PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 6-2130-00097/00001
Mod 0 Effective Date: 01/13/2014 Expiration Date: 01/12/2024

Mod 1 Effective Date: 02/09/2016 Expiration Date: 01/12/2024

Permit Issued To:ELG UTICA ALLOYS INC
378 GROS BLVD STE # 3
HERKIMER, NY 13350

Contact: BRET COPPLE
ELG UTICA ALLOYS INC
378 GROS BLVD STE # 3
HERKIMER, NY 13350
(315) 733-0475

Facility: ELG UTICA ALLOYS-HERKIMER
378 GROS BLVD BLDG #1
HERKIMER, NY 13350

Description:

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: LAWRENCE R AMBEAU
NYSDEC - REGION 6
317 WASHINGTON ST
WATERTOWN, NY 13601

Authorized Signature: _____ Date: ___ / ___ / _____

Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

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

Item B: Permittee's Contractors to Comply with Permit

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

Item C: Permittee Responsible for Obtaining Other Required Permits

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

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

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

LIST OF CONDITIONS

DEC GENERAL CONDITIONS
General Provisions
Facility Inspection by the Department
Relationship of this Permit to Other Department Orders and Determinations
Applications for permit renewals, modifications and transfers
Applications for permit renewals, modifications and transfers
Permit modifications, suspensions or revocations by the Department
Facility Level
Submission of application for permit modification or renewal-REGION 6 SUBOFFICE - UTICA

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 expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

Item 3.3:
Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

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

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

Item 1-1.3:
Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

Condition 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 6 SUBOFFICE - UTICA
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 6 Sub-office
Division of Environmental Permits
State Office Building, 207 Genesee Street
Utica, NY 13501-2885
(315) 793-2555

Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To:ELG UTICA ALLOYS INC
378 GROS BLVD STE # 3
HERKIMER, NY 13350

Facility: ELG UTICA ALLOYS-HERKIMER
378 GROS BLVD BLDG #1
HERKIMER, NY 13350

Authorized Activity By Standard Industrial Classification Code:
5093 - SCRAP AND WASTE MATERIALS

Mod 0 Permit Effective Date: 01/13/2014 Permit Expiration Date: 01/12/2024

Mod 1 Permit Effective Date: 02/09/2016 Permit Expiration Date: 01/12/2024

LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS
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4 6 NYCRR 211.1: Air pollution prohibited
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1-2 6 NYCRR 212-1.5 (a): Compliance Demonstration
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1-4 6 NYCRR 212-1.7 (b) (1): Compliance Demonstration
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STATE ONLY ENFORCEABLE CONDITIONS
Facility Level

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16 6 NYCRR Subpart 201-5: Emission Unit Definition
17 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
18 6 NYCRR 201-5.3 (c): Compliance Demonstration
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Emission Unit Level

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FEDERALLY ENFORCEABLE CONDITIONS
****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability

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

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

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

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

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

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

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

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

required to operate such device effectively.

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

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

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

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

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

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.

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

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

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

FEDERAL APPLICABLE REQUIREMENTS
The following conditions are federally enforceable.

Condition 1: **Exempt and Trivial Activities Applicability**

Effective between the dates of 01/13/2014 and 01/12/2024

Applicable Federal Requirement:6 NYCRR 201-3.1 (a)

Item 1.1:
If the facility owner and/or operator performs any of the exempt and trivial activities listed in 6 NYCRR Part 201-3.2(c) or 201-3.3(c), such activities are exempt from the permitting provisions of 6 NYCRR Part 201-5, but not from other Parts of 6 NYCRR Chapter III, or from applicable permitting requirements of local air pollution control agencies.

Condition 4: Air pollution prohibited
Effective between the dates of 01/13/2014 and 01/12/2024

Applicable Federal Requirement:6 NYCRR 211.1

Item 4.1:
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 1-1: Compliance Demonstration
Effective between the dates of 02/09/2016 and 01/12/2024

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

Item 1-1.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD001 Emission Point: K001E

Emission Unit: 0-KD001 Emission Point: K002E

Emission Unit: 0-KD001 Emission Point: K004E

Regulated Contaminant(s):
CAS No: 007440-02-0 NICKEL METAL AND INSOLUBLE COMPOUNDS

Item 1-1.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Emission points K001E, K002E and K004E are emergency system-overheat release stacks for Process KD1, KD3 and KD4 respectively. The intent of these EPs is to protect

the two cartridge filter units and the baghouse from damage when an associated oxidizer overheats. In the event of any given stack's use, the entire associated exhaust stream would be released to the atmosphere prior to the particulate removal functions of baghouse K1003, K3003 or K4003 respectively, including nine metal HAPs and hydrogen chloride PMs. This release, if it were somehow to persist for a sufficient time, could result in an AGC exceedence of nickel and other HAPs. Process KD1, Process KD3 and Process KD4 are programmed to immediately shut down the kiln (the source of emissions) if this emergency stack were to become active. Facility shall monitor and log any time period for which K001E, K002E and/or K004E were to be active. Every Annual Monitoring Report shall present an entry that references the status of K001E, K002E and K004E activity (even if none) during the applicable reporting period. These stacks are horizontally oriented openings that are mounted on other outside ductwork. These uncontrolled emissions should be considered compliant per startup, shutdown and malfunction rules because the source of the emissions (the kiln) is interlocked to immediately shut down.

Monitoring Frequency: CONTINUOUS
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 12 calendar month(s).

Condition 1-2: Compliance Demonstration
Effective between the dates of 02/09/2016 and 01/12/2024

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

Item 1-2.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD001 Emission Point: KFH1E

Emission Unit: 0-KD001 Emission Point: KFH2E

Emission Unit: 0-KD001 Emission Point: KFH3E

Emission Unit: 0-KD001 Emission Point: KFH4E

Regulated Contaminant(s):
CAS No: 007440-02-0 NICKEL METAL AND INSOLUBLE COMPOUNDS

Item 1-2.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Emission points KFH1E, KFH2E, KFH3E and KFH4E are emergency release stacks for Kilns 1, 2, 3 and 4 respectively; these emergency stacks (normally closed) are individually programmed to open if any one of the associated three thermal oxidizers were to lose combustion. These through-roof stacks are each mounted directly above each fume hood of the associated kiln. The intent is to avoid smoke back-up into the plant. Any exhaust that is released from these four stacks is uncontrolled. If any one emergency stack were to open, then the associated kiln is programmed to immediately shut down; the cooling nickel chips in that kiln will generate some additional uncontrolled emissions. Facility shall monitor and log any time period for which KFH1E, KFH2E, KFH3E and/or KFH4E were to be active. Every Annual Monitoring Report shall present an entry that references the status of KFH1E, KFH2E, KFH3E and KFH4E activity (even if there had been no activity) during the applicable reporting period. These uncontrolled emissions should be considered compliant per startup, shutdown and malfunction rules because the source of the emissions (kiln) is interlocked to immediately shut down.

Monitoring Frequency: CONTINUOUS
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 12 calendar month(s).

Condition 1-3: Compliance Demonstration
Effective between the dates of 02/09/2016 and 01/12/2024

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

Item 1-3.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD001 Emission Point: K0001

Emission Unit: 0-KD001 Emission Point: K0002

Emission Unit: 0-KD001 Emission Point: K0004

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 1-3.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
No person shall cause or allow emissions to the outdoor atmosphere having an average opacity of 20% or greater for any consequtive six-minute period from any process emission source subject to 6 NYCRR 201. Facility shall observe and evaluate the plume appearence daily and log these observations.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: Observe plumes daily, perform RM9 at DEC request
Monitoring Frequency: DAILY
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 12 calendar month(s).

Condition 1-4: Compliance Demonstration
Effective between the dates of 02/09/2016 and 01/12/2024

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

Item 1-4.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD001
Process: KD1 Emission Source: K1002

Emission Unit: 0-KD001
Process: KD4 Emission Source: K4002

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

Item 1-4.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
In order to ensure that the VOC destruction efficiency of the thermal oxidizer will meet or exceed the 81% that is specified in 6 NYCRR 212-3.1, the oxidizer outlet

temperature shall not fall below 1,300 degrees Fahrenheit. This temperature shall be continuously monitored and recorded whenever the associated kiln is processing chips. The source of this VOC is from residual machine tool coolants that arrive on turnings.

For Oxidizer #1 (Source K1002), the 1,300 degree limitation was determined during a 9/18/12 stack test on the oxidizer for Kilns #1 and #2.

Oxidizer #4 (Source K4002), has not been required by NYSDEC for performance testing (yet). The 1,300 degree limitation has been adopted from stack test results on Oxidizer #1.

Otherwise, facility is required to maintain the operational capability of this oxidizer and the facility shall log maintenance records for a minimum five-year period.

Parameter Monitored: TEMPERATURE
Lower Permit Limit: 1,300 degrees Fahrenheit
Reference Test Method: EPA Reference Method 25A if requested by NYSDEC
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 12 calendar month(s).

Condition 1-5: Compliance Demonstration
Effective between the dates of 02/09/2016 and 01/12/2024

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

Item 1-5.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD001
Process: KD3 Emission Source: K3002

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

Item 1-5.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
In order to ensure that the VOC destruction efficiency of

the thermal oxidizer will meet or exceed the 81% that is specified in 6 NYCRR 212-3.1, the oxidizer outlet temperature shall not fall below 1,250 degrees Fahrenheit. This temperature shall be continuously monitored and recorded whenever the associated kiln is processing chips. The source of this VOC is from residual machine tool coolants that arrive on turnings. The 1,250 degree limitation was determined during a 9/18/12 stack test on oxidizer for Kiln #3. Otherwise, facility is required to maintain the operational capability of this oxidizer and the facility shall log maintenance records for a minimum five-year period.

Parameter Monitored: TEMPERATURE
Lower Permit Limit: 1,250 degrees Fahrenheit
Reference Test Method: EPA Reference Method 25A if requested by NYSDEC
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 12 calendar month(s).

Condition 1-6: Compliance Demonstration
Effective between the dates of 02/09/2016 and 01/12/2024

Applicable Federal Requirement:6 NYCRR 212-1.7 (b) (5)

Item 1-6.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD001
Process: KD1 Emission Source: K1003

Emission Unit: 0-KD001
Process: KD3 Emission Source: K3003

Emission Unit: 0-KD001
Process: KD4 Emission Source: K4003

Regulated Contaminant(s):

CAS No: 007439-92-1	LEAD
CAS No: 007439-96-5	MANGANESE
CAS No: 007439-97-6	MERCURY
CAS No: 007440-43-9	CADMIUM
CAS No: 007440-47-3	CHROMIUM
CAS No: 007440-48-4	COBALT
CAS No: 007647-01-0	HYDROGEN CHLORIDE
CAS No: 007782-49-2	SELENIUM
CAS No: 0NY075-00-0	PARTICULATES
CAS No: 007440-02-0	NICKEL METAL AND INSOLUBLE

COMPOUNDS

Item 1-6.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Facility shall ensure that AGCs of the referenced HAP particulates are not exceeded by providing effective cartridge filter/baghouse maintenance that is in accord with the manufacturer's specifications and/or empirical history. Cartridge filter/baghouse units shall be operated within the referenced pressure drop parameters while the associated kiln is in operation. Manometer readings below 1" WC and above 6" WC shall require immediate root cause analysis and then expedient corrective action. Manometers shall be monitored and recorded once per week while the cartridge filter units are in operation. This record and all other cartridge filter maintenance records shall be kept for a minimum period of five years.

Parameter Monitored: PRESSURE DROP
Lower Permit Limit: 1 inches of water
Upper Permit Limit: 6 inches of water
Monitoring Frequency: WEEKLY
Averaging Method: RANGE-NOT TO FALL OUTSIDE OF STATED RANGE EXCEPT DURING STARTUP/SHUTDOWN
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 12 calendar month(s).

Condition 1-7: Compliance Demonstration
Effective between the dates of 02/09/2016 and 01/12/2024

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

Item 1-7.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD001
Process: KD1 Emission Source: K1000

Emission Unit: 0-KD001
Process: KD1 Emission Source: K2000

Emission Unit: 0-KD001
Process: KD3 Emission Source: K3000

Emission Unit: 0-KD001

Process: KD4 Emission Source: K4000

Regulated Contaminant(s):
CAS No: 007440-02-0 NICKEL METAL AND INSOLUBLE COMPOUNDS

Item 1-7.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS
Monitoring Description:
CAP:
The facility shall avoid an exceedence of the nickel AGC by restricting, facilitywide (meaning the sum of all throughput from all four kilns), the kiln processing of cleaned nickel-bearing chips to 53,118,208 pounds per consecutive 12-month rolling period.
RECORDS:
Facility owner shall maintain records that verify the facility's monthly nickel chip throughput. These records shall be maintained at the facility for a minimum five year period.
REPORTS:
Reports shall be submitted annually, in a format acceptable to the Department, which document that the facility's nickel chip throughput during any consecutive 365 day period were less than 53,118,208 pounds. The annual monitoring report shall include information that documents the nickel chip throughput from each emission source at the facility, including exempt and trivial activities. If requested, the report shall also include all emission factors and other data used in calculating the monthly nickel chip throughput. The form "Annual Capping Certification" is absolutely required.
NONCOMPLIANCE:
Any noncompliance with the nickel chip throughput limit in this condition shall be reported by sending a copy of such record to the NYSDEC Region 6, within 30 days of the occurrence.
BACKGROUND:
AERMOD modeling was performed by NYSDEC Central Office on 2/8/2013. The model considered the nine metal HAPs and hydrogen chloride that had been stack tested for on 9/18/2012. The model did suggest that the AGC for nickel would be breached in the absence of a cap. Upon consideration of four new cyclones, two new fabric filter units, a new baghouse and three new thermal oxidizers, Central Office staff has determined that ELG Utica Alloys has provided T-BACT and therefore the facility has been allowed to utilize the 'factor of ten' rule, which in this

case enables ELG to operate at stack test conditions, but for a limited number of hours (Central Office requested an hourly limit). See DAR-1 for the regulatory directive that allows a carcinogen's AGC to be exceeded by a factor of ten when T-BACT has been achieved.

The nickel chip throughput annual maximum cap of 39,838,656 lbs (this was for a three kiln operation - during "Renewal #1") was determined as follows: The nickel chip throughput rate during the 2012 stack test was 5,804 lbs/hr (summation of all three kilns while operating at the maximum rate that would produce a finished chip that met ELG's laboratory specifications). The projected annual operating time was calculated to be 6,864 hrs/yr. The product of 5,804 x 6,864 = 39,838,656 lbs of nickel chips per year. During "Mod #1, Renewal #1", ELG expanded to a four kiln operation; so the 39,838,656 cap was divided by three and then multiplied by four to yield the new capping max of 53,118,208 lb/yr.

Work Practice Type: PROCESS MATERIAL THRUPUT
Process Material: METAL
Upper Permit Limit: 53,118,208 pounds per year
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 1/30/2017.
Subsequent reports are due every 12 calendar month(s).

Condition 1-8: Compliance Demonstration
Effective between the dates of 02/09/2016 and 01/12/2024

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

Item 1-8.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD001
Process: KD1 Emission Source: K1000

Emission Unit: 0-KD001
Process: KD1 Emission Source: K2000

Emission Unit: 0-KD001
Process: KD3 Emission Source: K3000

Emission Unit: 0-KD001
Process: KD4 Emission Source: K4000

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 1-8.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
No facility owner or operator shall cause or allow particulate emissions that exceed 3.84 lbs/hr from a comtinuous process material dryer whose material throughput is 1,935 pounds of nickel chips per hour. This emission rate potential has been calculated from Table 6 in 6 NYCRR 212-2.5(b). Reference Method 5 shall be conducted at NYSDEC request.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 3.84 pounds per hour
Reference Test Method: EPA Reference Method 5 @ DEC request
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 12: Compliance Demonstration
Effective between the dates of 01/13/2014 and 01/12/2024

Applicable Federal Requirement:6 NYCRR Part 226

Item 12.1:
The Compliance Demonstration activity will be performed for the Facility.

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

Item 12.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
6NYCRR 226. Requirements for Open-top Vapor Degreasers
(For non Title V)

A. Equipment Specifications

The following types of control equipment must be used when conducting open-top vapor degreasing, solvent metal cleaning:

1) A cover which can be operated easily without disturbing the vapor zone.

(2) Safety switches which shut off the sump heat if the condenser malfunctions and shall shut off the pump if the vapor level drops excessively
(3) One of the following:
(i) a freeboard ratio that is greater than or equal to 0.75, and a powered or mechanically assisted cover if the top opening is greater than 10 square feet;
(ii) a refrigerated chiller; or
(iii) local exhaust ventilation and a carbon adsorption unit, or an equivalent system, for collection of VOCs.

B. Operating Requirements:

(1) Minimize solvent carry-out by the following measures:

(i) rack parts to allow full drainage;
(ii) move parts in and out of degreaser tank at less than 11 ft/min;
(iii) degrease the work load in the vapor zone at least 30 seconds or until condensation ceases;
(iv) tip out any pools of solvent before removal; and

(v) dry parts for at least 15 seconds before removal.

(2) Work loads shall not occupy more than half the open-top area of the degreaser tank.
(3) Spray only below the vapor level.

C. General Requirements:

A Person conducting solvent metal cleaning must:

(1) Store solvent in covered containers and transfer or dispose of waste solvent in such a manner that less than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere.
(2) Maintain equipment to minimize leaks and fugitive emissions.
(3) Display at the equipment location a conspicuous summary of proper operating procedures consistent with minimizing emissions of VOCs.
(4) Keep the degreaser cover closed except when:
(a) parts are being placed into or being removed from the degreaser;.
(b) adding or removing solvent from the degreaser; or
(c) no solvent is in the degreaser.
(5) Create and retain a record of solvent consumption for five years. This record must be made available to the Department upon request.

(6) Not clean sponges, fabric, wood, leather, paper products and other absorbent materials in a degreaser.

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 1/30/2014.
Subsequent reports are due every 12 calendar month(s).

Condition 1-9: Compliance Demonstration
Effective between the dates of 02/09/2016 and 01/12/2024

Applicable Federal Requirement:6 NYCRR 226.2

Item 1-9.1:
The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 000106-88-7	ETHYL OXIRANE
CAS No: 000646-06-0	DIOXACYCLOPENTANE, 1,3-
CAS No: 0NY998-00-0	VOC
CAS No: 000106-94-5	PROPANE, 1-BROMO-

Item 1-9.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Facility operates one non-halogenated open-top batch vapor degreaser that is exempt per 6 NYCRR 201-3.3 (c)(39)(iv) due to an open top area that is less than 11 square feet. In 2010, the solvent in use is Techtride DG and this solvent has been modeled with DAR-1 and has been found to exhibit no SGC or AGC exceedences.

This exempt unit is an Ultra Kool "Cold Trap Plus", 18 gallon capacity, 1.5 ft2.

Annually, facility shall monitor and record degreasing solvent usage. Annually, VOC and HAP emissions from solvent usage shall be calculated per current MSDS/TDS information and also reported in the Annual Monitoring Report. Both 1,3 Dioxolane and N-Propyl bromide are VOCs and ethyl oxirane is both VOC and HAP. Techtride DG is 100% VOC. Records shall be maintained for a minimum period of five years.

NOTE: During 2015, the EPA had been moving in the direction of possibly re-assessing N-propyl bromide to HAP status. Facility is required to be keep abreast of this potential change and also to recognize the recognize need

for a 10 ton self-imposed limit on this HAP (ELG will need a Title V air permit if ELG exceeds 10 tpy).

Monitoring Frequency: ANNUALLY
Averaging Method: ANNUAL TOTAL
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 12 calendar month(s).

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

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: **Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)**
Where facility owners and/or operators keep records pursuant to compliance with the requirements of 6 NYCRR Subpart 201-5.4, and/or the emission capping requirements of 6 NYCRR Subpart 201-7, the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. 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 B: **General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5**
Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

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

STATE ONLY APPLICABLE REQUIREMENTS
The following conditions are state only enforceable.

Condition 14: **Contaminant List**
Effective between the dates of 01/13/2014 and 01/12/2024

Applicable State Requirement:ECL 19-0301

Item 14.1:
Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 000106-88-7
Name: ETHYL OXIRANE

CAS No: 000106-94-5
Name: PROPANE, 1-BROMO-

CAS No: 000646-06-0
Name: DIOXACYCLOPENTANE, 1,3-

CAS No: 007439-92-1
Name: LEAD

CAS No: 007439-96-5
Name: MANGANESE

CAS No: 007439-97-6
Name: MERCURY

CAS No: 007440-02-0
Name: NICKEL METAL AND INSOLUBLE COMPOUNDS

CAS No: 007440-43-9
Name: CADMIUM

CAS No: 007440-47-3
Name: CHROMIUM

CAS No: 007440-48-4
Name: COBALT

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

CAS No: 007782-49-2
Name: SELENIUM

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

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

Condition 15: Malfunctions and start-up/shutdown activities
Effective between the dates of 01/13/2014 and 01/12/2024

Applicable State Requirement:6 NYCRR 201-1.4

Item 15.1:
(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

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

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

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

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

Condition 16: Emission Unit Definition
Effective between the dates of 01/13/2014 and 01/12/2024

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 16.1(From Mod 1):
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 0-KD001
Emission Unit Description:
This emission unit consists of kiln drying operations. Natural gas-fired rotary kilns are used to dry washed metal chips (nickel-based machine tool turnings).

Building(s): Main

Condition 17: Renewal deadlines for state facility permits
Effective between the dates of 01/13/2014 and 01/12/2024

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

Item 17.1:
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 18: Compliance Demonstration
Effective between the dates of 01/13/2014 and 01/12/2024

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

Item 18.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 18.2:
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 6
State Office Building
317 Washington Ave.
Watertown, NY 13601

Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.
Subsequent reports are due every 12 calendar month(s).

Condition 19: Visible Emissions Limited
Effective between the dates of 01/13/2014 and 01/12/2024

Applicable State Requirement:6 NYCRR 211.2

Item 19.1:
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 20: Compliance Demonstration
Effective between the dates of 01/13/2014 and 01/12/2024

Applicable State Requirement:6 NYCRR 211.2

Item 20.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD001

Emission Unit: 0-SMC01

Item 20.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Facility shall establish a complaint response procedure to manage complaints related to air emissions from this facility. The procedure shall be designed to ensure that complaints from officials or neighbors are adequately received and documented, and that appropriate response is taken by the facility. The facility shall:
1. Have a complaint phone line available 24 hours a day, 7 days a week.
2. Investigate any possible causes of any complaint received.
3. Take prompt action to abate any circumstance which is found to be the cause of the complaint.
4. Fully document the complaint, results of investigation, and any action taken.
5. Report in a format acceptable to the Department.

Monitoring Frequency: DAILY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.
Subsequent reports are due every 12 calendar month(s).

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

Condition 21: Emission Point Definition By Emission Unit
Effective between the dates of 01/13/2014 and 01/12/2024

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 21.1(From Mod 1):

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

Emission Unit: 0-KD001

Emission Point: K0001
Height (ft.): 57 Diameter (in.): 14
NYTMN (km.): 4764.727 NYTME (km.): 502.846 Building: Main

Emission Point: K0002
Height (ft.): 36 Diameter (in.): 10
NYTMN (km.): 4764.695 NYTME (km.): 502.853 Building: Main

Emission Point: K0004
Height (ft.): 40 Diameter (in.): 20
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Emission Point: K001E
Height (ft.): 22 Diameter (in.): 13
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Emission Point: K002E
Height (ft.): 14 Diameter (in.): 12
NYTMN (km.): 4764.695 NYTME (km.): 502.853 Building: Main

Emission Point: K004E
Height (ft.): 40 Diameter (in.): 20
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Emission Point: KFH1E
Height (ft.): 31 Diameter (in.): 12
NYTMN (km.): 5000. NYTME (km.): 100. Building: Main

Emission Point: KFH2E
Height (ft.): 31 Diameter (in.): 12
NYTMN (km.): 5000. NYTME (km.): 100. Building: Main

Emission Point: KFH3E
Height (ft.): 31 Diameter (in.): 12
NYTMN (km.): 5000. NYTME (km.): 100. Building: Main

Emission Point: KFH4E
Height (ft.): 31 Diameter (in.): 12
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Condition 22: Process Definition By Emission Unit
Effective between the dates of 01/13/2014 and 01/12/2024

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 22.1(From Mod 1):
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-KD001
Process: KD1 Source Classification Code: 3-04-010-99
Process Description:

Process KD1 consists of the operations of both Kiln #1 and of Kiln #2. Washed nickel chips (turnings) are metered into these natural gas-fired rotary kilns, where remaining machine tool coolants are oxidized and washwater is evaporated off. The exhaust from each kiln is routed directly through one dedicated cyclone (that is two cyclones total). The exhaust from these two cyclones is then joined into a single duct. This now-combined exhaust stream is fed to one a natural gas-fired thermal oxidizer (destroys VOCs from residual coolant oils), then into one heat exchanger (reduce temp to protect baghouse) and then to one fabric cartridge filter (picks up nine different metal HAP particles plus HCl particulates which originate from chlorinated coolant oils) before final atmospheric release through one stack (EP=K0001). Each kiln is equipped with burners that fire at 1 MM Btu/hr; burner exhaust is segregated from kiln airstream (vented separately).

This process has an THREE emergency exhaust-release stacks:

EP=K001E:
This stack's design is to dump the entire combined exhaust streams of Kiln #1 and Kiln #2 (in a thermal oxidizer overheat scenario) into the atmosphere immediately prior to fabric filter control. If this were to occur, nine metal HAPs plus hydrogen chloride PM would realize an uncontrolled release. The system is designed to immediately shut down Kilns #1 and #2 if such an overheat were to occur. The status of K001E activity or inactivity shall be addressed in every Annual Monitoring Report.

EP=KFH1E:
This stack's design is to dump the exhaust stream from Kiln #1 if the combustion in thermal oxidizer (Source=K1002) were to cease, in such an event, Kiln #1 is programmed to immediately shut down, a valve opens above the fume hood on Kiln #1 and then any residual kiln smoke is allowed to escape through a roof penetration duct (EP=KFH1E). The status of KFH1E activity or inactivity shall be addressed in every Annual Monitoring Report.

EP=KFH2E:
This stack's design is to dump the exhaust stream from Kiln #2 if the combustion in thermal oxidizer (Source=K1002) were to cease, in such an event, Kiln #2 is

programmed to immediately shut down, a valve opens above the fume hood on Kiln #2 and then any residual kiln smoke is allowed to escape through a roof penetration duct (EP=KFH2E). The status of KFH2E activity or inactivity shall be addressed in every Annual Monitoring Report.

Emission Source/Control: K1000 - Combustion
Design Capacity: 4,000 pounds per hour

Emission Source/Control: K2000 - Combustion
Design Capacity: 4,000 pounds per hour

Emission Source/Control: K1001 - Control
Control Type: CENTRIFUGAL

Emission Source/Control: K1002 - Control
Control Type: DIRECT FLAME AFTERBURNER WITH HEAT EXCHANGER

Emission Source/Control: K1003 - Control
Control Type: FABRIC FILTER

Emission Source/Control: K2001 - Control
Control Type: CENTRIFUGAL

Item 22.2(From Mod 1):
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-KD001
Process: KD3 Source Classification Code: 3-04-010-99
Process Description:

Process KD3 consists of the operation of one kiln line, known as Kiln #3. Washed nickel chips (turnings) are metered into a natural gas-fired rotary kiln (Kiln #3), where remaining machine tool coolants are oxidized and washwater is dried off. The kiln exhaust is routed through one cyclone, then through one heat recuperator (uses kiln exhaust heat to pre-heat oxidizer intake combustion air), then through one a natural gas-fired thermal oxidizer (destroys VOCs from from residual coolant oils), then through one heat exchanger (reduce temp to protect baghouse, dumps this heat into atmosphere) and then through one fabric cartridge filter (picks up nine different metal HAP particles plus HCl particles which form from chlorinated coolant oils) before final atmospheric release through a stack (EP=K0002). The kiln burners total at 1 MMBtu/hr; burner exhaust is segregated from kiln airstream.

This process has an TWO emergency exhaust-release stacks:

EP=K002E:
This stack's design is to dump the entire exhaust stream of Kiln #3 (in a thermal oxidizer overheat scenario) into the atmosphere immediately prior to fabric filter control. If this were to occur, nine metal HAPs plus hydrogen chloride PM would realize an uncontrolled release. The system is designed to immediately shut down Kiln #3 if such an overheat were to occur. The status of K002E activity or inactivity shall be addressed in every Annual Monitoring Report.

EP=KFH3E:
This stack's design is to dump the exhaust stream from Kiln #3 if the combustion in thermal oxidizer (Source=K3002) were to cease, in such an event, Kiln #3 is programmed to immediately shut down, a valve opens above the fume hood on Kiln #3 and then any residual kiln smoke is allowed to escape through a roof penetration duct (EP=KFH3E). The status of KFH3E activity or inactivity shall be addressed in every Annual Monitoring Report.

Emission Source/Control: K3000 - Combustion
Design Capacity: 4,000 pounds per hour

Emission Source/Control: K3001 - Control
Control Type: CENTRIFUGAL

Emission Source/Control: K3002 - Control
Control Type: DIRECT FLAME AFTERBURNER WITH HEAT EXCHANGER

Emission Source/Control: K3003 - Control
Control Type: FABRIC FILTER

Item 22.3(From Mod 1):
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-KD001
Process: KD4 Source Classification Code: 3-04-010-99
Process Description:
Process KD4 consists of the operation of one kiln line, known as Kiln #4. Washed nickel chips (turnings) are metered into a natural gas-fired rotary kiln (Kiln #4), where remaining machine tool coolants are oxidized and washwater is dried off. The kiln exhaust is routed through one cyclone (K4001), then through one heat recuperator (uses kiln exhaust heat to pre-heat oxidizer intake combustion air), then through one a natural gas-fired thermal oxidizer (K4002)(destroys VOCs from from residual coolant oils), then through one heat exchanger (reduce temp to protect baghouse, dumps this heat into atmosphere) and then through one baghouse (K4003)(120 bags)(picks up

nine different metal HAP particles plus HCl particles which form from chlorinated coolant oils) before final atmospheric release through a stack (EP=K0004). The kiln burners total at 1 MMBtu/hr; burner exhaust is segregated from kiln airstream.

This process has an TWO emergency exhaust-release stacks:

EP=K004E:
This stack's design is to dump the entire exhaust stream of Kiln #4 (in a thermal oxidizer overheat scenario) into the atmosphere immediately prior to baghouse control. If this were to occur, nine metal HAPs plus hydrogen chloride PM would realize an uncontrolled release. The system is designed to immediately shut down Kiln #4 if such an overheat were to occur. The status of K004E activity or inactivity shall be addressed in every Annual Monitoring Report.

EP=KFH4E:
This stack's design is to dump the exhaust stream from Kiln #4 if the combustion in thermal oxidizer (Source=K4002) were to cease, in such an event, Kiln #4 is programmed to immediately shut down, a valve opens above the fume hood on Kiln #4 and then any residual kiln smoke is allowed to escape through a roof penetration duct (EP=KFH4E). The status of KFH4E activity or inactivity shall be addressed in every Annual Monitoring Report.

Emission Source/Control: K4000 - Combustion
Design Capacity: 4,000 pounds per hour

Emission Source/Control: K4001 - Control
Control Type: CENTRIFUGAL

Emission Source/Control: K4002 - Control
Control Type: DIRECT FLAME AFTERBURNER WITH HEAT EXCHANGER

Emission Source/Control: K4003 - Control
Control Type: FABRIC FILTER