No: 000074-83-9  METHYL BROMIDE

**Item 72.2:**
Compliance Demonstration shall include the following monitoring:

**Monitoring Type:** RECORD KEEPING/MAINTENANCE PROCEDURES  
**Monitoring Description:**
Facility owner or operator shall not allow emissions of
the air contaminant(s) listed above to exceed the
requirements specified in Subdivision 212.2.3(b), Table 4
– Degree of Air Cleaning Required for Non-Criteria Air
Contaminants. The above listed contaminants have been
given an Environmental Rating of “B” for the associated
process emission source. The listed contaminants have been
demonstrated to have an emission rate potential (ERP) of
10 pounds or less per hour. Contaminants with ERP's equal
to or less than 10 pounds per hour require that the
ambient maximum off site air concentrations are less than
the annual and short-term guideline concentrations (AGC &
SGC).

The facility must maintain records to demonstrate that
none of the listed contaminants have had an increased ERP.
Any increase in the ERP of a contaminant will require a
reevaluation of its off site ambient impacts and percent
control required.
Condition 73: Compliance Demonstration  
Effective between the dates of 06/14/2019 and 06/13/2024  

**Applicable State Requirement:** 6 NYCRR 212-2.3 (b)  

**Item 73.1:**  
The Compliance Demonstration activity will be performed for:  

- Emission Unit: U-00063  
- Emission Point: 101A2  
- Process: H29  
- Emission Source: 101AJ  

Regulated Contaminant(s):  
- CAS No: 000075-01-4  
- VINYL CHLORIDE  

**Item 73.2:**  
Compliance Demonstration shall include the following monitoring:  

- Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES  
- Monitoring Description:  
  Facility owner or operator shall not allow emissions of the air contaminant(s) listed above to exceed the requirements specified in Subdivision 212-2.3(b), Table 4 – Degree of Air Cleaning Required for Non-Criteria Air Contaminants. The above listed contaminants have been given an Environmental Rating of “A” for the associated process emission source. The listed contaminants have been demonstrated to have an emission rate potential (ERP) less than 1 pound per hour but greater than 0.1 pound per hour and require at least 90 percent control at control device 10115.  

  The facility must maintain records to demonstrate that none of the listed contaminants have had an increased ERP. Any increase in the ERP of a contaminant will require a reevaluation of its off site ambient impacts and the percent control required.  

Monitoring Frequency: ANNUALLY  
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY  

Condition 74: Compliance Demonstration  
Effective between the dates of 06/14/2019 and 06/13/2024  

**Applicable State Requirement:** 6 NYCRR 212-2.3 (b)  

**Item 74.1:**  
The Compliance Demonstration activity will be performed for:
Item 74.2:
Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:
In order to maintain 99% control of arsenic, cadmium, nickel, lead, and mercury emissions from EP 110A1, the 2-stage dry filter (Control Device 11005) must be operated and maintained according to the manufacturer's specifications. The pressure drop across the filters shall be recorded once a month and maintained below 5" water. The filters shall be changed as necessary to ensure proper operating pressure differential. Records of pressure differential and filter changes shall be kept on site and made available to the Department upon request.

Parameter Monitored: PRESSURE DROP
Upper Permit Limit: 5 inches of water
Monitoring Frequency: MONTHLY
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 75: Compliance Demonstration
Effective between the dates of 06/14/2019 and 06/13/2024

Applicable State Requirement: 6 NYCRR 212-2.3 (b)

Item 75.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: U-00063 Emission Point: 110A1
Process: H34 Emission Source: 11005

Regulated Contaminant(s):
CAS No: 007664-41-7 AMMONIA

Item 75.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Facility owner or operator shall not allow emissions of the air contaminant(s) listed above to exceed the requirements specified in Subdivision 212-2.3(b), Table 4 – Degree of Air Cleaning Required for Non-Criteria Air Contaminants. The above listed contaminants have been given an Environmental Rating of
“C” for the associated process emission source. The listed contaminants have been demonstrated to have an emission rate potential (ERP) less than 10 pounds per hour and require ambient maximum off site air concentrations less than the annual and short-term guideline concentrations (AGC & SGC).

The facility must maintain records to demonstrate that none of the listed contaminants have had an increased ERP. Any increase in the ERP of a contaminant will require a reevaluation of its off site ambient impacts and its environmental rating.

Monitoring Frequency: ANNUALLY
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 76: Compliance Demonstration**

**Effective between the dates of 06/14/2019 and 06/13/2024**

**Applicable State Requirement:** 6 NYCRR 212-2.3 (b)

**Item 76.1:**
The Compliance Demonstration activity will be performed for:

<table>
<thead>
<tr>
<th>Emission Unit: U-00063</th>
<th>Emission Point: 110A1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process: H34</td>
<td>Emission Source: 110AE</td>
</tr>
</tbody>
</table>

**Regulated Contaminant(s):**

- CAS No: 000463-58-1 CARBONYL SULFIDE
- CAS No: 007446-09-5 SULFUR DIOXIDE
- CAS No: 007664-93-9 SULFURIC ACID
- CAS No: 007783-06-4 HYDROGEN SULFIDE
- CAS No: 000110-02-1 THIOPHENE
- CAS No: 000075-15-0 CARBON DISULFIDE

**Item 76.2:**
Compliance Demonstration shall include the following monitoring:

**Monitoring Type:** RECORD KEEPING/MAINTENANCE PROCEDURES

**Monitoring Description:**
Facility owner or operator shall not allow emissions of the air contaminant(s) listed above to exceed the requirements specified in Subdivision 212-2.3(b), Table 4 – Degree of Air Cleaning Required for Non-Criteria Air Contaminants. The above listed contaminants have been given an Environmental Rating of “B” for the associated process emission source. The listed contaminants have been demonstrated to have an emission rate potential (ERP) less than 10 pounds per hour and require ambient maximum off site air concentrations less than the annual and short-term guideline concentrations (AGC & SGC).
The facility must maintain records to demonstrate that none of the listed contaminants have had an increased ERP. Any increase in the ERP of a contaminant will require a reevaluation of its off site ambient impacts and its environmental rating.

Monitoring Frequency: ANNUALLY
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 77: Compliance Demonstration**

**Effective between the dates of 06/14/2019 and 06/13/2024**

**Applicable State Requirement:** 6 NYCRR 212-2.3 (b)

**Item 77.1:**
The Compliance Demonstration activity will be performed for:

- Emission Unit: U-00063
- Process: H34
- Emission Point: 110A1
- Emission Source: 110AE

**Regulated Contaminant(s):**
- CAS No: 007439-97-6, MERCURY
- CAS No: 007440-02-0, NICKEL METAL AND INSOLUBLE COMPOUNDS
- CAS No: 007440-38-2, ARSENIC
- CAS No: 007440-43-9, CADMIUM
- CAS No: 007439-92-1, LEAD

**Item 77.2:**
Compliance Demonstration shall include the following monitoring:

- **Monitoring Type:** RECORD KEEPING/MAINTENANCE PROCEDURES
- **Monitoring Description:** Facility owner or operator shall not allow emissions of the air contaminant(s) listed above to exceed the requirements specified in Subdivision 212-2.3(b), Table 4 – Degree of Air Cleaning Required for Non-Criteria Air Contaminants. The above listed contaminants have been given an Environmental Rating of “A” for the associated process emission source. The listed contaminants have been demonstrated to have an emission rate potential (ERP) which requires a 99 percent degree of cleaning.

The facility must maintain records to demonstrate that none of the listed contaminants have had an increased ERP. Any increase in the ERP of a contaminant will require a reevaluation of its off site ambient impacts and its environmental rating.

Monitoring Frequency: ANNUALLY
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY