

Facility DEC ID: 5520500057

**PERMIT**  
**Under the Environmental Conservation Law (ECL)**

**IDENTIFICATION INFORMATION**

Permit Type: Air State Facility  
Permit ID: 5-5205-00057/00006  
Mod 0 Effective Date: 07/14/2015 Expiration Date: 07/13/2025  
Mod 1 Effective Date: 07/28/2017 Expiration Date: 07/13/2025  
Mod 2 Effective Date: 01/22/2018 Expiration Date: 07/13/2025  
Mod 3 Effective Date: 08/10/2021 Expiration Date: 07/13/2025

Permit Issued To: AMES GOLDSMITH CORP  
21 ROGERS ST  
GLENS FALLS, NY 12801-3821

Contact: Michael Herman  
21 Rogers St  
Glens Falls, NY 12801  
(518) 741-7860

Facility: AMES GOLDSMITH CORP  
21 ROGERS ST  
GLENS FALLS, NY 12801

Description:  
Ames Goldsmith is a manufacturer of silver based products including, but not limited to, silver nitrate, silver oxide, silver powder and flake.

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: BETH A MAGEE  
NYSDEC - WARRENSBURG SUBOFFICE  
232 GOLF COURSE RD  
WARRENSBURG, NY 12885-1172

Authorized Signature: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_\_

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**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.

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**Facility Level**

- 6 7 Submission of application for permit modification or renewal-REGION 5 SUBOFFICE - WARRENSBURG

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

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

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

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

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

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

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

**Condition 1-1: Applications for permit renewals, modifications and transfers**  
**Applicable State Requirement: 6 NYCRR 621.11**

**Item 1-1.1:**  
 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 1-1.2:**  
 The permittee must submit a renewal application at least 180 days before the expiration of permits for Title V and State Facility Permits.

**Item 1-1.3**  
 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 3: Applications for permit renewals, modifications and transfers**

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**Applicable State Requirement: 6 NYCRR 621.11****Item 3.1:**

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

**Item 3.2:**

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

**Item 3.3:**

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

**Condition 2-1: Applications for permit renewals, modifications and transfers  
Applicable State Requirement: 6 NYCRR 621.11****Item 2-1.1:**

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 2-1.2:**

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

**Item 2-1.3**

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.

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**\*\*\*\* Facility Level \*\*\*\***

**Condition 5: Submission of application for permit modification or renewal-REGION 5  
SUBOFFICE - WARRENSBURG**

**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 5 Sub-office  
Division of Environmental Permits  
232 Golf Course Road  
Warrensburg, NY 12885-1172  
(518) 623-1281

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**Permit Under the Environmental Conservation Law (ECL)**

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: AMES GOLDSMITH CORP  
21 ROGERS ST  
GLENS FALLS, NY 12801-3821

Facility: AMES GOLDSMITH CORP  
21 ROGERS ST  
GLENS FALLS, NY 12801

Authorized Activity By Standard Industrial Classification Code:  
2819 - INDUSTRIAL INORGANIC CHEMICALS

Mod 0 Permit Effective Date: 07/14/2015

Permit Expiration Date: 07/13/2025

Mod 1 Permit Effective Date: 07/28/2017

Permit Expiration Date: 07/13/2025

Mod 2 Permit Effective Date: 01/22/2018

Permit Expiration Date: 07/13/2025

Mod 3 Permit Effective Date: 08/10/2021

Permit Expiration Date: 07/13/2025

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- 7 2 6 NYCRR 212-1.6 (a): Compliance Demonstration
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**Emission Unit Level**

**EU=U-00001,Proc=001**

- 12 6 6 NYCRR 212-2.1 (b): Compliance Demonstration

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- 12 7 6 NYCRR 212-2.1 (b): Compliance Demonstration

**EU=U-00001,Proc=FUM**

- 13 8 6 NYCRR 212-2.1 (b): Compliance Demonstration

**EU=U-00001,Proc=FUM,ES=SCB02**

- 13 1-2 6 NYCRR 212-2.1 (b): Compliance Demonstration
- 14 1-3 6 NYCRR 212-2.1 (b): Compliance Demonstration

**EU=U-00001,EP=1X500**

- 15 11 6 NYCRR 212-2.1 (b): Compliance Demonstration

**EU=U-CATRE,Proc=CAT,ES=00009**

- 15 2-3 6 NYCRR 212-2.1 (b): Compliance Demonstration
- 16 2-4 6 NYCRR 212-2.1 (b): Compliance Demonstration

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- 17 2-5 6 NYCRR 212-2.1 (b): Compliance Demonstration
- 17 2-6 6 NYCRR 212-2.1 (b): Compliance Demonstration

**EU=U-CATRE,EP=00011**

- 18 3-3 6 NYCRR 212-2.1 (b): Compliance Demonstration

**EU=U-POWFL,Proc=PDR,ES=AMSCB**

- 19 1-8 6 NYCRR 212-2.1 (b): Compliance Demonstration
- 19 1-9 6 NYCRR 212-2.1 (b): Compliance Demonstration

**EU=U-POWFL,Proc=PDR,ES=SCR01**

- 20 1-10 6 NYCRR 212-2.1 (b): Compliance Demonstration
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- 23 24 ECL 19-0301: Contaminant List
- 24 3-4 6 NYCRR 201-1.4: Malfunctions and Start-up/Shutdown Activities
- 24 26 6 NYCRR Subpart 201-5: Emission Unit Definition
- 26 27 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
- 26 28 6 NYCRR 201-5.3 (c): Compliance Demonstration
- 26 1 6 NYCRR 211.1: Air pollution prohibited
- 27 3-5 6 NYCRR 212-2.1 (a): Compliance Demonstration

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- 27 30 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
- 30 31 6 NYCRR Subpart 201-5: Process Definition By Emission Unit

**EU=U-POWFL,EP=AMSRB**

- 41 1-12 6 NYCRR 212-2.1 (a): Compliance Demonstration

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**FEDERALLY ENFORCEABLE CONDITIONS**

Renewal 1/Mod 3/FINAL

\*\*\*\* Facility Level \*\*\*\*

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

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

**Item A: Sealing - 6 NYCRR 200.5**

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation. Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

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

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

**Item B: Acceptable Ambient Air Quality - 6 NYCRR 200.6**

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

**Item C: Maintenance of Equipment - 6 NYCRR 200.7**

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

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

(a) Except as otherwise provided by this Part, construction or operation of a new, modified or existing air contamination source without a registration or permit issued pursuant to this Part is prohibited.

(b) If an existing facility or emission source was subject to the permitting requirements of this Part at the time of construction or modification, and the owner or operator failed to apply for a permit or registration as described in this Part, the owner or operator must apply for a permit or registration in accordance with the provisions of this Part. The facility or emission source is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing emission sources.

**Item E: Recycling and Salvage - 6 NYCRR 201-1.7**

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

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

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

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

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request.

Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

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

The owner and/or operator of an emission source or unit

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

**Item I: Required Emission Tests - 6 NYCRR 202-1.1**

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

**Item J: Open Fires Prohibitions - 6 NYCRR 215.2**

Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

**Item 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

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emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

**FEDERAL APPLICABLE REQUIREMENTS**  
**The following conditions are federally enforceable.**

**Condition 1-1: Non Applicable requirements**  
**Effective between the dates of 07/28/2017 and 07/13/2025**

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

**Item 1-1.1:**

This section contains a summary of those requirements that have been specifically identified as being not applicable to this facility and/or emission units, emission points, processes and/or emission sources within this facility. The summary also includes a justification for classifying any such requirements as non-applicable.

(From Mod 1) 6 NYCRR 212-3.1 (c) (4) (i)

Reason: Capture and control requirements are not in effect as long as emissions of volatile organic compounds (VOCs) are less than 50 tons per year.

To demonstrate this, the owner or operator shall calculate emissions of ethanol on a monthly basis and report annually (Not later than January 31st) the total emissions for the previous calendar year. Emissions shall be calculated by subtracting the weight of the dry silver from the weight of wet product before drying.

**Condition 29: Visible Emissions Limited**  
**Effective between the dates of 07/14/2015 and 07/13/2025**

**Applicable Federal Requirement:6 NYCRR 211.2**

**Item 29.1:**

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 2: Compliance Demonstration**  
**Effective between the dates of 07/14/2015 and 07/13/2025**

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

**Item 2.1:**

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The Compliance Demonstration activity will be performed for the Facility.

**Item 2.2:**

Compliance Demonstration 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 to the outdoor atmosphere 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

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING  
DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 3-1: Compliance Demonstration**

**Effective between the dates of 08/10/2021 and 07/13/2025**

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 3-1.1:**

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: U-CATRE

Process: CAT

Emission Source: 00010

Emission Unit: U-CATRE

Process: CAT

Emission Source: 00011

Regulated Contaminant(s):

CAS No: 007697-37-2

NITRIC ACID

CAS No: 000050-00-0

FORMALDEHYDE

**Item 3-1.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The source owner shall maintain a range of pressure drop across the scrubber from this source of 1.75 to 4.75 inches water. The monitoring of this surrogate will

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assist in demonstrating compliance with nitric acid limit found elsewhere in this permit.  
Source owner shall operate a monitoring device that continuously measures and records the scrubber pressure drop. Pressure drop will be recorded in a bound log book at the start of each process run and an alarm will sound if the scrubber pump stops operating during processing.

Parameter Monitored: PRESSURE CHANGE

Lower Permit Limit: 1.75 inches of water

Upper Permit Limit: 4.75 inches of water

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: RANGE - NOT TO FALL OUTSIDE OF STATED RANGE AT ANY TIME

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 3-2: Compliance Demonstration**  
**Effective between the dates of 08/10/2021 and 07/13/2025**

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 3-2.1:**

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

Emission Unit: U-CATRE

Process: CAT

Emission Source: 00010

Emission Unit: U-CATRE

Process: CAT

Emission Source: 00011

Regulated Contaminant(s):

CAS No: 007697-37-2 NITRIC ACID

CAS No: 000050-00-0 FORMALDEHYDE

**Item 3-2.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The scrubber liquid shall have a minimum pH of at least 9 during processing. Scrubber liquid pH will be measured at the beginning of each process run and recorded in a bound log book.

Parameter Monitored: ACIDITY/ALKALINITY

Lower Permit Limit: 9 pH (STANDARD) units

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED

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VALUE - SEE MONITORING DESCRIPTION  
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 3: Compliance Demonstration**  
Effective between the dates of 07/14/2015 and 07/13/2025

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 3.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 3.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

In accordance with 6NYCRR 212-2.3(b) table 4, to assure compliance for the degree of treatment of hydrazine, an A - rated contaminant, the source owner shall completely destroy any residual hydrazine remaining after the reaction is completed. The residual hydrazine will be destroyed after transfer of waste water to the evaporator prior to evaporation.

Records shall be kept in a bound log book indicating batch number, date, time and hydrazine sample results.

Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL CHANGE

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 4: Compliance Demonstration**  
Effective between the dates of 07/14/2015 and 07/13/2025

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 4.1:**

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: U-00001

Emission Unit: U-CATRE

Emission Unit: U-POWFL

Emission Unit: U-SILOX

**Item 4.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:



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No person shall cause or allow emissions that exceed the permissible emission rate as determined from Table 4 of 6NYCRR Section 212-2.3 for the environmental rating assigned to the contaminant by the Department.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 5: Compliance Demonstration**  
Effective between the dates of 07/14/2015 and 07/13/2025

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

**Item 5.1:**

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

Emission Unit: U-00001

Emission Unit: U-CATRE

Emission Unit: U-POWFL

Emission Unit: U-SILOX

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

**Item 5.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emissions of solid particles from process sources are limited to less than 0.05 grains per cubic foot of exhaust gas, expressed at standard conditions on a dry basis. Compliance testing will be conducted at the discretion of the department.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.05 grains per dscf

Reference Test Method: Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

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

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**Condition 6: Compliance Demonstration**  
**Effective between the dates of 07/14/2015 and 07/13/2025**

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 6.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00001  
Process: 001

**Item 6.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

A system must be in place that shuts down the process upon malfunction or shutdown of the control equipment. Residual emissions existing after shutdown shall not be emitted without appropriate control specified in 6NYCRR, Section 212-2.3, Table 3. This system shall be tested annually and documentation of this testing shall include date, time, and name of personnel performing test. These records shall be available for inspection by NYSDEC or USEPA representative during normal business hours. All occurrences of DCU shutdown and malfunctions must be recorded in a bound log book. This documentation shall be retained on site for a period of at least five (5) years.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 7: Compliance Demonstration**  
**Effective between the dates of 07/14/2015 and 07/13/2025**

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 7.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00001  
Process: 001  
Emission Source: 00001

**Item 7.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The permittee must continuously monitor and record the DCU temperature. The temperature of the DCU must stay above 1700 degrees F at all times the process is

Permit ID: 5-5205-00057/00006

Facility DEC ID: 5520500057

operating.

Parameter Monitored: TEMPERATURE  
 Lower Permit Limit: 1700 degrees Fahrenheit  
 Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
 Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION  
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 8: Compliance Demonstration**  
 Effective between the dates of 07/14/2015 and 07/13/2025

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 8.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00001  
 Process: FUM

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

**Item 8.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

Continuously monitor and record temperature in reactor kettles. As the temperature approaches 200 degrees F, addition of nitric acid will be stopped while oxidizing agent will continue to be added. This will ensure an excess of oxidizing agent which will prevent nitrogen oxide from being formed. The temperature shall not exceed 200 degrees F.

Parameter Monitored: TEMPERATURE  
 Upper Permit Limit: 200 degrees Fahrenheit  
 Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
 Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION  
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 1-2: Compliance Demonstration**  
 Effective between the dates of 07/28/2017 and 07/13/2025

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 1-2.1:**

The Compliance Demonstration activity will be performed for:

Permit ID: 5-5205-00057/00006

Facility DEC ID: 5520500057

Emission Unit: U-00001

Process: FUM

Emission Source: SCB02

Regulated Contaminant(s):

CAS No: 007697-37-2 NITRIC ACID

**Item 1-2.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The scrubber liquid shall have a minimum pH of at least 9 during processing. Scrubber liquid pH will be measured at the beginning of each process run and recorded in a bound log book.

Parameter Monitored: ACIDITY/ALKALINITY

Lower Permit Limit: 9 pH (STANDARD) units

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING  
DESCRIPTION

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

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 1-3: Compliance Demonstration**

**Effective between the dates of 07/28/2017 and 07/13/2025**

**Applicable Federal Requirement: 6 NYCRR 212-2.1 (b)**

**Item 1-3.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00001

Process: FUM

Emission Source: SCB02

Regulated Contaminant(s):

CAS No: 007697-37-2 NITRIC ACID

**Item 1-3.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The source owner shall maintain a range of pressure drop across the scrubber from this source of 1.75 to 4.75 inches water. The monitoring of this surrogate will assist in demonstrating compliance with nitric acid limit found elsewhere in this permit.

Source owner shall operate a monitoring device that continuously measures and records the scrubber pressure

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Facility DEC ID: 5520500057

drop. Pressure drop will be recorded in a bound log book at the start of each process run and an alarm will sound if the scrubber pump stops operating during processing.

Parameter Monitored: PRESSURE CHANGE  
 Lower Permit Limit: 1.75 inches of water  
 Upper Permit Limit: 4.75 inches of water  
 Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
 Averaging Method: RANGE - NOT TO FALL OUTSIDE OF STATED RANGE AT ANY TIME  
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 11: Compliance Demonstration**  
 Effective between the dates of 07/14/2015 and 07/13/2025

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 11.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00001                      Emission Point: 1X500

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

**Item 11.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

A performance test demonstrating NOx removal shall be conducted at the discretion of the permitting authority. NOx removal must be at least 94%. This performance test must be conducted under worst case loads and at surrogate parameters identified in this permit.

Parameter Monitored: OXIDES OF NITROGEN  
 Lower Permit Limit: 94 percent reduction  
 Reference Test Method: Method 7  
 Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
 Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED  
 Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 2-3: Compliance Demonstration**  
 Effective between the dates of 01/22/2018 and 07/13/2025

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 2-3.1:**

The Compliance Demonstration activity will be performed for:

Permit ID: 5-5205-00057/00006

Facility DEC ID: 5520500057

Emission Unit: U-CATRE

Process: CAT

Emission Source: 00009

Regulated Contaminant(s):

CAS No: 007697-37-2

NITRIC ACID

CAS No: 000050-00-0

FORMALDEHYDE

**Item 2-3.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The source owner shall maintain a range of pressure drop across the scrubber from this source of 1.75 to 4.75 inches water.

Source owner shall operate a monitoring device that continuously measures and records the scrubber pressure drop. Pressure drop will be recorded in a bound log book at the start of each process run and an alarm will sound if the scrubber pump stops operating during processing.

Parameter Monitored: PRESSURE CHANGE

Lower Permit Limit: 1.75 inches of water

Upper Permit Limit: 4.75 inches of water

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING  
DESCRIPTION

Averaging Method: RANGE - NOT TO FALL OUTSIDE OF STATED  
RANGE AT ANY TIME

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 2-4: Compliance Demonstration**

**Effective between the dates of 01/22/2018 and 07/13/2025**

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 2-4.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-CATRE

Process: CAT

Emission Source: 00009

Regulated Contaminant(s):

CAS No: 007697-37-2

NITRIC ACID

CAS No: 000050-00-0

FORMALDEHYDE

**Item 2-4.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

Permit ID: 5-5205-00057/00006

Facility DEC ID: 5520500057

The scrubber liquid shall have a minimum pH of at least 9 during processing. Scrubber liquid pH will be measured at the beginning of each process run and recorded in a bound log book.

Parameter Monitored: ACIDITY/ALKALINITY  
 Lower Permit Limit: 9 pH (STANDARD) units  
 Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
 Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE - SEE MONITORING DESCRIPTION  
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 2-5: Compliance Demonstration**  
 Effective between the dates of 01/22/2018 and 07/13/2025

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 2-5.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-CATRE  
 Process: PRO Emission Source: 00007

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

**Item 2-5.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The scrubber liquid shall have a maximum pH of 5 during processing. Scrubber liquid pH will be measured at the beginning of each process run and recorded in a bound log book.

Parameter Monitored: ACIDITY/ALKALINITY  
 Upper Permit Limit: 5 pH (STANDARD) units  
 Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
 Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION  
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 2-6: Compliance Demonstration**  
 Effective between the dates of 01/22/2018 and 07/13/2025

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 2-6.1:**

The Compliance Demonstration activity will be performed for:

Permit ID: 5-5205-00057/00006

Facility DEC ID: 5520500057

Emission Unit: U-CATRE

Process: PRO

Emission Source: 00007

Regulated Contaminant(s):

CAS No: 007664-41-7 AMMONIA

**Item 2-6.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The source owner shall maintain a range of pressure drop across the scrubber from this source of 1.75 to 4.75 inches water.

The owner or operator shall operate a monitoring device that continuously measures and records the scrubber pressure drop. Pressure drop will be recorded in a bound log book at the start of each process run and an alarm will sound if the scrubber pump stops operating during the process.

Parameter Monitored: PRESSURE DROP

Lower Permit Limit: 1.75 inches of water

Upper Permit Limit: 4.75 inches of water

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 3-3: Compliance Demonstration**

**Effective between the dates of 08/10/2021 and 07/13/2025**

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 3-3.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-CATRE

Emission Point: 00011

Regulated Contaminant(s):

CAS No: 007697-37-2 NITRIC ACID

**Item 3-3.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emissions of Nitric Acid shall not exceed 0.08 pounds per hour from this emission point. Compliance testing may be required at the discretion of the Department.



Permit ID: 5-5205-00057/00006

Facility DEC ID: 5520500057

Parameter Monitored: NITRIC ACID  
Upper Permit Limit: 0.08 pounds per hour  
Reference Test Method: Method 301  
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
Averaging Method: Arithmetic average of stack test runs  
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 1-8: Compliance Demonstration**  
Effective between the dates of 07/28/2017 and 07/13/2025

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 1-8.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-POWFL  
Process: PDR Emission Source: AMSCB  
Regulated Contaminant(s):  
CAS No: 000302-01-2 HYDRAZINE

**Item 1-8.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The source owner shall maintain a range of pressure drop across the scrubber from this source of 1.75 to 4.75 inches water.  
The owner or operator shall operate a monitoring device that continuously measures and records the scrubber pressure drop. Pressure drop will be recorded in a bound log book at the start of each process run and an alarm will sound if the scrubber pump stops operating during the process.

Parameter Monitored: PRESSURE CHANGE  
Lower Permit Limit: 1.75 inches of water  
Upper Permit Limit: 4.75 inches of water  
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
Averaging Method: RANGE - NOT TO FALL OUTSIDE OF STATED RANGE AT ANY TIME  
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 1-9: Compliance Demonstration**  
Effective between the dates of 07/28/2017 and 07/13/2025

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

Permit ID: 5-5205-00057/00006

Facility DEC ID: 5520500057

**Item 1-9.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-POWFL

Process: PDR

Emission Source: AMSCB

Regulated Contaminant(s):

CAS No: 000302-01-2      HYDRAZINE

**Item 1-9.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The scrubber liquid shall have a maximum pH of 5 during processing. Scrubber liquid pH will be measured at the beginning of each process run and recorded in a bound log book.

Parameter Monitored: ACIDITY/ALKALINITY

Upper Permit Limit: 5 pH (STANDARD) units

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING  
DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING  
DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 1-10: Compliance Demonstration**

**Effective between the dates of 07/28/2017 and 07/13/2025**

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 1-10.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-POWFL

Process: PDR

Emission Source: SCR01

Regulated Contaminant(s):

CAS No: 000050-00-0      FORMALDEHYDE

**Item 1-10.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The source owner shall maintain a range of pressure drop across the scrubber from this source of 1.75 to 4.75 inches water.

Source owner shall operate a monitoring device that continuously measures and records the scrubber pressure

Permit ID: 5-5205-00057/00006

Facility DEC ID: 5520500057

drop. Pressure drop will be recorded in a bound log book at the start of each process run and an alarm will sound if the scrubber pump stops operating during processing.

Parameter Monitored: PRESSURE CHANGE  
 Lower Permit Limit: 1.75 inches of water  
 Upper Permit Limit: 4.75 inches of water  
 Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
 Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE - SEE MONITORING DESCRIPTION  
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 1-11: Compliance Demonstration**  
 Effective between the dates of 07/28/2017 and 07/13/2025

**Applicable Federal Requirement: 6 NYCRR 212-2.1 (b)**

**Item 1-11.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-POWFL  
 Process: PDR Emission Source: SCR01

Regulated Contaminant(s):  
 CAS No: 000050-00-0 FORMALDEHYDE

**Item 1-11.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The scrubber liquid shall have a minimum pH of at least 9 during processing. Scrubber liquid pH will be measured at the beginning of each process run and recorded in a bound log book.

Parameter Monitored: ACIDITY/ALKALINITY  
 Lower Permit Limit: 9 pH (STANDARD) units  
 Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
 Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE - SEE MONITORING DESCRIPTION  
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

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

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

**This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability**

**Item A: Emergency Defense - 6 NYCRR 201-1.5**

An emergency, as defined in 6 NYCRR 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 demonstrate, 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 facility was being properly operated and maintained;

(3) during the period of the emergency the facility owner or operator took all reasonable steps to minimize the 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 any 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 malfunction provision contained in any applicable requirement.

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

Where facility owners and/or operators keep records pursuant to compliance with the requirements of 6 NYCRR Subpart 201-5.4, and/or the emission capping requirements of 6 NYCRR Subpart 201-7, the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records.

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Facility owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department.

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

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

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

**STATE ONLY APPLICABLE REQUIREMENTS**

**The following conditions are state only enforceable.**

**Condition 24: Contaminant List**

**Effective between the dates of 07/14/2015 and 07/13/2025**

**Applicable State Requirement:ECL 19-0301**

**Item 24.1:**

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

CAS No: 000050-00-0  
Name: FORMALDEHYDE

CAS No: 000302-01-2  
Name: HYDRAZINE

CAS No: 007664-41-7  
Name: AMMONIA

CAS No: 007697-37-2  
Name: NITRIC ACID

Permit ID: 5-5205-00057/00006

Facility DEC ID: 5520500057

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

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

**Condition 3-4: Malfunctions and Start-up/Shutdown Activities**  
**Effective between the dates of 08/10/2021 and 07/13/2025**

**Applicable State Requirement:6 NYCRR 201-1.4**

**Item 3-4.1:**

(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 maintenance and start-up/shutdown activities when they are expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when required by a permit condition or upon request by the department. Such reports shall state whether an exceedance occurred and if it was unavoidable, include the time, frequency and duration of the exceedance, 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 monitoring and quarterly reporting requirements need not submit additional reports of exceedances to the department.

(c) In the event that air contaminant emissions exceed any applicable emission standard due to a malfunction, the facility owner or operator shall 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. In addition, the facility owner or operator shall compile and maintain a record of all malfunctions. Such records shall be maintained at the facility for a period of at least five years and must be made available to the department upon request. 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, the air contaminants emitted, and the resulting emission rates and/or opacity.

(d) The department may also require the facility 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 26: Emission Unit Definition**  
**Effective between the dates of 07/14/2015 and 07/13/2025**

Permit ID: 5-5205-00057/00006

Facility DEC ID: 5520500057

**Applicable State Requirement:6 NYCRR Subpart 201-5**

**Item 26.1(From Mod 3):**

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

Emission Unit: U-00001

Emission Unit Description:

This emission unit is for the Silver Nitrate Department. It consists of six reactor vessels (sources K001-K05A), six evaporators (sources EV001-05A), two new pressure vessels (sources NPV01 & 02), three drying ovens (sources OV-NA, OV-NB and OV-NC), one pelletizer (source Pell1), one packaging unit (source PCK1), a direct combustion unit (source 00001), a packed tower scrubber (source 00002), a scrubber (SCB02) and two dust collectors with HEPA filters. The DCU (emission point 1X500), dust collector (EP 2X500) and scrubber (EP SCB02) are the only emission points in this unit.

Building(s): 1

**Item 26.2(From Mod 3):**

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

Emission Unit: U-CATRE

Emission Unit Description:

This emission unit is for the catalyst recycling department. It consists of ten reactor units (K16 - K25), four wet scrubbers (00007, 00009 00010 and 00011), one dust collector and a melting unit which is exempt from permitting. Emission points include exhausts from the scrubbers and dust collector.

Building(s): 1

**Item 26.3(From Mod 3):**

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

Emission Unit: U-POWFL

Emission Unit Description:

This emission unit consists of four process. Process PDR and Process AMM produce silver powder. Process SOH produces silver and tin oxide. Process ETH dewater/washes silver powder with ethanol.

Building(s): 1  
3

**Item 26.4(From Mod 3):**

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

Emission Unit: U-SILOX

Emission Unit Description:

This emission unit consists of Process SOX which produces silver oxide. Emission sources consist of: reactor kettles (sources K0006-11 and), drying ovens and

Permit ID: 5-5205-00057/00006

Facility DEC ID: 5520500057

sieves. Emission point EP RCT01 is a vent for reactors K0006 - 11. Ovens vent water vapor from the material as it is being dried. Particulate emissions from the sieves are controlled by HEPA dust collectors.

Building(s): 1  
3

**Condition 27: Renewal deadlines for state facility permits  
Effective between the dates of 07/14/2015 and 07/13/2025**

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

**Item 27.1:**

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

**Condition 28: Compliance Demonstration  
Effective between the dates of 07/14/2015 and 07/13/2025**

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

**Item 28.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 28.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

Division of Air Resources  
NYS Dept. of Environmental Conservation  
Region 5  
232 Golf Course Rd.  
Warrensburg, NY 12885

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 1: Air pollution prohibited  
Effective between the dates of 07/14/2015 and 07/13/2025**

**Applicable State Requirement:6 NYCRR 211.1**

**Item 1.1:**

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.



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Facility DEC ID: 5520500057

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 3-5: Compliance Demonstration**  
**Effective between the dates of 08/10/2021 and 07/13/2025**

**Applicable State Requirement: 6 NYCRR 212-2.1 (a)**

**Item 3-5.1:**

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

Emission Unit: U-CATRE	Emission Point: 00009
Emission Unit: U-CATRE	Emission Point: 00011
Emission Unit: U-POWFL	Emission Point: SCB01
Regulated Contaminant(s): CAS No: 000050-00-0	FORMALDEHYDE

**Item 3-5.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emissions of Formaldehyde from each emission point are limited to 0.017 pounds per hour.  
 Formaldehyde is a "A" rated contaminant. Modeling has demonstrated that emissions at or below this rate will not cause unacceptable ambient impacts.  
 Compliance testing shall be conducted at the discretion of the Department.

Parameter Monitored: FORMALDEHYDE

Upper Permit Limit: 0.017 pounds per hour

Reference Test Method: Method 323

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

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

**Condition 30: Emission Point Definition By Emission Unit**  
**Effective between the dates of 07/14/2015 and 07/13/2025**

Permit ID: 5-5205-00057/00006

Facility DEC ID: 5520500057

**Applicable State Requirement:6 NYCRR Subpart 201-5**

**Item 30.1(From Mod 3):**

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

Emission Unit: U-00001

Emission Point: 1X500

Height (ft.): 42 Diameter (in.): 18  
 NYTMN (km.): 4796.42 NYTME (km.): 611.327 Building: 1

Emission Point: 2X500

Height (ft.): 27 Diameter (in.): 10  
 NYTMN (km.): 4796.42 NYTME (km.): 611.327 Building: 1

Emission Point: SCB02

Height (ft.): 27 Diameter (in.): 14  
 NYTMN (km.): 4796.42 NYTME (km.): 611.327 Building: 1

**Item 30.2(From Mod 3):**

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

Emission Unit: U-CATRE

Emission Point: 00007

Height (ft.): 20 Diameter (in.): 10  
 NYTMN (km.): 4796.41 NYTME (km.): 611.313 Building: 1

Emission Point: 00009

Height (ft.): 20 Diameter (in.): 10  
 NYTMN (km.): 4796.4 NYTME (km.): 611.315 Building: 1

Emission Point: 00011

Height (ft.): 20 Diameter (in.): 8  
 NYTMN (km.): 4796.41 NYTME (km.): 611.313 Building: 1

Emission Point: DTCLT

Height (ft.): 10 Diameter (in.): 6  
 NYTMN (km.): 4796.41 NYTME (km.): 611.313 Building: 1

Emission Point: OVNVT

Height (ft.): 33 Diameter (in.): 8  
 NYTMN (km.): 4796.41 NYTME (km.): 611.313 Building: 1

**Item 30.3(From Mod 3):**

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

Emission Unit: U-POWFL

Emission Point: AMDST

Height (ft.): 25 Diameter (in.): 4  
 NYTMN (km.): 4796.43 NYTME (km.): 611.327 Building: 3

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Facility DEC ID: 5520500057

Emission Point: AMSRB			
Height (ft.): 30	Diameter (in.): 10		
NYTMN (km.): 4796.43	NYTME (km.): 611.327	Building: 3	
Emission Point: DSTPF			
Height (ft.): 21	Diameter (in.): 7		
NYTMN (km.): 4796.4	NYTME (km.): 611.285	Building: 3	
Emission Point: OVGRB			
Height (ft.): 9	Diameter (in.): 8		
NYTMN (km.): 4796.43	NYTME (km.): 611.327	Building: 3	
Emission Point: OVN01			
Height (ft.): 28	Diameter (in.): 6		
NYTMN (km.): 4796.401	NYTME (km.): 611.284	Building: 3	
Emission Point: OVN02			
Height (ft.): 28	Diameter (in.): 6		
NYTMN (km.): 4796.4	NYTME (km.): 611.285	Building: 3	
Emission Point: OVN03			
Height (ft.): 28	Diameter (in.): 6		
NYTMN (km.): 4796.41	NYTME (km.): 611.285	Building: 3	
Emission Point: OVN04			
Height (ft.): 28	Diameter (in.): 6		
NYTMN (km.): 4796.402	NYTME (km.): 611.285	Building: 3	
Emission Point: OVN05			
Height (ft.): 28	Diameter (in.): 6		
NYTMN (km.): 4796.404	NYTME (km.): 611.285	Building: 3	
Emission Point: OVN06			
Height (ft.): 28	Diameter (in.): 6		
NYTMN (km.): 4796.405	NYTME (km.): 611.285	Building: 3	
Emission Point: OVN08			
Height (ft.): 28	Diameter (in.): 6		
NYTMN (km.): 4796.407	NYTME (km.): 611.285	Building: 3	
Emission Point: OVN09			
Height (ft.): 28	Diameter (in.): 6		
NYTMN (km.): 4796.4	NYTME (km.): 611.285	Building: 3	
Emission Point: OVN10			
Height (ft.): 28	Diameter (in.): 6		
NYTMN (km.): 4796.4	NYTME (km.): 611.285	Building: 3	
Emission Point: OVN7A			
Height (ft.): 28	Diameter (in.): 6		
NYTMN (km.): 4796.406	NYTME (km.): 611.285	Building: 3	
Emission Point: OVN8A			

Permit ID: 5-5205-00057/00006

Facility DEC ID: 5520500057

Height (ft.): 28	Diameter (in.): 6	
NYTMN (km.): 4796.408	NYTME (km.): 611.285	Building: 3
Emission Point: OVVAC		
Height (ft.): 19	Diameter (in.): 6	
NYTMN (km.): 4796.43	NYTME (km.): 611.327	Building: 3
Emission Point: SCB01		
Height (ft.): 60	Diameter (in.): 10	
NYTMN (km.): 4796.4	NYTME (km.): 611.285	Building: 3
Emission Point: VENT1		
Height (ft.): 14	Diameter (in.): 14	
NYTMN (km.): 4796.43	NYTME (km.): 611.327	Building: 3
Emission Point: VENT2		
Height (ft.): 14	Diameter (in.): 14	
NYTMN (km.): 4796.43	NYTME (km.): 611.327	Building: 3

**Item 30.4(From Mod 3):**

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

Emission Unit: U-SILOX

Emission Point: OVP01		
Height (ft.): 33	Length (in.): 5	Width (in.): 5
NYTMN (km.): 4796.43	NYTME (km.): 611.327	Building: 1
Emission Point: OVP02		
Height (ft.): 33	Diameter (in.): 6	
NYTMN (km.): 4796.4	NYTME (km.): 611.285	Building: 1
Emission Point: OVP03		
Height (ft.): 33	Length (in.): 5	Width (in.): 5
NYTMN (km.): 4796.43	NYTME (km.): 611.327	Building: 1
Emission Point: RCT01		
Height (ft.): 27	Diameter (in.): 9	
NYTMN (km.): 4796.43	NYTME (km.): 611.327	Building: 1
Emission Point: VENT3		
Height (ft.): 14	Diameter (in.): 18	
NYTMN (km.): 4796.43	NYTME (km.): 611.327	Building: 1

**Condition 31: Process Definition By Emission Unit**  
**Effective between the dates of 07/14/2015 and 07/13/2025**

**Applicable State Requirement:6 NYCRR Subpart 201-5**

**Item 31.1(From Mod 3):**

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

Emission Unit: U-00001

Permit ID: 5-5205-00057/00006

Facility DEC ID: 5520500057

Process: 001 Source Classification Code: 3-01-999-99

Process Description:

Silver is reacted in steam heated kettles with Nitric Acid to produce Silver Nitrate. The kettles are exhausted to the Direct Combustion Unit (DCU) which controls Nitrogen Oxide emissions.

Emission Source/Control: 00001 - Control  
Control Type: DIRECT FLAME AFTERBURNER

Emission Source/Control: K0001 - Process

Emission Source/Control: K0002 - Process

Emission Source/Control: K0003 - Process

Emission Source/Control: K0004 - Process

Emission Source/Control: K0005 - Process

Emission Source/Control: K005A - Process

Emission Source/Control: NPV01 - Process

Emission Source/Control: NPV02 - Process

**Item 31.2(From Mod 3):**

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

Emission Unit: U-00001

Process: 111 Source Classification Code: 3-01-999-99

Process Description:

This process receives silver nitrate solution from Process 011\ EU CATRE and completes the formation of silver nitrate crystals. The mixture received from process 011 is sent to the new pressure vessels where it is treated and put under light pressure through filters to remove fine impurities. Next the mixture is sent to the evaporators where the solution is typically only stored. However, hand crystallizing using only one evaporator at any time is still an option. If not hand crystallized, the mixture is sent to a crystallizer where liquid is evaporated and silver nitrate crystals are formed. After the crystals form, it is sent to a centrifuge which then releases into an oven. There are no emissions from the crystallizers and centrifuge processes. In the ovens material is allowed to completely dry and is then sent to the packaging/pelletizer units. There are two emission points which releases to the outside air in this process, (EP SCBO2 and 2x500).

The two dust collectors (sources DUST1 & 5) vent inside the building.

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Emission Source/Control: 00002 - Control  
Control Type: PACKED-GAS ABSORPTION SYSTEM

Emission Source/Control: 2X500 - Control  
Control Type: DUST COLLECTOR

Emission Source/Control: DUST1 - Control  
Control Type: HIGH EFFICIENCY PARTICULATE AIR FILTER

Emission Source/Control: DUST5 - Control  
Control Type: HIGH EFFICIENCY PARTICULATE AIR FILTER

Emission Source/Control: EV001 - Process  
Design Capacity: 400 gallons

Emission Source/Control: EV002 - Process  
Design Capacity: 300 gallons

Emission Source/Control: EV003 - Process  
Design Capacity: 300 gallons

Emission Source/Control: EV004 - Process  
Design Capacity: 300 gallons

Emission Source/Control: EV005 - Process  
Design Capacity: 400 gallons

Emission Source/Control: NPV01 - Process  
Design Capacity: 1,000 gallons

Emission Source/Control: NPV02 - Process  
Design Capacity: 1,000 gallons

Emission Source/Control: OV-NA - Process

Emission Source/Control: OV-NB - Process

Emission Source/Control: OV-NC - Process

Emission Source/Control: PCK01 - Process

Emission Source/Control: PELL1 - Process

**Item 31.3(From Mod 3):**

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

Emission Unit: U-00001

Process: FUM

Source Classification Code: 3-01-999-99

Process Description:

Silver ingots and chemicals are placed in one of two steam jacketed reactors (K0004, K0005) and heated. The process is allowed to continue until silver nitrate is

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formed. The silver nitrate solution from these reactors will then be further refined in EU 00001, process 111.

This process produces significantly less NOx than traditional methods and will be vented to a scrubber (source/control SCB02) and out EP SCB02. This process will allow for refinement in technology associated with "NOx free" silver nitrate production. Data obtained while operating this process may later be used to design an effective emissions control device for a full conversion of the facility to the "NOx free" technology.

Emission Source/Control: SCB02 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: EV001 - Process  
Design Capacity: 400 gallons

Emission Source/Control: EV002 - Process  
Design Capacity: 300 gallons

Emission Source/Control: EV003 - Process  
Design Capacity: 300 gallons

Emission Source/Control: EV004 - Process  
Design Capacity: 300 gallons

Emission Source/Control: EV005 - Process  
Design Capacity: 400 gallons

Emission Source/Control: EV05A - Process  
Design Capacity: 400 gallons

Emission Source/Control: K0001 - Process  
Design Capacity: 4,000 pounds per day

Emission Source/Control: K0002 - Process  
Design Capacity: 4,000 pounds per day

Emission Source/Control: K0003 - Process  
Design Capacity: 4,000 pounds per day

Emission Source/Control: K0004 - Process  
Design Capacity: 4,000 pounds per day

Emission Source/Control: K0005 - Process  
Design Capacity: 4,000 pounds per day

Emission Source/Control: K005A - Process  
Design Capacity: 4,000 pounds per day

Emission Source/Control: K00F1 - Process

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Design Capacity: 500 gallons

Emission Source/Control: NPV01 - Process  
 Design Capacity: 1,000 gallons

Emission Source/Control: NPV02 - Process  
 Design Capacity: 1,000 gallons

**Item 31.4(From Mod 3):**

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

Emission Unit: U-CATRE

Process: 011

Source Classification Code: 3-01-999-99

Process Description:

Silver ingots and chemicals are placed in one of three steam jacketed reactors and heated. The process is allowed to continue until silver nitrate is formed. The silver nitrate solution from these reactors will then be further refined in EU 00001, process 111.

This process produces significantly less NOx than traditional methods and will be vented to two scrubbers (source/control 00010 and 00011) and out EP 00011. This process will allow for refinement in technology associated with "NOx free" silver nitrate production. Data obtained while operating this process may later be used to design an effective emissions control device for a full conversion of the facility to the "NOx free" technology.

Emission Source/Control: 00010 - Control  
 Control Type: WET SCRUBBER

Emission Source/Control: 00011 - Control  
 Control Type: WET SCRUBBER

Emission Source/Control: K0016 - Process

Emission Source/Control: K0017 - Process

**Item 31.5(From Mod 3):**

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

Emission Unit: U-CATRE

Process: CAT

Source Classification Code: 3-01-999-99

Process Description:

Recovery of silver products from the spent catalysts and the silver nitrate process onsite. The silver from the spent catalysts is either stripped from the catalyst in a "NOx free" process or washed, precipitated, dried and melted using added chemicals such as formaldehyde and sodium hydroxide.

The emission points associated with this process are for the kettles/scrubber (EP 00011), vats/ scrubber (EP



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00009) and dust collector (EP DTCLT).

Emission Source/Control: 00007 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: 00009 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: 00010 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: 00011 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: DUST2 - Control  
Control Type: HIGH EFFICIENCY PARTICULATE AIR FILTER

Emission Source/Control: K0016 - Process

Emission Source/Control: K0017 - Process

Emission Source/Control: K0018 - Process

Emission Source/Control: K0019 - Process

Emission Source/Control: K0020 - Process

Emission Source/Control: K0021 - Process

Emission Source/Control: K0022 - Process

Emission Source/Control: K0023 - Process

Emission Source/Control: K0024 - Process

Emission Source/Control: K0025 - Process

**Item 31.6(From Mod 3):**

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

Emission Unit: U-CATRE

Process: FFC

Source Classification Code: 3-01-999-99

Process Description:

Recovery of silver products from the spent catalysts and the silver nitrate process onsite. The silver chloride (AgCl) found on the catalyst is processed with chemicals such as formaldehyde and sodium hydroxide to help precipitate and refine the silver. The wet silver powder is mixed with nitric acid and hydrogen peroxide for further processing. The emission points associated with this process are for the kettles/scrubber (EP 00011) and vats/ fume free reactors/ scrubber (EP00009).

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Emission Source/Control: 00009 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: 00010 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: 00011 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: FF0P1 - Process

Emission Source/Control: FF0P2 - Process

Emission Source/Control: FF0P3 - Process

Emission Source/Control: K0016 - Process

Emission Source/Control: K0017 - Process

Emission Source/Control: K0018 - Process

Emission Source/Control: K0019 - Process

Emission Source/Control: K0020 - Process

Emission Source/Control: K0021 - Process

Emission Source/Control: K0022 - Process

Emission Source/Control: K0023 - Process

Emission Source/Control: K0024 - Process

Emission Source/Control: K0025 - Process

**Item 31.7(From Mod 3):**

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

Emission Unit: U-CATRE

Process: PRO

Source Classification Code: 3-01-999-99

Process Description:

Ammonia solution is prepared in a holding tank and sent through one of 3 ion exchange columns to strip promoter from the resin. After passing through the column, the solution is transferred to a final cook down tank for concentration and sampling.

Emission Source/Control: 00007 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: SCR02 - Control  
Control Type: WET SCRUBBER

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Facility DEC ID: 5520500057

Emission Source/Control: ASTNK - Process

Emission Source/Control: CDTNK - Process

Emission Source/Control: CLMN1 - Process

Emission Source/Control: CLMN2 - Process

Emission Source/Control: CLMN3 - Process

**Item 31.8(From Mod 3):**

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

Emission Unit: U-POWFL

Process: AMM

Source Classification Code: 3-01-999-99

Process Description:

Silver nitrate is placed inside reactors with ammonium hydroxide and hydrazine and heated. After the reaction is completed, residual hydrazine is completely destroyed. The remaining ammonia and ammonium nitrate bearing waste water is removed by decantation and made up with fresh water, this is done at least three times. The silver and water solution is sent to a centrifuge to separate out the silver powder. The moist silver powder is then sent to the drying ovens. The ovens slowly dry the silver powder. Then the material is sent to a sieve which screens the powder. This powder can either be sold or used in the flake process. Emissions from reactors and day tanks are exhausted through scrubber AMSCB and out EP AMSRB. Emissions from the sieves are exhausted through HEPA filters.

Emission Source/Control: AMSCB - Control

Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: DUST4 - Control

Control Type: HIGH EFFICIENCY PARTICULATE AIR FILTER

Emission Source/Control: DUST6 - Control

Control Type: FABRIC FILTER

Emission Source/Control: DUST7 - Control

Control Type: FABRIC FILTER

Emission Source/Control: AMDAY - Process

Design Capacity: 30 gallons

Emission Source/Control: AMRT1 - Process

Design Capacity: 500 gallons

Emission Source/Control: AMRT2 - Process

Design Capacity: 500 gallons

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Emission Source/Control: GRBOV - Process  
Design Capacity: 460 volts

Emission Source/Control: HZDAY - Process  
Design Capacity: 30 gallons

Emission Source/Control: RFS01 - Process  
Design Capacity: 21.5 inches

Emission Source/Control: RFS02 - Process  
Design Capacity: 21.5 inches

Emission Source/Control: SSRX1 - Process  
Design Capacity: 500 gallons

Emission Source/Control: SWSR1 - Process  
Design Capacity: 24 inches

Emission Source/Control: SWSR2 - Process  
Design Capacity: 24 inches

Emission Source/Control: VACOV - Process  
Design Capacity: 700 pounds per load

**Item 31.9(From Mod 3):**

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

Emission Unit: U-POWFL  
Process: ETH Source Classification Code: 3-01-999-99  
Process Description:

Ethanol is added to powder either in a filter cart or filter press for de-watering/washing of the material. the existing ethanol is either discharged to the effluent system or is collected for distillation. Ethanol is also used for coating silver in a mixed slurry. The powder wet with ethanol is filtered and dried in a batch oven.

Emission Source/Control: CARTS - Process

Emission Source/Control: OVN03 - Process  
Design Capacity: 35 kilowatts

Emission Source/Control: OVN04 - Process  
Design Capacity: 35 kilowatts

Emission Source/Control: OVN05 - Process

Emission Source/Control: OVN09 - Process

Emission Source/Control: OVN7A - Process

Emission Source/Control: OVN8A - Process

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Emission Source/Control: PRESS - Process

**Item 31.10(From Mod 3):**

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

Emission Unit: U-POWFL

Process: PDR

Source Classification Code: 3-01-999-99

Process Description:

Silver nitrate and chemicals are placed into three  
these kettles and heated up with steam. Emissions from  
these kettles are exhausted to a wet scrubber (SCR01).  
When the reaction is done, the product is dropped into  
wash carts where they are pumped down to remove liquids.  
Chemicals remaining in this liquid are treated to remove  
any potential for emissions of these chemicals in the  
waste water disposal system. This material is then sent  
to a drying oven. When drying is done, the product is  
scooped out by hand and placed into shipping totes for  
shipment to customers. The emission points associated  
with this process are for the reactors/scrubber (EP  
SCB01), and ovens.

Emission Source/Control: AMSCB - Control

Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: SCR01 - Control

Control Type: WET SCRUBBER

Emission Source/Control: K0013 - Process

Emission Source/Control: K0014 - Process

Emission Source/Control: K0015 - Process

Emission Source/Control: OVN01 - Process

Emission Source/Control: OVN02 - Process

Emission Source/Control: OVN03 - Process

Emission Source/Control: OVN04 - Process

Emission Source/Control: OVN05 - Process

Emission Source/Control: OVN06 - Process

Emission Source/Control: OVN08 - Process

Emission Source/Control: OVN09 - Process

Emission Source/Control: OVN10 - Process

Emission Source/Control: OVN7A - Process

Permit ID: 5-5205-00057/00006

Facility DEC ID: 5520500057

Emission Source/Control: OVN8A - Process

**Item 31.11(From Mod 3):**

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

Emission Unit: U-POWFL

Process: SOH

Source Classification Code: 3-01-999-99

## Process Description:

Silver nitrate, tin compounds and chemicals are mixed in kettles. The kettles are heated and the process is allowed to react to form a silver and tin oxide mixture. The kettles are then dumped into open carts which have a vacuum on the bottom to suck out liquids. The carts are filled with de-ionized water and drained by the vacuum several times until the material meets specifications. The material is tested on site and after it passes, it is scooped on to large metal sheets and placed into ovens. When the drying is done, the material is sucked out of the ovens and sent to the cyclone where solids fall out. The air goes to a HEPA dust collector. The solids that come out of the cyclone are dropped into shipping containers and packaged for shipment to clients.

Emission Source/Control: K0012 - Process

Emission Source/Control: OVEN4 - Process

Emission Source/Control: OVN04 - Process

**Item 31.12(From Mod 3):**

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

Emission Unit: U-SILOX

Process: SOX

Source Classification Code: 3-01-999-99

## Process Description:

Silver nitrate and chemicals are mixed into reactor kettles and reacted. The exhaust from these reactors contain steam and particulates. The kettles are then dumped into open carts which have a vacuum on the bottom to suck out liquids. The carts are filled with de-ionized water and drained by the vacuum several times until the material meets specifications. The material is tested on site and after it passes, it is scooped into large metal sheets and placed in ovens. When the drying is done, the material is sucked out of the ovens and sent to a cyclone where the solids fall out. The air goes on to a dust collector venting inside of the building. The solids that come out of the cyclone are dropped into shipping containers and packaged for shipment to clients.

Emission Source/Control: K0006 - Process

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- Emission Source/Control: K0007 - Process
- Emission Source/Control: K0008 - Process
- Emission Source/Control: K0009 - Process
- Emission Source/Control: K0010 - Process
- Emission Source/Control: K0011 - Process
- Emission Source/Control: K011A - Process
- Emission Source/Control: OVEN1 - Process
- Emission Source/Control: OVEN2 - Process
- Emission Source/Control: OVEN3 - Process
- Emission Source/Control: PCK02 - Process

**Condition 1-12: Compliance Demonstration**  
**Effective between the dates of 07/28/2017 and 07/13/2025**

**Applicable State Requirement:6 NYCRR 212-2.1 (a)**

**Item 1-12.1:**

The Compliance Demonstration activity will be performed for:

- Emission Unit: U-POWFL                      Emission Point: AMSRB
- Regulated Contaminant(s):  
CAS No: 000302-01-2                      HYDRAZINE

**Item 1-12.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emissions of Hydrazine are limited to 0.00012 pounds per hour.

Hydrazine is a "A" rated contaminant. Modeling has demonstrated that emissions at or below this rate will not cause unacceptable ambient impacts.

Compliance testing shall be conducted at the discretion of the Department.

Parameter Monitored: HYDRAZINE

Upper Permit Limit: 0.00012 pounds per hour

Reference Test Method: Method 18

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

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**Facility DEC ID: 5520500057**

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE



**Permit ID: 5-5205-00057/00006**

**Facility DEC ID: 5520500057**