

New York State Department of Environmental Conservation

Permit ID: 1282000528



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

**IDENTIFICATION INFORMATION**

Permit Type: Air State Facility  
Permit ID: 1-2820-00528/00001  
Effective Date: 10/22/2003  
Expiration Date: No expiration date

ROHM & HAAS COMPANY  
100 INDEPENDENCE MALL WEST  
PHILADELPHIA, PA 19106-2399

Facility: ROHM & HAAS ELECTRONIC MATERIALS LLC  
272 BUFFALO AVE  
FREEPORT, NY 11520

Contact: JACK LEIBEL  
272 BUFFALO AVENUE  
FREEPORT, NY 11520  
(516) 868-8800

Description:

**NATURE OF BUSINESS OF THE FACILITY**

SHIPLEY COMPANY, L.L.C., FORMERLY LEA RONAL INC., LOCATED AT 272/300 BUFFALO AVENUE IN FREEPORT, NY, MANUFACTURES PRODUCTS USED IN THE ELECTRONICS INDUSTRY AND RECOVERS PRECIOUS METALS (GOLD). PRIMARY PRODUCTS MANUFACTURED AT THE FACILITY ARE POTASSIUM GOLD CYANIDE, A PALLADIUM-AMMONIUM COMPLEX, TIN METHANESULFONATE AND IMAGING INKS.

**(PRIMARY SIC)** - 2899 - CHEMICALS AND CHEMICAL PREPARATION.  
3341 - SECONDARY SMELTING AND REFINING OF NON FERROUS METALS.

**TYPE OF EQUIPMENT AND PROCESSES AT THE FACILITY**

**PRECIPITATION**

SPENT GOLD CYANIDE PLATING BATHS ARE PROCESSED FOR GOLD RECLAMATION. IN THE PRECIPITATION PROCESS SPENT GOLD-BEARING SOLUTIONS, SUCH AS SPENT POTASSIUM CYANIDE PLATING BATHS, GOLD IS PRECIPITATED FROM SOLUTION. THE SOLUTIONS ARE RECEIVED IN DRUMS AND MAY CONTAIN; POTASSIUM GOLD CYANIDE, DIPOTASSIUM PHOSPHATE, POTASSIUM CYANIDE, COPPER, NICKEL, COBALT, SILVER AND TIN.

THE SPENT SOLUTION IS PUMPED INTO ONE OF SEVERAL VESSELS. NAOH IS ADDED TO ADJUST THE pH AND ENSURE ALKALINITY. SODIUM HYDROSULFITE IS ADDED ALONG WITH DEXTROSE. THE SOLUTION IS HEATED TO THE BOILING POINT AND MAINTAINED

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AT THAT TEMPERATURE FOR TWO HOURS. THE GOLD PRECIPITATE SETTLES OVERNIGHT WHILE THE SOLUTION COOLS. THE SOLUTION IS SAMPLED FOR RESIDUAL POTASSIUM GOLD CYANIDE. IF THE CONCENTRATION IS MINIMAL AND WITHIN SPECS, THE SOLUTION IS DECANTED AND DIRECTED TO WASTEWATER PRETREATMENT. OTHERWISE, THE REACTION SEQUENCE IS REPEATED UNTIL THE CONDITIONS ARE MET.

THE PRECIPITATE, CONTAINING ELEMENTAL GOLD, IS THEN IS PLACED ON ONE OF FIVE FILTERS, WASHED WITH HOT WATER AND AIR DRIED. THE WATER IS DISCHARGED TO WASTEWATER PRETREATMENT. THE PRECIPITATE IS DIRECTED TO THE REFINERY FOR

R PROCESSING.

MOST OF THE SOURCES IN THIS AREA VENT TO A PACKED BED SCRUBBER (#56).

**INCINERATION**

SPENT COMBUSTIBLE MATERIALS CONTAMINATED WITH GOLD BEARING WASTES ARE INCINERATED AND GOLD IS RECOVERED IN THE ASH. THE MAJORITY OF THE MATERIALS THAT ARE INCINERATED ARE FILTERS USED TO MAINTAIN THE GOLD PLATING BATHS.

WASTE IS MANUALLY FED TO THE INCINERATOR UNTIL IT IS APPROXIMATELY 75% FULL BY VOLUME. THE INCINERATION CHAMBER IS 33 CUBIC FEET. TWO NATURAL GAS FIRED AFTERBURNERS IN THE INCINERATOR EXHAUST ARE STARTED AND THE INCINERATOR IS SLOWLY HEATED, USING A THIRD, NATURAL GAS FIRED BURNER, TO A TEMPERATURE OF APPROXIMATELY 1650F. THE SYSTEM OPERATES 8 HOURS PER DAY AND TURNED OFF OVERNIGHT AND TYPICALLY REQUIRES 4 DAYS TO PROCESS. THE ASH IS REMOVED FROM THE INCINERATOR, CRUSHED TO DECREASE PARTICLE SIZE AND SIEVED. THIS INTERMEDIATE PRODUCT IS THEN SENT TO THE REFINERY.

**REFINERY**

GOLD CONTAINING SOLIDS FROM THE ABOVE DESCRIBED OPERATIONS ARE REFINED. SOLIDS ARE PLACED IN VESSELS, THIS IS A BATCH OPERATION. APPROXIMATELY 55 GALLONS OF A 30% HCL SOLUTION AND 20 GALLONS OF A 70% HNO3 SOLUTION (AQUA REGIA) ARE ADDED TO THE VESSEL. THE REACTION MIXTURE IS HEATED AND THE ACIDS EVAPORATED. RESIDUAL METALS REACT WITH HNO3 TO FORM NOx. THE VESSEL EXHAUSTS TO A CONDENSER. THE CONDENSED LIQUID IS PUMPED TO WASTEWATER PRETREATMENT. THE GOLD SOLUTION, LEFT IN THE VESSEL, IS THEN MIXED WITH SODIUM HYDROSULFITE AND ELEMENTAL GOLD IS PRECIPITATED. THIS REACTION PROCESS CAN TAKE AS LONG AS TWO WEEKS.

THE DIGESTION TANKS IN THIS AREA VENT TO THE #55 SCRUBBER (A 3-STAGE, 2,100 CFM TRI-MER SCRUBBER) FOR ACID AND NOx REMOVAL. SEVERAL OTHER SOURCES IN

#3 SCRUBBER.

**DISSOLUTION**

THE REFINED GOLD IS CONVERTED TO POTASSIUM GOLD CYANIDE, THE FINAL PRODUCT. THE GOLD IS DISSOLVED IN POTASSIUM CYANIDE SOLUTION IN ONE OF SEVERAL KETTLES. THE FINAL PRODUCT IS THE SOLID CYANIDE SALT (POTASSIUM GOLD CYANIDE). THE EXHAUST FROM THE SOURCES IN THIS AREA ARE TREATED BY SCRUBBER #9 (20,000 CFM PACKED BED). THE DISSOLVED MATERIAL IS THEN BLENDED WITH SURFACTANTS AND SHIPPED.

**AMMONIUM COMPLEX**

INORGANIC PALLADIUM SALTS ARE MIXED WITH 40% AMMONIUM HYDROXIDE SOLUTION TO FORM PALLADIUM-AMMONIUM COMPLEX. THESE SOURCES ARE

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7 SCRUBBER #3.

**~~TIN METHANESULFONATE~~**

INORGANIC TIN SALTS ARE MIXED WITH METHANE ACID TO FORM A SOLUTION OF TIN METHANESULFONATE. SOURCES IN THIS AREA ARE CONTROLLED WITH #75 PACKED

R (15,000 CFM).

**~~IMAGING INKS~~**

RESINS, SOLVENTS AND OTHER MATERIALS ARE MIXED AND MILLED TO PRODUCE INKS USED FOR IMAGING. IMAGING INKS ARE MANUFACTURED IN 3-ROLL MILLS AND IN MEDIA MILLS.

IN THE 3-ROLL MILL PROCESS, RAW MATERIALS ARE WEIGHED AND ADDED TO ONE OF SEVERAL MIXING VESSELS AT ONE OF THE TWO VENTED WEIGH STATIONS. THE MIXING VESSEL IS SEALED AND THE RAW MATERIALS ARE BLENDED FOR A SPECIFIED TIME. THE BLENDED MATERIAL IS PUMPED TO ONE OF FOUR 3-ROLL MILLS, MILLED FOR 3 - 4 HOURS AND PACKAGED. THE MEDIA MILL PROCESS IS IDENTICAL TO THE 3-ROLL MILL PROCESS.

EMISSIONS FROM THE WEIGH STATION AND PULVERIZER ARE CONTROLLED BY BAGHOUSES.

**~~WASTEWATER TREATMENT~~**

THE SYSTEM PRETREATS WASTE WATER PRIOR TO DISCHARGE TO THE CITY OF FREEPORT. THE TREATMENT CONSISTS OF EQUALIZATION TANKS, CYANIDE DESTRUCTION (ELECTROLYTIC AND WITH SODIUM HYPOCHLORITE) TANKS, NEUTRALIZATION TANKS, SETTLING TANKS, TWO FILTER PRESSES FOR DEWATERING METAL HYDROXIDE SLUDGES, AND CHEMICAL STORAGE TANKS. THE AREA ALSO CONTAINS A DRUM WASHING STATION (TO CLEAN DRUMS CONTAINING CYANIDE SOLUTIONS). WASTEWATER GENERATED FROM THE CYANIDE DESTRUCT SYSTEM IS PACKAGED AND SHIPPED AS WASTE, NOT DISCHARGED TO THE CITY. THE SYSTEM HAS CAPACITY OF 2,800 GALLONS OF CYANIDE WASTEWATER, 10,000 GALLONS OF NON-CYANIDE BEARING WASTEWATER PER DAY. EMISSIONS FORM THIS AREA ARE VENTED

ER #56 AND #57.

**~~PILOT PLATING LINES~~**

THE FACILITY OPERATES SEVERAL PILOT PLATING LINES TO EVALUATE ITS PRODUCTS. THESE LINES ARE NOT FOR PRODUCTION PURPOSES.

**~~AND FURNACES~~**

THE FACILITY OPERATES SEVERAL PRECIOUS METAL GAS-FIRED AND ELECTRIC MELT POTS, GAS FIRED AND ELECTRIC ASSAY FURNACES AND OTHER SMALL HEAT-TREATING FURNACES.

**~~LABORATORIES~~**

THE FACILITY OPERATES SEVERAL ANALYTICAL AND RESEARCH LABORATORIES.

**~~BOILERS AND HEATERS~~**

THE FACILITY OPERATES 3 NATURAL GAS, #2 FUEL OIL FIRED BOILERS AND SEVERAL NATURAL GAS FIRED HEATERS. THE TOTAL FUEL INPUT RATING OF ALL BOILERS AND

IS 7.7 MMBTU.

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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:

GEORGE W HAMMARTH  
DIVISION OF ENVIRONMENTAL PERMITS  
SUNY CAMPUS, LOOP ROAD, BUILDING 40  
STONY BROOK, NY 11790-2356

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 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 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

prescribed for the permittee.

**Item C: Permittee Responsible for Obtaining Other Required Permits**

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

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

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

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**LIST OF CONDITIONS**

**DEC GENERAL CONDITIONS**

**General Provisions**

Inspection by the Department

Relationship of this Permit to Other Department Orders and Determinations

Applications for Permit Renewals and Modifications

Permit Modifications, Suspensions, and Revocations by the Department

**Facility Level**

Submission of Applications for Permit Modification or Renewal-REGION 1

HEADQUARTERS



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**DEC GENERAL CONDITIONS**

\*\*\*\* **General Provisions** \*\*\*\*

**GENERAL CONDITIONS - Apply to ALL Authorized Permits.**

**Condition 1: Facility Inspection by the Department**

**Applicable State Requirement: ECL 19-0305**

**Item 1.1:**

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

**Item 1.2:**

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

**Item 1.3:**

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

**Condition 2: Relationship of this Permit to Other Department Orders and Determinations**

**Applicable State Requirement: ECL 3-0301.2(m)**

**Item 2.1:**

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

**Condition 3: Applications for Permit Renewals and Modifications**

**Applicable State Requirement: 6NYCRR 621.13(a)**

**Item 3.1:**

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

**Item 3.2:**

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

**Condition 4: Permit Modifications, Suspensions, and Revocations by the Department**

**Applicable State Requirement: 6NYCRR 621.14**

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**Item 4.1:**

The Department reserves the right to modify, suspend, or revoke this permit. The grounds for modification, suspension or revocation include:

- a) the scope of the permitted activity is exceeded or a violation of any condition of the permit or provisions of the ECL and pertinent regulations is found;
- b) the permit was obtained by misrepresentation or failure to disclose relevant facts;
- c) new material information is discovered; or
- d) environmental conditions, relevant technology, or applicable law or regulation have materially changed since the permit was issued.

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

**Condition 5: Submission of Applications for Permit Modification or Renewal-REGION 1 HEADQUARTERS**  
**Applicable State Requirement: 6NYCRR 621.5(a)**

**Item 5.1:**

Submission of applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator  
Region 1 Headquarters  
Division of Environmental Permits  
SUNY Campus, Loop Road, Building 40  
Stony Brook, NY 11790-2356  
(631) 444-0365



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

**IDENTIFICATION INFORMATION**

Permit Issued To: ROHM & HAAS COMPANY  
100 INDEPENDENCE MALL WEST  
PHILADELPHIA, PA 19106-2399

Facility: ROHM & HAAS ELECTRONIC MATERIALS LLC  
272 BUFFALO AVE  
FREEPORT, NY 11520

Authorized Activity By Standard Industrial Classification Code:  
2899 - CHEMICAL PREPARATIONS, NEC  
3341 - SECONDARY NONFERROUS



**LIST OF CONDITIONS**

**FEDERALLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 19 6NYCRR 215: Open Fires Prohibited at Industrial and Commercial Sites
- 3 6NYCRR 200.7: Maintenance of equipment
- 6 6NYCRR 201-1.7: Recycling and Salvage
- 7 6NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the Air
- 9 6NYCRR 201-3.2(a): Proof of Eligibility
- 10 6NYCRR 201-3.3(a): Proof of Eligibility
- 15 6NYCRR 202-1.1: Required emissions tests
- 18 6NYCRR 211.3: Visible emissions limited.
- 1 6NYCRR 200.5: Sealing
- 2 6NYCRR 200.6: Acceptable ambient air quality
- 4 6NYCRR 201-1.2: Unpermitted Emission Sources
- 5 6NYCRR 201-1.5: Emergency Defense
- 8 6NYCRR 201-1.10(a): Public Access to Recordkeeping
- 11 6NYCRR 201-7.2: Facility Permissible Emissions
- \*12 6NYCRR 201-7.2: Compliance Demonstration
- \*13 6NYCRR 201-7.2: Compliance Demonstration
- \*14 6NYCRR 201-7.2: Compliance Demonstration
- 16 6NYCRR 202-1.4: Separate emission test by the commissioner
- 17 6NYCRR 202-1.5: Prohibitions

**STATE ONLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 20 6NYCRR 201-1.4: Unavoidable noncompliance and violations
- 21 6NYCRR 201-5: General Provisions
- 22 6NYCRR 201-5: Permit Exclusion Provisions
- 23 6NYCRR 201-5: Emission Unit Definition
- 24 6NYCRR 201-5.3(b): Contaminant List
- 25 6NYCRR 211.2: Air pollution prohibited
- 26 6NYCRR 212.3(a): Compliance Demonstration
- 27 6NYCRR 212.4(a): Compliance Demonstration
- 28 6NYCRR 212.4(b): Compliance Demonstration
- 29 6NYCRR 212.4(c): Compliance Demonstration

**Emission Unit Level**

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

NOTE: \* preceding the condition number indicates capping.METALS

Permit Effective Date: 10/22/2003

Permit Expiration Date: No expiration date.



**FEDERALLY ENFORCEABLE CONDITIONS**

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

**Condition 19: Open Fires Prohibited at Industrial and Commercial Sites**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 215**

**Item 19.1:**

No person shall burn, cause, suffer, allow or permit the burning in an open fire of garbage, rubbish for salvage, or rubbish generated by industrial or commercial activities.

**Condition 3: Maintenance of equipment**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 200.7**

**Item 3.1:**

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

**Condition 6: Recycling and Salvage**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 201-1.7**

**Item 6.1:**

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.

**Condition 7: Prohibition of Reintroduction of Collected Contaminants to the Air**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 201-1.8**

**Item 7.1:**

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

**Condition 9: Proof of Eligibility**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**



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

**Item 9.1:**

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.

**Condition 10: Proof of Eligibility**

**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 201-3.3(a)**

**Item 10.1:**

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.

**Condition 15: Required emissions tests**

**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 202-1.1**

**Item 15.1:**

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 6NYCRR Part 202-1.

**Condition 18: Visible emissions limited.**

**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 211.3**

**Item 18.1:**

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-

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minute period per hour of not more than 57 percent opacity.

**Condition 1: Sealing**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 200.5**

**Item 1.1:**

(a) 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 labelling 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.

(b) 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.

(c) Unless authorized by the commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section

**Condition 2: Acceptable ambient air quality**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 200.6**

**Item 2.1:**

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

**Condition 4: Unpermitted Emission Sources**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 201-1.2**

**Item 4.1:**

If an existing emission source was subject to the permitting requirements of 6NYCRR 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.



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(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.

**Condition 5: Emergency Defense**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 201-1.5**

**Item 5.1:**

An emergency constitutes an affirmative defense to an action brought 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 and/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;

(3) During the period of the emergency the facility owner and/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 and/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 and/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.

**Condition 8: Public Access to Recordkeeping**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 201-1.10(a)**

**Item 8.1:**

Where emission source owners and/or operators keep records pursuant to compliance with the operational flexibility requirements of 6 NYCRR Subpart 201-5.4(b)(1), and/or the emission capping requirements of 6 NYCRR Subparts 201-7.2(d), 201-7.3(f), 201-7.3(g), 201-7.3(h)(5), 201-7.3(i) and 201-7.3(j), the Department will make such records available to the public upon request in accordance



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with 6 NYCRR Part 616 - Public Access to Records. Emission source owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department of receipt of the request.

**Condition 11: Facility Permissible Emissions**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 201-7.2**

**Item 11.1:**

The sum of emissions from the emission units specified in this permit shall not equal or exceed the following

Potential To Emit (PTE) rate for each regulated contaminant:

CAS No: 0NY100-00-0                      PTE: 19,800 pounds per year  
Name: HAP

CAS No: 0NY210-00-0                      PTE: 49,800 pounds per year  
Name: OXIDES OF NITROGEN

CAS No: 0NY998-00-0                      PTE: 49,800 pounds per year  
Name: VOC

**Condition 12: Compliance Demonstration**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 201-7.2**

**Item 12.1:**

The Compliance Demonstration activity will be performed for the Facility.

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

**Item 12.2:**

Compliance Demonstration shall include the following monitoring:

Capping: Yes  
Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES  
Monitoring Description:  
Facility shall maintain records that demonstrate that  
Oxides of Nitrogen, NO<sub>x</sub>, emissions, do not exceed 22.5 tons  
per year.

Reference Test Method: N/A  
Monitoring Frequency: MONTHLY



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Reporting Requirements: ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 1/30/2004.  
Subsequent reports are due every 12 calendar month(s).

**Condition 13: Compliance Demonstration**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 201-7.2**

**Item 13.1:**

The Compliance Demonstration activity will be performed for the Facility.

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

**Item 13.2:**

Compliance Demonstration shall include the following monitoring:

Capping: Yes  
Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES  
Monitoring Description:  
FACILITY SHALL MAINTAIN RECORDS THAT  
DEMONSTRATE THAT THE EMISSIONS WILL NOT  
EXCEED 9.0 TONS PER YEAR OF ANY HAZARDOUS  
AIR POLLUTANT (HAP) OR 22.5 TONS PER YEAR  
OF ANY COMBINATION OF SUCH HAP/S. THIS  
CONDITION WILL CAP THE FACILITY EMISSIONS  
FOR THIS/THESE HAP/S BELOW TITLE V  
APPLICABILITY THRESHOLDS.

Reference Test Method: N/A  
Monitoring Frequency: MONTHLY  
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY  
Reporting Requirements: ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 1/30/2004.  
Subsequent reports are due every 12 calendar month(s).

**Condition 14: Compliance Demonstration**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 201-7.2**

**Item 14.1:**

The Compliance Demonstration activity will be performed for the Facility.



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

**Item 14.2:**

Compliance Demonstration shall include the following monitoring:

Capping: Yes  
Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES  
Monitoring Description:  
FACILITY SHALL MAINTAIN RECORDS THAT  
DEMONSTRATE THAT THE EMISSIONS OF THE  
CONTAMINANT LISTED ABOVE WILL NOT EXCEED  
22.5 TONS PER YEAR. THIS CONDITION WILL  
CAP THE FACILITY BELOW TITLE V  
THRESHOLDS.

Reference Test Method: N/A  
Monitoring Frequency: MONTHLY  
Averaging Method: ANNUAL MAXIMUM ROLLED WEEKLY  
Reporting Requirements: ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 1/30/2004.  
Subsequent reports are due every 12 calendar month(s).

**Condition 16: Separate emission test by the commissioner**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 202-1.4**

**Item 16.1:**

The commissioner may conduct separate or additional emission tests on the behalf of the State to ascertain compliance or noncompliance with any air pollution code, rule, or regulation.

**Condition 17: Prohibitions**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable Federal Requirement: 6NYCRR 202-1.5**

**Item 17.1:**

No person shall conceal an emission by the use of air or other gaseous diluents to achieve compliance with an emission standard which is based on the concentration of a contaminant in the gases emitted through a stack.



**STATE ONLY ENFORCEABLE CONDITIONS**

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

**Condition 20: Unavoidable noncompliance and violations**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

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

Item 20.1:

At the discretion of the commissioner a violation of any applicable emission standard for necessary scheduled equipment maintenance, start-up/shutdown conditions and malfunctions or upsets may be excused if such violations are unavoidable. The following actions and recordkeeping and reporting requirements must be adhered to in such circumstances.

(a) The facility owner and/or operator shall compile and maintain records of all equipment 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 commissioner's representative when requested to do so in writing or when so required by a condition of a permit issued for the corresponding air contamination source except where conditions elsewhere in this permit which contain more stringent reporting and notification provisions for an applicable requirement, in which case they supercede those stated here. Such reports shall describe why the violation was unavoidable and shall include the time, frequency and duration of the maintenance and/or start-up/shutdown activities and the identification of air contaminants, and the estimated emission rates. If a facility owner and/or operator is subject to continuous stack monitoring and quarterly reporting requirements, he need not submit reports for equipment maintenance or start-up/shutdown for the facility to the commissioner's representative.

(b) In the event that emissions of air contaminants in excess of any emission standard in 6 NYCRR Chapter III Subchapter A occur due to a malfunction, the facility owner and/or operator shall report such malfunction by telephone to the commissioner's representative as soon as possible during normal working hours, but in any event not later than two working days after becoming aware that the malfunction occurred. Within 30 days thereafter, when requested in writing by the commissioner's representative, the facility owner and/or operator shall submit a written report to the commissioner's representative describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates. These reporting requirements are superceded by conditions elsewhere in this permit which contain reporting and notification provisions for applicable requirements more stringent than those above.

(c) The Department may also require the owner and/or operator to include in reports described under (a) and (b) above an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions depending on the deviation of the malfunction and the air contaminants emitted.

(d) In the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner and/or operator shall take appropriate action to prevent emissions which will result in contravention of any applicable ambient air



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quality standard. Reasonably available control technology, as determined by the commissioner, shall be applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

(e) In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets.

**Condition 21: General Provisions**

**Effective between the dates of 10/22/2003 and Permit Expiration Date**

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

**Item 21.1:**

This section contains terms and conditions that are not federally enforceable and are not required under the Act or under any of its applicable requirements. Terms and conditions so designated are not subject to the requirements of Section 201-6.4 of Part 201.

**Item 21.2:**

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.

**Item 21.3:**

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.

**Condition 22: Permit Exclusion Provisions**

**Effective between the dates of 10/22/2003 and Permit Expiration Date**

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

**Item 22.1:**

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 currently pending or future legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant 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 by the Department and the receipt thereof by the Applicant does not



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supercede, revoke or rescind an order or modification thereof on consent or determination by the Commissioner issued heretofore by the Department or any of the terms, conditions or requirements contained in such order or modification thereof unless specifically intended by this permit.

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 the right of the Department to bring any future action, or pursue any pending action, either administrative or judicial, to required remediation, contribution for costs incurred or funds expended, for any violations, past, present or future, known or unknown, of applicable federal law, the ECL, or the rules and regulations promulgated thereunder, or conditions contained in any other licenses or permits issued to the Applicant and not addressed in this permit.

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 the right of the Department to pursue any claims for natural resource damages against the Applicant.

**Condition 23: Emission Unit Definition**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

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

**Item 23.1:**

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

Emission Unit: U-0000A

Emission Unit Description:

REFINERY AND LABORATORY OPERATIONS RELATED  
TO PRECIOUS METALS.

Building(s): 272

**Item 23.2:**

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

Emission Unit: U-0000B

Emission Unit Description:

PRECIOUS METAL MANUFACTURING.

Building(s): 272

**Item 23.3:**

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

Emission Unit: U-0000C

Emission Unit Description:

INK PRODUCTION OPERATIONS.

Building(s): 272

**Item 23.4:**



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

Emission Unit: U-0000D

Emission Unit Description:

ADDITIVE TANKS FOR PRODUCTION OF GOLD  
PLATING SOLUTION.

Building(s): 272

**Item 23.5:**

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

Emission Unit: U-0000E

Emission Unit Description:

SILVER CYANIDE SALT PRECIPITATION.

Building(s): 272

**Item 23.6:**

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

Emission Unit: U-0000F

Emission Unit Description:

ELEVEN REACTORS USED FOR DISSOLVING BASE  
METAL WITH HCl AND HNO<sub>3</sub> IN AQUA REGIA AREA  
CONNECTED TO 3-STAGE TRI-MER WET SCRUBBER.

Building(s): 272

**Item 23.7:**

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

Emission Unit: U-0000G

Emission Unit Description:

PRECIOUS METAL PROCESSING, RECLAMATION,  
AND WASTE TREATMENT.

Building(s): 272

**Item 23.8:**

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

Emission Unit: U-0000H

Emission Unit Description:

EXHAUST FOR WASTE TREATMENT AND STORAGE,  
DRUM WASHING, AND CHEMICAL MIXING TANKS.

Building(s): 272

**Item 23.9:**

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

Emission Unit: U-0000I



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Emission Unit Description:  
INCINERATOR SYSTEM

**Item 23.10:**

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

Emission Unit: U-0000J  
Emission Unit Description:  
PRINTED CIRCUIT BOARD LAB

**Condition 24: Contaminant List**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

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

**Item 24.1:**

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

CAS No: 0NY100-00-0  
Name: HAP

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

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

**Condition 25: Air pollution prohibited**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable State Requirement: 6NYCRR 211.2**

**Item 25.1:**

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

**Condition 26: Compliance Demonstration**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable State Requirement: 6NYCRR 212.3(a)**

**Item 26.1:**

The Compliance Demonstration activity will be performed for the Facility.

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

**Item 26.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

EMISSIONS FROM EXISTING SOURCES.  
THE FACILITY WILL NOT CAUSE OR ALLOW  
EMISSIONS THAT VIOLATE THE REQUIREMENT  
SPECIFIED IN TABLE 2, TABLE 3, OR TABLE 4  
OF PART 212 FOR THE ENVIRONMENTAL RATING  
ISSUED BY THE COMMISSIONER.

Reference Test Method: N/A

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING  
DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2004.

Subsequent reports are due every 12 calendar month(s).

**Condition 27: Compliance Demonstration**  
**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable State Requirement: 6NYCRR 212.4(a)**

**Item 27.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 27.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

EMISSIONS FROM NEW SOURCES AND/OR  
MODIFICATIONS.  
NO PERSON SHALL CAUSE OR ALLOW EMISSIONS  
THAT EXCEED THE APPLICABLE EMISSION RATE  
AS DETERMINED FROM TABLE 2, TABLE 3, OR  
TABLE 4 OF PART 212 FOR THE ENVIRONMENTAL  
RATING ISSUED BY THE COMMISSIONER.

Reference Test Method: N/A

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING



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**DESCRIPTION**

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2004.

Subsequent reports are due every 12 calendar month(s).

**Condition 28: Compliance Demonstration**

**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable State Requirement: 6NYCRR 212.4(b)**

**Item 28.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 28.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

EMISSIONS FROM NEW SOURCES AND/OR  
MODIFICATIONS.

FOR GASES AND LIQUIDS WITH AN  
ENVIRONMENTAL RATING OF A, B, OR C, AND  
FOR SOLID PARTICULATES WITH AN  
ENVIRONMENTAL RATING OF A, WHERE THE  
EMISSION RATE POTENTIAL IS NOT SHOWN IN  
TABLE 2 THE PERMISSIBLE EMISSION RATE  
SHALL BE SPECIFIED BY THE COMMISSIONER.

Reference Test Method: N/A

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING  
DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2004.

Subsequent reports are due every 12 calendar month(s).

**Condition 29: Compliance Demonstration**

**Effective between the dates of 10/22/2003 and Permit Expiration Date**

**Applicable State Requirement: 6NYCRR 212.4(c)**

**Item 29.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 29.2:**

Compliance Demonstration shall include the following monitoring:

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Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

EMISSIONS FROM NEW SOURCES AND/OR MODIFICATIONS.  
IN INSTANCES WHERE DETERMINATION OF PERMISSIBLE EMISSION RATE USING PROCESS WEIGHT IS NOT APPLICABLE (SEE TABLE 5) AND FOR AN ENVIRONMENTAL RATING OF B OR C, NO PERSON WILL CAUSE OR ALLOW EMISSIONS OF SOLID PARTICULATES THAT EXCEED 0.05 GRAINS OF PARTICULATES PER CUBIC FOOT OF EXHAUST GAS, EXPRESSED AT STANDARD CONDITIONS ON A DRY GAS BASIS.

Reference Test Method: N/A

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2004.

Subsequent reports are due every 12 calendar month(s).

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

**Condition 30: Emission Point Definition By Emission Unit  
Effective between the dates of 10/22/2003 and Permit Expiration Date**

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

**Item 30.1:**

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

Emission Unit: U-0000A

Emission Point: 00003

Height (ft.): 40

Diameter (in.): 24

NYTMN (km.): 4500.5

NYTME (km.): 620.9

Building: 272

**Item 30.2:**

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

Emission Unit: U-0000B

Emission Point: 00009



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**Facility DEC ID: 1282000528**

Height (ft.): 40                      Diameter (in.): 24  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

**Item 30.3:**

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

Emission Unit: U-0000C

Emission Point: 00034  
Height (ft.): 23                      Diameter (in.): 8  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

Emission Point: 00035  
Height (ft.): 24                      Diameter (in.): 16  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

Emission Point: 00036  
Height (ft.): 24                      Diameter (in.): 16  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

Emission Point: 00037  
Height (ft.): 24                      Diameter (in.): 19  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

Emission Point: 00038  
Height (ft.): 24                      Diameter (in.): 19  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

Emission Point: 00069  
Height (ft.): 24                      Diameter (in.): 19  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

Emission Point: 00071  
Height (ft.): 24                      Diameter (in.): 19  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

Emission Point: 00072  
Height (ft.): 23                      Diameter (in.): 48  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

Emission Point: 00309  
Height (ft.): 21                      Diameter (in.): 17  
NYTMN (km.): 4500.5              NYTME (km.): 620.9

**Item 30.4:**

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



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**Facility DEC ID: 1282000528**

Emission Unit: U-0000D

Emission Point: 00040

Height (ft.): 24                      Diameter (in.): 13  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

Emission Point: 00041

Height (ft.): 24                      Diameter (in.): 13  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

Emission Point: 00042

Height (ft.): 24                      Diameter (in.): 13  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

**Item 30.5:**

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

Emission Unit: U-0000E

Emission Point: 00044

Height (ft.): 24                      Diameter (in.): 16  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

Emission Point: 00045

Height (ft.): 24                      Diameter (in.): 13  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

**Item 30.6:**

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

Emission Unit: U-0000F

Emission Point: 00055

Height (ft.): 39                      Diameter (in.): 18  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

**Item 30.7:**

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

Emission Unit: U-0000G

Emission Point: 00056

Height (ft.): 35                      Diameter (in.): 18  
NYTMN (km.): 4500.5              NYTME (km.): 620.9              Building: 272

**Item 30.8:**

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



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Emission Unit: U-0000H

Emission Point: 00075

Height (ft.): 38

Diameter (in.): 36

NYTMN (km.): 4500.5

NYTME (km.): 620.9

Building: 272

**Item 30.9:**

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

Emission Unit: U-0000I

Emission Point: 00043

Height (ft.): 38

Diameter (in.): 16

NYTMN (km.): 4500.5

NYTME (km.): 620.9

**Item 30.10:**

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

Emission Unit: U-0000J

Emission Point: 00060

Height (ft.): 20

Diameter (in.): 12

NYTMN (km.): 4500.5

NYTME (km.): 620.9

Emission Point: 00061

Height (ft.): 20

Diameter (in.): 12

NYTMN (km.): 4500.5

NYTME (km.): 620.9

Building: 272

**Condition 31: Process Definition By Emission Unit**

**Effective between the dates of 10/22/2003 and Permit Expiration Date**

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

**Item 31.1:**

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

Emission Unit: U-0000A

Process: A01

Source Classification Code: 6-45-825-02

Process Description:

CENTRAL EXHAUST SYSTEM WITH FUME SCRUBBER.

CAUSTIC USED IN SCRUBBER TO NEUTRALIZE

FUMES.

Emission Source/Control: 0A01C - Control

Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)



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**Facility DEC ID: 1282000528**

Emission Source/Control: 0A02S - Process

Emission Source/Control: 0A03S - Process

Emission Source/Control: 0A04S - Process

Emission Source/Control: 0A05S - Process

Emission Source/Control: 0A06S - Process

Emission Source/Control: 0A07S - Process

**Item 31.2:**

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

Emission Unit: U-0000A

Process: A02

Source Classification Code: 3-03-013-01

Process Description:

TWO LAB HOODS LOCATED IN ASSAY ROOM FOR  
ASSAYING OF GOLD AND SILVER CYANIDE  
SOLUTIONS.

Emission Source/Control: 0A02S - Process

**Item 31.3:**

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

Emission Unit: U-0000A

Process: A03

Source Classification Code: 3-03-013-01

Process Description:

TWO FILTER UNIT LOCATED UNDER HOOD USED  
FOR PROCESSING SOLUTION AFTER GOLD  
PRECIPITATION

Emission Source/Control: 0A03S - Process

**Item 31.4:**

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

Emission Unit: U-0000A

Process: A04

Source Classification Code: 3-03-013-01

Process Description:

THREE 100 AND ONE 150 GALLON GOLD  
PRECIPITATION TANKS

Emission Source/Control: 0A04S - Process

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**Item 31.5:**

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

Emission Unit: U-0000A

Process: A05

Source Classification Code: 3-03-013-01

Process Description: THREE 500 GALLON ACID PROCESSING TANKS

Emission Source/Control: 0A05S - Process

**Item 31.6:**

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

Emission Unit: U-0000A

Process: A06

Source Classification Code: 3-09-011-01

Process Description:

ONE 1,000 GALLON WASTE ACID TANK AND TWO  
150 GALLON SLUDGE TANKS

Emission Source/Control: 0A06S - Process

**Item 31.7:**

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

Emission Unit: U-0000A

Process: A07

Source Classification Code: 3-09-011-02

Process Description:

THREE 160 GALLON TANKS FOR PRECIPITATING  
GOLD MANUFACTURING PALLADIUM-AMMONIUM  
COMPLEX

Emission Source/Control: 0A07S - Process

**Item 31.8:**

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

Emission Unit: U-0000B

Process: B01

Source Classification Code: 6-45-825-02

Process Description: EXHAUST WITH FUME SCRUBBER.

Emission Source/Control: 0B01C - Control

Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: 0B02S - Process

Emission Source/Control: 0B03S - Process

**Item 31.9:**

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

Emission Unit: U-0000B

Process: B02

Source Classification Code: 3-03-013-01

Process Description: FOUR PRECIPITATING FREEZER TANKS.

Emission Source/Control: 0B02S - Process

**Item 31.10:**

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

Emission Unit: U-0000B

Process: B03

Source Classification Code: 3-03-013-01

Process Description: EIGHT POTASSIUM GOLD CYANIDE TANKS.

Emission Source/Control: 0B03S - Process

**Item 31.11:**

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

Emission Unit: U-0000C

Process: C01

Source Classification Code: 3-03-013-01

Process Description:

WEIGH STATION, HYPER MIXER, AND FLOOR VENT  
ROUTED TO BAGHOUSE.

Emission Source/Control: 0C01C - Control

Control Type: FABRIC FILTER

Emission Source/Control: 0C01S - Process

**Item 31.12:**

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

Emission Unit: U-0000C

Process: C02

Source Classification Code: 3-01-020-18

Process Description: INK MILLING AND PACKAGING.

Emission Source/Control: C02AS - Process

Emission Source/Control: C02BS - Process

Emission Source/Control: C02CS - Process

Emission Source/Control: C02DS - Process

Emission Source/Control: C02ES - Process

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Emission Source/Control: C02FS - Process

Emission Source/Control: C02GS - Process

**Item 31.13:**

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

Emission Unit: U-0000D

Process: D01

Source Classification Code: 3-03-013-01

Process Description:

FOUR 55 GALLON MIXING AND MAKE UP ADDITIVE  
TANKS USED IN PRODUCTION OF GOLD PLATING  
ADDITIVES.

Emission Source/Control: 0D01S - Process

**Item 31.14:**

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

Emission Unit: U-0000D

Process: D02

Source Classification Code: 3-03-013-01

Process Description:

TWO 100 GALLON MIXING AND MAKE UP ADDITIVE  
TANKS USED IN PRODUCTION OF GOLD PLATING  
ADDITIVES.

Emission Source/Control: 0D02S - Process

**Item 31.15:**

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

Emission Unit: U-0000D

Process: D03

Source Classification Code: 3-03-013-01

Process Description:

250-GALLON MIXING AND MAKE-UP ADDITIVE  
TANK USED IN PRODUCTION OF GOLD PLATING  
ADDITIVES.

Emission Source/Control: 0D03S - Process

**Item 31.16:**

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

Emission Unit: U-0000E

Process: E01

Source Classification Code: 3-09-012-03

Process Description:

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CANOPY HOOD OVER CENTRIFUGE MACHINE FOR  
PREPARATION OF SILVER CYANIDE SALTS  
(MANUFACTURING PLATING ADDITIVE).

Emission Source/Control: 0E01S - Process

**Item 31.17:**

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

Emission Unit: U-0000E

Process: E02

Source Classification Code: 3-09-012-04

Process Description:

300-GALLON STEAM KETTLE FOR PREPARATION OF  
SILVER CYANIDE PLATING SALTS (MANUFACTURING  
PLATING ADDITIVE).

Emission Source/Control: 0E02S - Process

**Item 31.18:**

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

Emission Unit: U-0000F

Process: F01

Source Classification Code: 3-09-012-04

Process Description:

ELEVEN REACTORS USED FOR DISSOLVING BASE  
METAL WITH HCl AND HNO<sub>3</sub> IN AQUA REGIA AREA  
CONNECTED TO 3-STAGE TRI-MER WET SCRUBBER.

Emission Source/Control: 0F01C - Control

Control Type: WET SCRUBBER

Emission Source/Control: 0F01S - Process

**Item 31.19:**

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

Emission Unit: U-0000G

Process: G01

Process Description:

CENTRAL EXHAUST SYSTEM WITH FUME SCRUBBER.  
CAUSTIC USED TO NEUTRALIZE ACID FUMES.

Emission Source/Control: 0G01C - Control

Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: 0G02S - Process

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**Facility DEC ID: 1282000528**



**Item 31.20:**

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

Emission Unit: U-0000G

Process: G02

Source Classification Code: 3-03-013-01

Process Description:

FOUR 300 GALLON STEAM-HEATED PRECIPITATION  
TANKS. RECLAIM GOLD FROM PLATING SOLUTIONS  
RETURNED FROM COMMERCIAL USERS

Emission Source/Control: 0G02S - Process

**Item 31.21:**

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

Emission Unit: U-0000G

Process: G03

Source Classification Code: 3-03-013-01

Process Description:

TWO 500 GALLON STEAM HEATED PRECIPITATION  
TANKS. RECLAIM GOLD FROM PLATING SOLUTIONS  
RETURNED FROM COMMERCIAL USERS

Emission Source/Control: 0G03S - Process

**Item 31.22:**

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

Emission Unit: U-0000G

Process: G04

Source Classification Code: 3-03-013-01

Process Description:

500 GALLON WASTE TREATMENT TANK USED FOR  
ELECTROLYTIC CYANIDE DESTRUCTION FROM  
SOLUTIONS RETURNED FROM MANUFACTURING  
OPERATIONS. METALS ARE PLATED ON CATHODES

Emission Source/Control: 0G04S - Process

**Item 31.23:**

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

Emission Unit: U-0000G

Process: G05

Source Classification Code: 3-03-013-01

Process Description:

800 GALLON WASTE TREATMENT TANK USED FOR  
ELECTROLYTIC CYANIDE DESTRUCTION FROM  
SOLUTIONS RETURNED FROM MANUFACTURING  
OPERATIONS. METALS ARE PLATED ON CATHODES

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Emission Source/Control: 0G05S - Process

**Item 31.24:**

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

Emission Unit: U-0000G

Process: G06

Source Classification Code: 3-01-820-03

Process Description:

TWO 1,500 GALLON TANKS TO OXIDIZE RESIDUAL  
CYANIDE CONTENT AFTER ELECTROLYTIC  
DESTRUCTION

Emission Source/Control: 0G06S - Process

**Item 31.25:**

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

Emission Unit: U-0000G

Process: G07

Process Description: 3,000 GALLON WASTE TREATMENT TANK FOR CYANIDE

Emission Source/Control: 0G07S - Process

**Item 31.26:**

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

Emission Unit: U-0000G

Process: G08

Process Description: 1,200 GALLON STORAGE TANK

Emission Source/Control: 0G08S - Process

**Item 31.27:**

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

Emission Unit: U-0000G

Process: G09

Process Description: THREE LAB HOODS IN REFINERY AREA

Emission Source/Control: 0G09S - Process

**Item 31.28:**

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

Emission Unit: U-0000H

Process: H01

Source Classification Code: 3-01-009-07



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Process Description:

EXHAUST FOR WASTE TREATMENT AND STORAGE,  
DRUM WASHING, AND CHEMICAL MIXING TANKS.

Emission Source/Control: 0H01C - Control

Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: 0H02S - Process

Emission Source/Control: 0H03S - Process

**Item 31.29:**

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

Emission Unit: U-0000H

Process: H02

Source Classification Code: 4-07-999-99

Process Description: WASTE TREATMENT AND STORAGE.

Emission Source/Control: 0H02S - Process

**Item 31.30:**

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

Emission Unit: U-0000H

Process: H03

Source Classification Code: 3-01-009-07

Process Description: CHEMICAL MIXING TANKS.

Emission Source/Control: 0H03S - Process

**Item 31.31:**

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

Emission Unit: U-0000I

Process: I01

Process Description:

33 CUBIC FOOT GAS FIRED INCINERATOR USED  
TO COMBUST GOLD BEARING WASTE FOR RECOVERY

Emission Source/Control: 0000I - Process

**Item 31.32:**

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

Emission Unit: U-0000J

Process: J01

Process Description:

PILOT SCALE PRINTED CIRCUIT BOARD PLATING,

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CLEANING, AND PROCESSING LINES

Emission Source/Control: 0000J - Process