

Facility DEC ID: 914200031

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

**IDENTIFICATION INFORMATION**

Permit Type: Air State Facility  
 Permit ID: 9-1420-00031/02001  
 Effective Date: 06/30/2022 Expiration Date: 06/29/2032

Permit Issued To: UNITED PRECIOUS METAL REFINING INC  
 2781 TOWNLINE RD  
 ALDEN, NY 14004-9676

Contact: JAMES VOROS  
 UNITED PRECIOUS METAL REFINING  
 2781 TOWNLINE RD  
 ALDEN, NY 14004  
 (716) 683-8334

Facility: UNITED PRECIOUS METAL REFINING  
 2781 TOWNLINE ROAD  
 ALDEN, NY 14004

Description:

United Precious Metal Refining (UPMR) is a refiner and supplier of precious metals (gold, silver, platinum and palladium) located in the Town of Alden, Erie County . The facility specializes in the manufacture of master alloys, grains, solders, wire and other products which are used by the jewelry industry. Alloys are produced by melting precious metals together with small quantities of other metal constituents in electric induction furnaces. The facility performs recovery and refining of precious metals using several different methods. The facility has been organized into four existing emission units (1-WCHEM, 2-MLTNG, 3-RECOV, 4-CRUSH)

1-WCHEM incorporates various wet chemical processing operations including the dissolving of gold in aqua-regia, precipitation of gold and other precious metals, electrolytic silver refining, gold rinsing and wastewater treatment operations. Emissions from the associated processes are controlled by two wet scrubbers and are subject to the emission control standards outlined in 6 NYCRR Part 212 Table 4.

2-MLTNG consists of dry refining operations which include smelting and the pouring of molten metal, as well as alloy manufacturing and fire assaying. These operations all involve the melting of metals in either electric or natural gas-fired furnaces and are exempt from permitting under 6 NYCRR Part 201-3.2(c)(41).

3-RECOV consists of three natural gas-fired precious metal recovery furnaces which are used to incinerate combustible scrap materials containing precious metals in order to separate the precious metals from the scrap. Emissions generated from the furnaces are controlled by an afterburner equipped to each unit and are subject to the emission control standards outlined in 6 NYCRR Part 212 Table 2 and Table 4.

Facility DEC ID: 914200031

4-CRUSH consists of the crushing, screening and blending of recovered solids and manual sifting and screening of burn material. Emissions generated from this emission unit are controlled by several dust collectors and are subject to the particulate control standards outlined in 6 NYCRR Part 212-2.4(b)(1).

Particulate emissions from the facility are regulated under 6 NYCRR Parts 212-1.6(a) and 212-2.4(b). The facility is restricted from creating emissions which have an average opacity during any six consecutive minutes of 20% or greater. The facility also has a particulate emission limit of 0.050 grains per dry standard cubic foot of exhaust gas. UPMR must assure compliance with these particulate standards by following standard operating procedures and manufacturer's recommended maintenance requirements, and by performing weekly visible emissions observations of all emissions points.

A facility wide Part 212 evaluation was completed as part of the permit application submitted to DEC. Air dispersion modeling using AERSCREEN showed compliance with the applicable standards however, additional emissions testing for the recovery furnaces is needed to confirm emission rates. This emission testing must be completed no later than 180 days after the issuance of this permit.

The potential climate impacts of this Air State Facility Permit were evaluated in accordance with the requirements of Section 7(2) of CLCPA. Proposed measures include the replacement of several existing natural gas-fired induction furnaces with new electric units and replacement of the existing refractory lining on the existing recovery furnaces to reduce heat loss and improve efficiency. The facility will also continue to perform regular maintenance and tune-ups on its combustion equipment to ensure optimal performance and efficiency. For these reasons, DEC has determined that this modification is consistent with the goals of CLCPA.

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

Permit Administrator: LISA M CZECHOWICZ  
NYSDEC - REGION 9  
700 Delaware Ave  
BUFFALO, NY 14209

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

Facility DEC ID: 914200031

**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.

Facility DEC ID: 9142000031

**PAGE LOCATION OF CONDITIONS**

**PAGE**

**DEC GENERAL CONDITIONS**

**General Provisions**

- 5 1 Facility Inspection by the Department
- 5 2 Relationship of this Permit to Other Department Orders and Determinations
- 5 3 Applications for permit renewals, modifications and transfers
- 6 4 Permit modifications, suspensions or revocations by the Department

**Facility Level**

- 6 5 Submission of application for permit modification or renewal-REGION 9 HEADQUARTERS

Facility DEC ID: 9142000031

**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.

Facility DEC ID: 914200031

**Condition 4: Permit modifications, suspensions or revocations by the Department**  
**Applicable State Requirement: 6 NYCRR 621.13**

**Item 4.1:**

The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

- a) materially false or inaccurate statements in the permit application or supporting papers;
- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

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

**Condition 5: Submission of application for permit modification or renewal-REGION 9 HEADQUARTERS**  
**Applicable State Requirement: 6 NYCRR 621.6 (a)**

**Item 5.1:**

Submission of applications for permit modification or renewal are to be submitted to:  
NYSDEC Regional Permit Administrator  
Region 9 Headquarters  
Division of Environmental Permits  
700 Delaware Ave.,  
Buffalo, NY 14209  
(716) 851-7130

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

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

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: UNITED PRECIOUS METAL REFINING INC  
2781 TOWNLINE RD  
ALDEN, NY 14004-9676

Facility: UNITED PRECIOUS METAL REFINING  
2781 TOWNLINE ROAD  
ALDEN, NY 14004

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

Permit Effective Date: 06/30/2022

Permit Expiration Date: 06/29/2032

**PAGE LOCATION OF CONDITIONS**

**PAGE**

**FEDERALLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 6 1 6 NYCRR 211.2: Visible Emissions Limited
- 6 2 6 NYCRR 212-1.7 (a): Compliance Demonstration
- 7 3 6 NYCRR 212-1.7 (b) (1): Compliance Demonstration
- 8 4 6 NYCRR 212-2.4 (b): Compliance Demonstration
- 9 5 40CFR 60, NSPS Subpart JJJJ: Compliance Demonstration
- 10 6 40CFR 63, Subpart ZZZZ: Compliance Demonstration

**Emission Unit Level**

**EU=1-WCHEM,EP=00001**

- 11 7 6 NYCRR 212-2.3 (b): Compliance Demonstration
- 12 8 6 NYCRR 212-2.3 (b): Compliance Demonstration
- 12 9 6 NYCRR 212-2.3 (b): Compliance Demonstration
- 13 10 6 NYCRR 212-2.3 (b): Compliance Demonstration

**EU=1-WCHEM,EP=00019**

- 14 11 6 NYCRR 212-2.3 (b): Compliance Demonstration
- 14 12 6 NYCRR 212-2.3 (b): Compliance Demonstration
- 15 13 6 NYCRR 212-2.3 (b): Compliance Demonstration

**EU=2-MLTNG**

- 16 14 6 NYCRR 212-2.3 (b): Compliance Demonstration

**STATE ONLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 18 15 ECL 19-0301: Contaminant List
- 18 16 6 NYCRR 201-1.4: Malfunctions and Start-up/Shutdown Activities
- 19 17 6 NYCRR Subpart 201-5: Emission Unit Definition
- 20 18 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
- 20 19 6 NYCRR 201-5.3 (c): Compliance Demonstration
- 21 20 6 NYCRR 211.1: Air pollution prohibited

**Emission Unit Level**

- 21 21 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
- 23 22 6 NYCRR Subpart 201-5: Process Definition By Emission Unit



Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

**FEDERALLY ENFORCEABLE CONDITIONS**

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,

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

required to operate such device effectively.

**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**

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

**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)**

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

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: Visible Emissions Limited**  
**Effective between the dates of 06/30/2022 and 06/29/2032**

**Applicable Federal Requirement:6 NYCRR 211.2**

**Item 1.1:**

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 06/30/2022 and 06/29/2032**

**Applicable Federal Requirement:6 NYCRR 212-1.7 (a)**

**Item 2.1:**

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

Emission Unit: 3-RECOV

Regulated Contaminant(s):  
 CAS No: 001746-01-6      2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN

**Item 2.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This condition applies to the thermal oxidizers identified as ABRN1, ABRN2 & ABRN3.

UPMR must assure compliance with the mass emission limit of 0.0001 pounds per year for emissions of 2,3,7,8 TCDD

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

TEF, Polychlorinated Dibenzodioxins, Polychlorinated Dibenzofurans (2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN). In order to confirm annual emissions UPMR must conduct a performance test which will measure the concentration of 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN in the stack both before and after the afterburner. The performance test must be conducted in accordance with 40CFR60, Appendix A, Method 23.

Initial performance testing must be completed no later than 180 days after the issuance of this permit. Performance testing shall be repeated at least once every 5 years, based on the dates of the previous test. The performance test may be performed on one of the three recovery furnaces. The results of the test will be considered representative of the other two similar units. A different furnace should be tested with every testing cycle.

Test protocol(s) shall be submitted to the Regional Air Pollution Control Engineer (RAPCE) at least 60 days prior to the proposed test date(s). Department staff will be afforded the opportunity to witness the performance test by notifying the RAPCE of the actual test date at least 30 days prior to the test date. A test report shall be submitted to the RAPCE within 60 days of test completion.

Upper Permit Limit: 0.0001 pounds

Reference Test Method: Method 23

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 12-MONTH TOTAL, ROLLED MONTHLY

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 3: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 06/29/2032**

**Applicable Federal Requirement: 6 NYCRR 212-1.7 (b) (1)**

**Item 3.1:**

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

Emission Unit: 3-RECOV  
 Process: 012

Emission Source: ABRN1

Emission Unit: 3-RECOV  
 Process: 012

Emission Source: ABRN2

Emission Unit: 3-RECOV

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

Process: 012

Emission Source: ABRN3

**Item 3.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

UPMR will operate thermal oxidizers (ABRN1, ABRN2 & ABRN3) to control emissions of volatile organic compounds (VOC), particulates, and dioxins from the recovery furnaces (HTMP1, HTMP2, EPATC).

UPMR must assure compliance with the mass emission limit (MEL) of 0.0001 pounds per year for emissions of 2,3,7,8 TCDD TEF, Polychlorinated Dibenzodioxins, Polychlorinated Dibenzofurans. In order to demonstrate continuous compliance with the MEL, UPMR will continuously monitor the combustion chamber temperature of the afterburners. The temperature will be maintained at or above the temperature at which the most recent performance test was conducted, to assure the minimum destruction efficiency based on source performance testing. UPMR must maintain a minimum combustion chamber temperature of 1700 degrees Fahrenheit, until the initial performance test is completed, whenever materials are being processed in one of the recovery furnaces. Initial performance testing must be completed no later than 180 days after the issuance of this permit. Performance testing shall be repeated at least once every 5 years, based on the dates of the previous tests.

A continuous monitor to measure the combustion chamber temperature must be installed, periodically calibrated, and operated at all times when one of the furnaces is operating. Operation and calibration procedures shall be performed in accordance with manufacturer specifications. UPMR shall maintain continuous recording data of the combustion chamber temperatures. The continuous data recordings and the calibration data shall be maintained on-site for a period of 5 years and be made available for review upon request by DEC.

Parameter Monitored: TEMPERATURE

Lower Permit Limit: 1700 degrees Fahrenheit

Monitoring Frequency: CONTINUOUS

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

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 4: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 06/29/2032**

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

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

**Item 4.1:**

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

**Item 4.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emissions from any process emission source for which an application was received by the department after July 1, 1973 are restricted as follows:

No facility owner or operator shall cause or allow emissions of particulate that exceed 0.050 grains per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis, except in instances where determination of permissible emission rate using process weight for a specific source category emitting solid particulate is based upon Table 5 and Table 6 of Subdivisions 212-2.5(a) and (b) of this Part.

As per 212-1.7(a) 'Sampling and monitoring' section, facility owners and/or operators of a process emission source required by the department to demonstrate compliance with this Part may be required to conduct capture efficiency and/or stack emissions testing using acceptable and approved procedures pursuant to Part 202 of this Title using EPA Test Reference Method 5.

Parameter Monitored: PM-10

Upper Permit Limit: 0.050 grains per dscf

Reference Test Method: USEPA Reference Test Method 5

Monitoring Frequency: Once every five years

Averaging Method: Arithmetic average of stack test runs

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 5: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 06/29/2032**

**Applicable Federal Requirement:40CFR 60, NSPS Subpart JJJJ**

**Item 5.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 5.2:**

Compliance Demonstration shall include the following monitoring:

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

UPMR operates one 100 kW and one 200 kW emergency generator which are exempt from permitting under 6 NYCRR Part 201-3.2(c)(6) but must comply with the requirements in 40 CFR 60 Subpart JJJJ as follows:

- 1) Operators comply by purchasing an engine certified by the manufacturer;
- 2) Keep manufacturer certification on site verifying compliance with Subpart JJJJ;
- 3) Operate and maintain engine and control device according to manufacturer’s instructions;
- 4) Record Hours of operation using a non-resettable hour meter;
- 5) Limit use/operation to 100 hrs/yr for maintenance and readiness testing. Unlimited use for emergencies.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 6: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 06/29/2032**

**Applicable Federal Requirement:40CFR 63, Subpart ZZZZ**

**Item 6.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 6.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

UPMR operates one 40 kW emergency generator which is exempt from permitting under 6 NYCRR Part 201-3.2(c)(6) but must comply with the requirements in 40 CFR 63 Subpart ZZZZ as follows:

- 1) Operate and maintain engine and control device according to manufacturer’s instructions or owner-developed maintenance plan;
- 2) Record operating hours using a non-resettable hour meter;
- 3) Change oil and filter every 500 hours or annually, whichever comes first;
- 4) May use oil analysis specified in 63.6625(i) instead of prescribed oil change frequency
- 5) Inspect hoses and belts every 500 hours or annually, whichever comes first, and replace as necessary;



Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

- 6) Inspect spark plugs every 1000 hours or annually, whichever comes first, and replace as necessary;
- 7) Keep records of maintenance;
- 8) Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes;
- 9) Limit use to 100 hrs/yr for maintenance and readiness testing. Unlimited use for emergencies.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

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

**Condition 7: Compliance Demonstration**  
Effective between the dates of 06/30/2022 and 06/29/2032

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

**Item 7.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-WCHEM      Emission Point: 00001

**Item 7.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

In order to show continuous compliance with Tables 3 and 4 of 6 NYCRR 212-2.3 UPMR must maintain the differential pressure across the scrubber between 0-4 inches of water, and record the observed differential pressure at the beginning of every shift.

Observations should be recorded in a bound logbook and made available to DEC upon request.

Parameter Monitored: PRESSURE DROP

Lower Permit Limit: 0 inches of water

Upper Permit Limit: 4 inches of water

Monitoring Frequency: CONTINUOUS

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 8: Compliance Demonstration**

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

Effective between the dates of 06/30/2022 and 06/29/2032

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

**Item 8.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-WCHEM                      Emission Point: 00001

**Item 8.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

In order to show continuous compliance with the emissions control requirements in Tables 3 and 4 of 6 NYCRR 212-2.3 UPMR must maintain a recirculation flow rate of at least 370 gpm when operating the scrubber.

Parameter Monitored: FLOW RATE

Lower Permit Limit: 370 gallons per minute

Monitoring Frequency: CONTINUOUS

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

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 9: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 06/29/2032**

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

**Item 9.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-WCHEM                      Emission Point: 00001

**Item 9.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

In order to show continuous compliance with Tables 3 and 4 of 6 NYCRR 212-2.3 UPMR must maintain the pH of the scrubber solution between 9 and 12, and record the observed pH at the beginning of every shift.

Observations should be recorded in a bound logbook and made available to DEC upon request.

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

Parameter Monitored: PH

Lower Permit Limit: 9 pH (STANDARD) units

Upper Permit Limit: 12 pH (STANDARD) units

Monitoring Frequency: CONTINUOUS

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

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 10: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 06/29/2032**

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

**Item 10.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-WCHEM                      Emission Point: 00001

**Item 10.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emissions from wet chemical processing operations which involves gold dissolving and precipitation, and the electrolytic refining of silver are routed to a packed-tower wet scrubber. The scrubber is used to control emissions of NOx and acid gases generated from the chemical processes. Emissions from these processes received an environmental rating of B. Air dispersion modeling was completed showing that emissions of NOx and acid gasses from the scrubber comply with the degree of air cleaning required in Tables 3 and 4 of 6 NYCRR 212-2.3.

The wet scrubber and associated components must be maintained in accordance with manufacturer’s specifications and good engineering practice. The scrubber sump must be drained out periodically to prevent caustic salts from filling the packing and diminishing the scrubber performance.

The scrubbers must be operated according to the manufacturer's specifications and operating instructions which must be available at the facility at all times in a location where they can be easily accessed by the operators. Records of any maintenance or calibrations performed on the air pollution control equipment or monitors are maintained on site. Records must be maintained onsite for a minimum of 5 years.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 11: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 06/29/2032**

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

**Item 11.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-WCHEM      Emission Point: 00019

**Item 11.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

In order to show continuous compliance with Table 4 of 6  
NYCRR 212-2.3 UPMR must maintain the pH of the scrubber  
solution between 9 and 12, and record the observed pH at  
the beginning of every shift.

Observations should be recorded in a bound logbook and  
made available to DEC upon request.

Parameter Monitored: PH RANGE EXCURSIONS, > 60 MINUTES

Lower Permit Limit: 9 pH (STANDARD) units

Upper Permit Limit: 12 pH (STANDARD) units

Monitoring Frequency: CONTINUOUS

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

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 12: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 06/29/2032**

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

**Item 12.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-WCHEM      Emission Point: 00019

**Item 12.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

In order to show continuous compliance with Table 4 of 6

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

NYCRR 212-2.3 UPMR must maintain the differential pressure between 0-2.5 inches of water or greater and record the reading at the beginning of every shift.

Observations should be recorded in a bound logbook and made available to DEC upon request.

Parameter Monitored: PRESSURE DROP  
 Lower Permit Limit: 0 inches of water  
 Upper Permit Limit: 2.5 inches of water  
 Monitoring Frequency: CONTINUOUS  
 Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -  
 SEE MONITORING DESCRIPTION  
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 13: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 06/29/2032**

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

**Item 13.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-WCHEM                      Emission Point: 00019

**Item 13.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emissions from UPMR’s wastewater treatment process are routed to a packed-tower wet scrubber. The scrubber is used to control emissions of acid gases generated from the water treatment process. Emissions from these processes received an environmental rating of B. Air dispersion modeling was completed showing that emissions of acid gasses from the scrubber comply with the degree of air cleaning required in Table 4 of 6 NYCRR 212-2.3.

The wet scrubber and associated components must be maintained in accordance with manufacturer’s specifications and good engineering practice. Cleaning of the scrubber should occur at least once every three months.

The scrubbers must be operated according to the manufacturer's specifications and operating instructions which must be available at the facility at all times in a location where they can be easily accessed by the operators. Records of any maintenance or calibrations performed on the air pollution control equipment or monitors are maintained on site. Records must be

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

maintained onsite for a minimum of 5 years

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 14: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 06/29/2032**

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

**Item 14.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: 2-MLTNG

**Item 14.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The mass emission limit (MEL) for 2,3,7,8 TCDD TEF, Polychlorinated Dibenzodioxins, Polychlorinated Dibenzofurans (2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN) is 0.0001 lbs/yr. UPMR must track the projected annual emissions of 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN by monitoring throughput of material into the recovery furnaces and using emission factors generated from the most recent stack test as required by a separate condition in this permit.

If the projected emission totals are greater than the 0.0001 lb/yr MEL then UPMR must contact DEC in writing with a DAR-1 compliant Part 212 analysis before any exceedance of the MEL occurs to show that offsite impacts would be below AGS/SGC limits per 6 NYCRR Part 212-2.1(a). Any additional pollution controls or process modifications added must be included in the notification and approved by DEC.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

**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

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

with 6 NYCRR Part 616 - Public Access to Records.  
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 15: Contaminant List**

**Effective between the dates of 06/30/2022 and 06/29/2032**

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

**Item 15.1:**

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

CAS No: 001746-01-6

Name: 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN

CAS No: 0NY075-00-0

Name: PARTICULATES

**Condition 16: Malfunctions and Start-up/Shutdown Activities**

**Effective between the dates of 06/30/2022 and 06/29/2032**



Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

**Applicable State Requirement:6 NYCRR 201-1.4****Item 16.1:**

(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 17: Emission Unit Definition****Effective between the dates of 06/30/2022 and 06/29/2032****Applicable State Requirement:6 NYCRR Subpart 201-5****Item 17.1:**

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

Emission Unit: 1-WCHEM

Emission Unit Description:

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

This emission unit incorporates various wet chemical processing operations including the dissolving of gold in aqua-regia, precipitation of gold and other precious metals, electrolytic silver refining, gold rinsing and wastewater treatment operations.

Building(s): 1

**Item 17.2:**

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

Emission Unit: 2-MLTNG

Emission Unit Description:

This emission unit consists of dry refining operations which include smelting and the pouring of molten metal, as well as alloy manufacturing and fire assaying. These operations all involve the melting of metals in either electric or natural gas-fired furnaces.

Building(s): 1

**Item 17.3:**

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

Emission Unit: 3-RECOV

Emission Unit Description:

This emission unit consists of three natural gas-fired precious metal recovery furnaces.

Building(s): 1

**Item 17.4:**

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

Emission Unit: 4-CRUSH

Emission Unit Description:

This emission unit consists of crushing, screening and blending of recovered solids (crucibles and furnace slag) and the manual sifting/screening of burn material.

Building(s): 1

**Condition 18: Renewal deadlines for state facility permits**  
**Effective between the dates of 06/30/2022 and 06/29/2032**

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

**Item 18.1:**

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 19: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 06/29/2032**

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

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

**Item 19.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 19.2:**

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 9  
700 Delaware Ave.,  
Buffalo, N.Y. 14209

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 20: Air pollution prohibited**

**Effective between the dates of 06/30/2022 and 06/29/2032**

**Applicable State Requirement:6 NYCRR 211.1**

**Item 20.1:**

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 21: Emission Point Definition By Emission Unit**

**Effective between the dates of 06/30/2022 and 06/29/2032**

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

**Item 21.1:**

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

Emission Unit: 1-WCHEM

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

Emission Point: 00001  
 Height (ft.): 31 Length (in.): 19 Width (in.): 14  
 NYTMN (km.): 4759.13 NYTME (km.): 208.061 Building: 1

Emission Point: 00019  
 Height (ft.): 48 Diameter (in.): 22  
 NYTMN (km.): 4759.13 NYTME (km.): 208.061 Building: 1

**Item 21.2:**

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

Emission Unit: 2-MLTNG

Emission Point: 00005  
 Height (ft.): 17 Diameter (in.): 30  
 NYTMN (km.): 4759.13 NYTME (km.): 208.061 Building: 1

Emission Point: 00006  
 Height (ft.): 17 Diameter (in.): 30  
 NYTMN (km.): 4759.13 NYTME (km.): 208.061 Building: 1

Emission Point: 00008  
 Height (ft.): 17 Diameter (in.): 30  
 NYTMN (km.): 4759.13 NYTME (km.): 208.061 Building: 1

Emission Point: 00020  
 Height (ft.): 11 Diameter (in.): 4  
 NYTMN (km.): 4759.13 NYTME (km.): 208.061 Building: 1

Emission Point: 00022  
 Height (ft.): 19 Diameter (in.): 30  
 NYTMN (km.): 4759.13 NYTME (km.): 208.061 Building: 1

Emission Point: 00023  
 Height (ft.): 18 Length (in.): 28 Width (in.): 36  
 NYTMN (km.): 4759.13 NYTME (km.): 208.061 Building: 1

Emission Point: 00024  
 Height (ft.): 30 Diameter (in.): 18  
 NYTMN (km.): 4759.13 NYTME (km.): 208.061 Building: 1

Emission Point: 00025  
 Height (ft.): 30 Diameter (in.): 18  
 NYTMN (km.): 4759.13 NYTME (km.): 208.061 Building: 1

**Item 21.3:**

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

Emission Unit: 3-RECOV

Emission Point: 00014  
 Height (ft.): 36 Diameter (in.): 24

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

NYTMN (km.): 4759.13    NYTME (km.): 208.061    Building: 1

Emission Point: 00016  
 Height (ft.): 36    Diameter (in.): 24  
 NYTMN (km.): 4759.13    NYTME (km.): 208.061    Building: 1

Emission Point: 00021  
 Height (ft.): 36    Diameter (in.): 14  
 NYTMN (km.): 4759.13    NYTME (km.): 208.061    Building: 1

**Item 21.4:**

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

Emission Unit: 4-CRUSH

Emission Point: 00017  
 Height (ft.): 30    Length (in.): 12    Width (in.): 12  
 NYTMN (km.): 4759.13    NYTME (km.): 208.061    Building: 1

Emission Point: 00018  
 Height (ft.): 15    Length (in.): 12    Width (in.): 15  
 NYTMN (km.): 4759.13    NYTME (km.): 208.061    Building: 1

**Condition 22: Process Definition By Emission Unit**  
 Effective between the dates of 06/30/2022 and 06/29/2032

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

**Item 22.1:**

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

Emission Unit: 1-WCHEM  
 Process: 001    Source Classification Code: 3-09-001-98  
 Process Description:  
 Dissolving of gold, platinum, and palladium in aqua-regia

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

Emission Source/Control: AULAB - Process

**Item 22.2:**

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

Emission Unit: 1-WCHEM  
 Process: 002    Source Classification Code: 3-09-001-98  
 Process Description:  
 Precipitation of gold from aqua-regia using sulfur dioxide.

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

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

Emission Source/Control: AULAB - Process

**Item 22.3:**

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

Emission Unit: 1-WCHEM  
 Process: 003 Source Classification Code: 3-09-001-98  
 Process Description:  
 Precipitation of platinum and palladium from aqua regia using zinc.

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

Emission Source/Control: PTPDP - Process

**Item 22.4:**

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

Emission Unit: 1-WCHEM  
 Process: 004 Source Classification Code: 3-09-001-98  
 Process Description:  
 Electrolytic silver refining. This process involves placing a crude silver anode together with a pure metal cathode inside a cell containing nitric acid solution. The cell is electrically charged causing the silver to dissolve. The pure silver deposits onto the cathode and is then recovered. Silver is also precipitated from the spent solution using hydrochloric acid.

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

Emission Source/Control: AGLAB - Process

**Item 22.5:**

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

Emission Unit: 1-WCHEM  
 Process: 005 Source Classification Code: 3-09-001-98  
 Process Description:  
 Rinsing of gold with deionized water and hydrochloric acid solution.

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

Emission Source/Control: RINSE - Process

**Item 22.6:**

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

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

Emission Unit: 1-WCHEM  
 Process: 006 Source Classification Code: 3-09-001-98

Process Description:  
 Treatment of process wastewater via neutralization, which involves the use of sodium hydroxide or sulfuric acid, filtration, and the precipitation of metals.

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

Emission Source/Control: WWTOP - Process

**Item 22.7:**

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

Emission Unit: 2-MLTNG  
 Process: 007 Source Classification Code: 3-09-001-98

Process Description:  
 Secondary smelting of nonferrous precious metals. This process is performed using natural gas-fired crucible furnaces. Flux material consisting of a mixture of borax and soda ash is used in the process to help remove (oxidize) impurities.

Emission Source/Control: CF5&6 - Combustion

Emission Source/Control: CRUC3 - Combustion

Emission Source/Control: CRUC4 - Combustion

Emission Source/Control: CF3DC - Control  
 Control Type: DUST COLLECTOR

Emission Source/Control: CF4DC - Control  
 Control Type: DUST COLLECTOR

Emission Source/Control: CF5DC - Control  
 Control Type: DUST COLLECTOR

**Item 22.8:**

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

Emission Unit: 2-MLTNG  
 Process: 008 Source Classification Code: 3-09-001-98

Process Description:  
 Melting of scrap precious metals in electric induction furnaces to reduce oxidation and impurities and improve fluidity of the metal. Small amounts of borax flux are used for this operation.

Emission Source/Control: SMIND - Combustion

Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

Emission Source/Control: SINDC - Control  
Control Type: DUST COLLECTOR

**Item 22.9:**

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

Emission Unit: 2-MLTNG  
Process: 009 Source Classification Code: 3-09-001-98  
Process Description: Pouring and molding of molten precious metals.

Emission Source/Control: CF5DC - Control  
Control Type: DUST COLLECTOR

Emission Source/Control: MPOUR - Process

**Item 22.10:**

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

Emission Unit: 2-MLTNG  
Process: 010 Source Classification Code: 3-09-001-98  
Process Description:  
Fire assay analysis of scrap precious metals. This process involves the melting of scrap precious metals together with lead flux inside natural gas-fired furnaces.

Emission Source/Control: ASSAY - Combustion

Emission Source/Control: ASSDC - Control  
Control Type: DUST COLLECTOR

**Item 22.11:**

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

Emission Unit: 2-MLTNG  
Process: 011 Source Classification Code: 3-09-001-98  
Process Description:  
Melting of precious metals with other non-ferrous metals, including copper, zinc, nickel, and tin, to produce precious metal alloys.

Emission Source/Control: LIADC - Control  
Control Type: DUST COLLECTOR

Emission Source/Control: LIBDC - Control  
Control Type: DUST COLLECTOR

Emission Source/Control: LIWDC - Control  
Control Type: DUST COLLECTOR

Emission Source/Control: LINDW - Process



Permit ID: 9-1420-00031/02001

Facility DEC ID: 9142000031

Emission Source/Control: LINEA - Process

Emission Source/Control: LINEB - Process

**Item 22.12:**

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

Emission Unit: 3-RECOV

Process: 012

Source Classification Code: 3-09-001-98

Process Description:

Thermal reduction of precious metals containing scrap materials.

Emission Source/Control: EPATC - Combustion

Emission Source/Control: HTMP1 - Combustion

Emission Source/Control: HTMP2 - Combustion

Emission Source/Control: ABRN1 - Control

Control Type: THERMAL OXIDATION

Emission Source/Control: ABRN2 - Control

Control Type: THERMAL OXIDATION

Emission Source/Control: ABRN3 - Control

Control Type: THERMAL OXIDATION

**Item 22.13:**

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

Emission Unit: 4-CRUSH

Process: 013

Source Classification Code: 3-09-001-98

Process Description:

Crushing, screening and blending of recovered solids (crucibles and furnace slag).

Emission Source/Control: CRSDC - Control

Control Type: DUST COLLECTOR

Emission Source/Control: BMILL - Process

Emission Source/Control: CRSRM - Process

**Item 22.14:**

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

Emission Unit: 4-CRUSH

Process: 014

Source Classification Code: 3-09-001-98

Process Description: Sifting/screening of ash and burn material.

**Permit ID: 9-1420-00031/02001**

**Facility DEC ID: 9142000031**

Emission Source/Control: SFTDC - Control  
Control Type: DUST COLLECTOR

Emission Source/Control: SFTNG - Process

**Permit ID: 9-1420-00031/02001**

**Facility DEC ID: 9142000031**