



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 5-4144-00013/00040
Effective Date: 07/28/2017 Expiration Date: 07/27/2027

Permit Issued To: 50 HARRISON AVENUE LLC
50 HARRISON AVE
SOUTH GLENS FALLS, NY 12803

Contact: WILLIAM HAMELIN
21 ROGERS ST
GLENS FALLS, NY 12801
(518) 792-5808

Facility: 50 HARRISON AVENUE LLC
50 HARRISON AVE
SOUTH GLENS FALLS, NY 12803

Description:
50 Harrison Avenue is approximately 120,000 SF consisting of three (3) adjoining buildings and two smaller outbuildings. The facility is used for the catalyst sampling operation and storage, an expanded silver coated copper process and corporate offices.

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: KEVIN R BLISS
NYSDEC - WARRENSBURG SUBOFFICE
232 GOLF COURSE RD
WARRENSBURG, NY 12885-1172

Authorized Signature: _____ Date: ___ / ___ / ____



Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

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

Item B: Permittee's Contractors to Comply with Permit

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

Item C: Permittee Responsible for Obtaining Other Required Permits

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

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

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



LIST OF CONDITIONS

DEC GENERAL CONDITIONS

General Provisions

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

Facility Level

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



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 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 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

New York State Department of Environmental Conservation

Permit ID: 5-4144-00013/00040

Facility DEC ID: 5414400013



Permit Under the Environmental Conservation Law (ECL)

**ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY
PERMIT**

IDENTIFICATION INFORMATION

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SOUTH GLENS FALLS, NY 12803

Facility: 50 HARRISON AVENUE LLC
50 HARRISON AVE
SOUTH GLENS FALLS, NY 12803

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

Permit Effective Date: 07/28/2017

Permit Expiration Date: 07/27/2027



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6 NYCRR 201-6.4 (g): Non Applicable requirements
- 2 6 NYCRR 211.1: Air pollution prohibited

Emission Unit Level

EU=H-AGCU1

- 3 6 NYCRR 212-1.6 (a): Compliance Demonstration
- 4 6 NYCRR 212-2.4 (b): Compliance Demonstration

EU=H-AGCU1,EP=SCB01

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

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 6 ECL 19-0301: Contaminant List
- 7 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
- 8 6 NYCRR Subpart 201-5: Emission Unit Definition
- 9 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
- 10 6 NYCRR 201-5.3 (c): Compliance Demonstration
- 11 6 NYCRR 211.2: Visible Emissions Limited

Emission Unit Level

- 12 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
- 13 6 NYCRR Subpart 201-5: Process Definition By Emission Unit

EU=H-AGCU1,Proc=PDR,ES=SCB02

- 14 6 NYCRR 212-2.1 (a): Compliance Demonstration
- 15 6 NYCRR 212-2.1 (a): Compliance Demonstration
- 16 6 NYCRR 212-2.1 (a): Compliance Demonstration

EU=H-AGCU1,Proc=SIL,ES=SCB01

- 17 6 NYCRR 212-2.1: Compliance Demonstration
- 18 6 NYCRR 212-2.1: Compliance Demonstration



FEDERALLY ENFORCEABLE CONDITIONS
****** 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.

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

If an existing emission source was subject to the permitting requirements of 6 NYCRR Part 201 at the time of construction or modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

(a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.

(b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

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 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 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: Non Applicable requirements
Effective between the dates of 07/28/2017 and 07/27/2027

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

Item 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.

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 2: Air pollution prohibited
Effective between the dates of 07/28/2017 and 07/27/2027

Applicable Federal Requirement:6 NYCRR 211.1

Item 2.1:

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.



**** Emission Unit Level ****

Condition 3: Compliance Demonstration
Effective between the dates of 07/28/2017 and 07/27/2027

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

Item 3.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: H-AGCU1

Item 3.2:

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

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 4: Compliance Demonstration
Effective between the dates of 07/28/2017 and 07/27/2027

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

Item 4.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: H-AGCU1

Item 4.2:

Compliance Demonstration shall include the following monitoring:

New York State Department of Environmental Conservation

Permit ID: 5-4144-00013/00040

Facility DEC ID: 5414400013



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

Condition 5: Compliance Demonstration
Effective between the dates of 07/28/2017 and 07/27/2027

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

Item 5.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: H-AGCU1 Emission Point: SCB01

Regulated Contaminant(s):
CAS No: 007697-37-2 NITRIC ACID

Item 5.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emissions of nitric acid is given an environmental rating of "B" per 6NYCRR 212.9 table 1. For a B- rated contaminant, having an ERP of <10 pounds per hour, the degree of treatment must be determined by the Commissioner. To mitigate short-term and annual impacts, the source owner shall not have emissions of nitric acid from emission point SCB01 greater than 0.08 pounds per hour. Compliance testing may be required at the discretion of the Department.

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: AVERAGING METHOD AS PER REFERENCE TEST



METHOD INDICATED
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE



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: 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.



Item 7.1:

(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 8: Emission Unit Definition
Effective between the dates of 07/28/2017 and 07/27/2027

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 8.1:

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

Emission Unit: H-AGCU1

Emission Unit Description:

Production of silver flake, production of silver coated coated copper and other miscellaneous operations.

Building(s): 2



Condition 12: Emission Point Definition By Emission Unit
Effective between the dates of 07/28/2017 and 07/27/2027

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 12.1:

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

Emission Unit: H-AGCU1

Emission Point: FAN01
Height (ft.): 28 Diameter (in.): 24
NYTMN (km.): 4794.54 NYTME (km.): 611.4 Building: 3

Emission Point: FAN02
Height (ft.): 28 Diameter (in.): 24
NYTMN (km.): 4794.47 NYTME (km.): 611.46 Building: 3

Emission Point: OVACE
Height (ft.): 28 Diameter (in.): 6
NYTMN (km.): 4794.5 NYTME (km.): 611.42 Building: 3

Emission Point: OVLRE
Height (ft.): 28 Diameter (in.): 6
NYTMN (km.): 4794.5 NYTME (km.): 611.42 Building: 3

Emission Point: OVN07
Height (ft.): 28 Diameter (in.): 6
NYTMN (km.): 4794.54 NYTME (km.): 611.46 Building: 3

Emission Point: OVN08
Height (ft.): 28 Diameter (in.): 6
NYTMN (km.): 4794.56 NYTME (km.): 611.45 Building: 3

Emission Point: OVN09
Height (ft.): 28 Diameter (in.): 6
NYTMN (km.): 4794.58 NYTME (km.): 611.44 Building: 3

Emission Point: OVN19
Height (ft.): 28 Diameter (in.): 6
NYTMN (km.): 4794.5 NYTME (km.): 611.43 Building: 3

Emission Point: OVN20
Height (ft.): 28 Diameter (in.): 6
NYTMN (km.): 4794.5 NYTME (km.): 611.42 Building: 3

Emission Point: OVN22
Height (ft.): 28 Diameter (in.): 6
NYTMN (km.): 4794.5 NYTME (km.): 611.42 Building: 3

Emission Point: OVN23

New York State Department of Environmental Conservation

Permit ID: 5-4144-00013/00040

Facility DEC ID: 5414400013



Emission Source/Control: RCT06 - Process

Item 13.3:

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

Emission Unit: H-AGCU1

Process: CSR

Process Description:

Copper flake is reacted with silver nitrate to produce silver coated copper flake.

Emission Source/Control: SCB01 - Control

Control Type: WET SCRUBBER

Emission Source/Control: BAR01 - Process

Emission Source/Control: CWT01 - Process

Design Capacity: 3,000 gallons

Emission Source/Control: CWT02 - Process

Design Capacity: 3,000 gallons

Emission Source/Control: OVN09 - Process

Emission Source/Control: RCT01 - Process

Design Capacity: 1,500 gallons

Emission Source/Control: SLD01 - Process

Design Capacity: 60 pounds per hour

Emission Source/Control: WSH01 - Process

Design Capacity: 300 gallons

Item 13.4:

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

Emission Unit: H-AGCU1

Process: FLK

Process Description:

This is a batch process. Silver powder is mixed in with chemicals or solvents to disperse the powder. This material is put into ball mills where it is rolled for 4 to 60 hours depending on the final product. When this process is done, it is pumped into a wash vessel for decant washing and then transferred into a hand cart so the solvents can be washed out and removed by vacuum. The washed silver flake is then dried in a batch oven and sorted by screens. The washed out solvents are sent to either the commodity ethanol stream and sent out for re-use or are distilled in house. A small (SGQ level) portion is sent out as mineral spirits waste.

New York State Department of Environmental Conservation

Permit ID: 5-4144-00013/00040

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Process: PDR

Process Description:

Silver nitrate and chemicals are placed in reactors and heated to produce silver powder. Emissions are exhausted to a wet scrubber.

Emission Source/Control: SCB02 - Control

Control Type: WET SCRUBBER

Emission Source/Control: RCT03 - Process

Emission Source/Control: RCT04 - Process

Emission Source/Control: SNTNK - Process

Item 13.7:

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

Emission Unit: H-AGCU1

Process: SIL

Process Description:

Silver ingots are dissolved with nitric acid to make silver nitrate. The acid is treated with hydrogen peroxide and vented through a scrubber.

Emission Source/Control: SCB01 - Control

Control Type: WET SCRUBBER

Emission Source/Control: BAR01 - Process

Emission Source/Control: GRA01 - Process

Emission Source/Control: NITRI - Process

Emission Source/Control: OVACE - Process

Emission Source/Control: TREAT - Process

Condition 14: Compliance Demonstration

Effective between the dates of 07/28/2017 and 07/27/2027

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

Item 14.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: H-AGCU1

Process: PDR

Emission Source: SCB02

Regulated Contaminant(s):

CAS No: 000050-00-0

FORMALDEHYDE



Item 14.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emissions of Formaldehyde 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

Condition 15: Compliance Demonstration

Effective between the dates of 07/28/2017 and 07/27/2027

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

Item 15.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: H-AGCU1

Process: PDR

Emission Source: SCB02

Regulated Contaminant(s):

CAS No: 000050-00-0

FORMALDEHYDE

Item 15.2:

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 formaldehyde emission 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.

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Process: SIL

Emission Source: SCB01

Regulated Contaminant(s):

CAS No: 007697-37-2 NITRIC ACID

Item 17.2:

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 9.0 during processing. Scrubber liquid will be replaced at the beginning of each process run and pH measured at the time of replacement.

Parameter Monitored: ACIDITY/ALKALINITY

Lower Permit Limit: 9.0 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 18: Compliance Demonstration

Effective between the dates of 07/28/2017 and 07/27/2027

Applicable State Requirement:6 NYCRR 212-2.1

Item 18.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: H-AGCU1

Process: SIL

Emission Source: SCB01

Regulated Contaminant(s):

CAS No: 007697-37-2 NITRIC ACID

Item 18.2:

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 drop. Pressure drop will be recorded in a bound log book

New York State Department of Environmental Conservation

Permit ID: 5-4144-00013/00040

Facility DEC ID: 5414400013



at the start of each process run and an alarm will sound
if the scrubber pump stops operating during processing.

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

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY