Facility DEC ID: 6213000097

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

Mod 2 Effective Date: Expiration Date:

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

Contact: FREDERICK A SCHWEIZER
378 Gros Blvd.
Herkimer, NY 13350
(315) 574-1680

Description:
This ASF permit modification is being performed to add a new water/detergent wash line (and associated an baghouse) into this permit. Also 12 new fume hoods (and associated dust filtration units) have been added to this permit.

Facility DEC ID: 6213000097

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: TERRY R TYOE
NYSDEC - UTICA SUBOFFICE
207 GENESEE ST
UTICA, NY 13501-2885

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.

PAGE LOCATION OF CONDITIONS

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

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

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

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

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

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

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

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

Item 1-1.1:
The permittee must submit a 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 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 2-1: Applications for permit renewals, modifications and transfers
Applicable State Requirement: 6 NYCRR 621.11

Item 2-1.1:
The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item2-1.2:
The permittee must submit a renewal application at least 180 days before the expiration of permits for Title V and State Facility Permits.

Item 2-1.3
Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

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

Item 4.1:
The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

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

****** Facility Level ******

Facility DEC ID: 6213000097

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 ID: 6-2130-00097/00001 **Facility DEC ID: 6213000097**

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

Permit Effective Date: Permit Expiration Date:

PAGE LOCATION OF CONDITIONS

PAGE

NOTE: * preceding the condition number indicates capping.

FEDERALLY ENFORCEABLE CONDITIONS

Renewal 1/Mod 2/DRAFT ****** 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

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

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

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

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

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

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

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

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

Item H: Proof of Eligibility for Sources Defined as Trivial

Activities - 6 NYCRR 201-3.3 (a)
The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

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

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

Item J: Open Fires Prohibitions - 6 NYCRR 215.2
Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

Item K: Permit Exclusion - ECL 19-0305
The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item L: Federally Enforceable Requirements - 40 CFR 70.6 (b)

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

FEDERAL APPLICABLE REQUIREMENTS
The following conditions are federally enforceable.

Condition 2-1: Facility Permissible Emissions
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 2-1.1:
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: 000106-94-5 (From Mod 2) PTE: 2,033 pounds per year
Name: PROPANE, 1-BROMO-

CAS No: 007439-92-1 (From Mod 2) PTE: 0.7 pounds per year
Name: LEAD

CAS No: 007439-96-5 (From Mod 2) PTE: 0.12 pounds per year
Name: MANGANESE

CAS No: 007439-97-6 (From Mod 2) PTE: 0.3 pounds per year
Name: MERCURY

CAS No: 007440-02-0 (From Mod 2) PTE: 163 pounds per year
Name: NICKEL METAL AND INSOLUBLE COMPOUNDS

CAS No: 007440-43-9 (From Mod 2) PTE: 0.04 pounds per year
Name: CADMIUM

CAS No: 007440-48-4 (From Mod 2) PTE: 20 pounds per

year
Name: COBALT

CAS No: 007647-01-0 (From Mod 2) PTE: 2,015 pounds per year
Name: HYDROGEN CHLORIDE

CAS No: 007782-49-2 (From Mod 2) PTE: 0.4 pounds per year
Name: SELENIUM

Condition 2: Facility Permissible Emissions
Effective between the dates of 01/13/2014 and 02/08/2016

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Expired by Mod 1

Item 2.1:
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: 000106-94-5 (From Mod 2) PTE: 2,033 pounds per year
Name: PROPANE, 1-BROMO-

CAS No: 007439-92-1 (From Mod 2) PTE: 0.7 pounds per year
Name: LEAD

CAS No: 007439-96-5 (From Mod 2) PTE: 0.12 pounds per year
Name: MANGANESE

CAS No: 007439-97-6 (From Mod 2) PTE: 0.3 pounds per year
Name: MERCURY

CAS No: 007440-02-0 (From Mod 2) PTE: 163 pounds per year
Name: NICKEL METAL AND INSOLUBLE COMPOUNDS

CAS No: 007440-43-9 (From Mod 2) PTE: 0.04 pounds per year
Name: CADMIUM

CAS No: 007440-48-4 (From Mod 2) PTE: 20 pounds per year
Name: COBALT

CAS No: 007647-01-0 (From Mod 2) PTE: 2,015 pounds

per year

Name: HYDROGEN CHLORIDE

CAS No: 007782-49-2 (From Mod 2) PTE: 0.4 pounds per year

Name: SELENIUM

Condition 2-2: Capping Monitoring Condition
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 2-2.1:
Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR 212-2.1 (a)

Item 2-2.2:
Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 2-2.3:
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.

Item 2-2.4:
On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 2-2.5:
The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 2-2.6:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-VAPDG
Process: VDG Emission Source: V6000

Regulated Contaminant(s):

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

Item 2-2.7:
Compliance Demonstration shall include the following monitoring:

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

CAP:
The facility shall avoid an exceedance of the Part 212-2.1 Table 2 Mass Emission Limit of n Propyl bromide by restricting the actual usage of 1-bromopropane to 500 pounds per consecutive 12-month rolling period.

For the purpose of this cap only, the twelve-month rolling period shall begin on the issuance actual date of "Renewal 1 - Modification 2".

RECORDS:
Facility owner/operator shall maintain records that verify the facility's 1-bromopropane usage remains less than or equal to 500 pounds per year. 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 1-bromopropane emissions, during any consecutive 365-day period, not to exceed 500 pounds. The Annual Monitoring Report shall include information that documents the 1-bromopropane usage. If requested, the report shall also include all shipping invoices or other appropriate data used in calculating the solvent usage/purchase. The form "Annual Capping Certification" is absolutely required.

NONCOMPLIANCE:
Any noncompliance with the 1-bromopropane 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.

METHOD OF DETERMINATION OF LIMIT VALUE:

In July 2021, AERSCREEN modeling had indicated that facility will be unable to meet compliance with the n Propyl bromide AGC of 0.43 ug/m3 in the absence of a limit. The emission rate used was (2,204 lbs/yr)/(8,760 hr/yr) = 0.2308 lb/hr. Evaporation of solvent is believed to progress once it has been poured from the barrel. The

solvent Techtride DG contains 1-bromopropane up to 100% of volume by weight. Source V6000 (open-top vapor degreaser) was modeled without an emission point. Source V6000 has no capture equipment and also has no control device. Facility has elected to impose a 500 lb/yr 1-bromopropane limit in order to avoid exceedence of the Part 212-2.2 Table 2 mass emission limit.

Parameter Monitored: SOLVENT
Upper Permit Limit: 500 pounds per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 2-3: Capping Monitoring Condition
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 2-3.1:
Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR 212-2.1 (a)

Item 2-3.2:
Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 2-3.3:
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.

Item 2-3.4:
On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 2-3.5:
The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 2-3.6:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD011
Process: K11 Emission Source: K1000

Emission Unit: 0-KD011
Process: K11 Emission Source: K2000

Emission Unit: 0-KD012
Process: K13 Emission Source: K3000

Emission Unit: 0-KD012
Process: K14 Emission Source: K4000

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: 007440-48-4	COBALT
CAS No: 007647-01-0	HYDROGEN CHLORIDE
CAS No: 007782-49-2	SELENIUM
CAS No: 007440-02-0	NICKEL METAL AND INSOLUBLE COMPOUNDS

Item 2-3.7:
Compliance Demonstration shall include the following monitoring:

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

CAP:
The facility shall avoid an exceedance of the nickel SGC by restricting the throughput of cleaned nickel-bearing chips to 49,000,000 pounds per consecutive 12-month rolling period. DAR-1 cites the SGC for nickel (07440-02-0) as 0.02 µg/m3.

RECORDS:
Facility owner/operator 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 49,000,000 pounds. The Annual Monitoring Report shall include information that documents the nickel chip throughput from each kiln emission source at the facility. 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. Note: Nickel chips that have been cleaned/processed solely through water wash line (Source W5000) are not subject for inclusion into this limit as long as those chips are not later sent through any of the four kilns.

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.

METHOD OF DETERMINATION OF LIMIT VALUE:
AERSCREEN modeling was performed during July 2021 on emission points K0001 and K0002. The modeling results for K0002 were 'cloned' and ASSUMED to be acceptable for the nearly identical K0003 (in effect, this 1-hour downwind concentration was added-in twice). Emission rates from the 2012 stack test (on EPs K0001 and K0002) were utilized. Modeling was evaluated at 1,722 feet downrange at the borderline of the Herkimer Elementary School. K0001 yielded 0.2559 µg/m3, K0002 yielded 0.004162 µg/m3 and K0003 was assigned at 0.004162 µg/m3 ; the summation of all three was 0.264224 µg/m3, which exceeds the nickel SGC of 0.02 µg/m3.
In recognition of the facilities' utilization of 4 cyclones, 3 thermal oxidizers and 3 baghouses, the fact that these control devices are late-model and of excellent maintenance, DAR has elected to grant T-BACT status to the kilning operations. Further, DAR has granted the utilization of the "ten times rule" [212-1.5(d) and DAR-10]: SGC of 0.02 µg/m3 X 10 = 0.2 µg/m3, which is still exceeded by the model outcome of 0.264224 µg/m3. The NYSDEC reserves the right to retract T-BACT status and/or the "ten times rule" at any time without precedent.
Facility has elected to self-impose this 49,000,000 lb/yr limit: The average nickel chip processing rate was 5,804 lbs/hr during 2012 stack tests (on EPs K0001 & K0002 therefore, Kilns 1, 2 & 3 operating). When 5,804 is multiplied by 4/3 (to extrapolate 5,804 to FOUR kilns), the nickel chip processing rate is 7,738.7 lb/hr. When 7,738.7 is taken at 8,760 hr/yr, the nickel chip throughput rate becomes 67,791,012 pounds of chips per year. The modeled 0.264224 µg/m3 1-hour concentration, if

reduced by 76%, could bring that 1,727 ft concentration into compliance with the SGCx10 of 0.2 µg/m3. Assuming linearity of chips-to-emissions, 76% of 67,791,012 lbs would yield 51,521,169 lbs of chips per year. The Division of Air Resources (DAR) desires a margin-of-error and therefore a limit of 49MM pounds of nickel chip throughput per 12-month rolling period.

Parameter Monitored: METAL
Upper Permit Limit: 49,000,000 pounds per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 20: Compliance Demonstration
Effective between the dates of 01/13/2014 and Permit Expiration Date

Applicable Federal Requirement:

Expired by Mod 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).

Condition 1-1: Compliance Demonstration
Effective between the dates of 02/09/2016 and Permit Expiration Date

Applicable Federal Requirement:

Expired by Mod 2

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 Permit Expiration Date

Applicable Federal Requirement:

Expired by Mod 2

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 2-4: Compliance Demonstration
Effective for entire length of Permit

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

Item 2-4.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD011 Emission Point: HOT12

Emission Unit: 0-KD012 Emission Point: HOT03

Emission Unit: 0-KD012 Emission Point: HOT04

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

Item 2-4.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Emission points HOT12, HOT03 and HOT04 are emergency system-overheat release stacks for Process K11, K13 and K14 respectively. The intent of these EPs is to protect the three baghouses 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 K11, Process K13 and Process K14 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 HOT12, HOT03 and/or HOT04 were to be active.

Every Annual Monitoring Report shall present an entry that references the status of HOT12, HOT03 and HOT04 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.
Subsequent reports are due every 12 calendar month(s).

Condition 1-3: Compliance Demonstration
Effective between the dates of 02/09/2016 and Permit Expiration Date

Applicable Federal Requirement:

Expired by Mod 2

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 2-5: Compliance Demonstration
Effective for entire length of Permit

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

Item 2-5.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD011 Emission Point: K0001

Emission Unit: 0-KD012 Emission Point: K0002

Emission Unit: 0-KD012 Emission Point: K0004

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

Item 2-5.2:
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.
Subsequent reports are due every 12 calendar month(s).

Condition 1-4: Compliance Demonstration
Effective between the dates of 02/09/2016 and Permit Expiration Date

Applicable Federal Requirement:

Expired by Mod 2

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 Permit Expiration Date

Applicable Federal Requirement:

Expired by Mod 2

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 2-6: Compliance Demonstration
Effective for entire length of Permit

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

Item 2-6.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD011
Process: K11 Emission Source: K1002

Emission Unit: 0-KD012
Process: K14 Emission Source: K4002

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

Item 2-6.2:
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, 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.
Subsequent reports are due every 12 calendar month(s).

Condition 2-7: Compliance Demonstration
Effective for entire length of Permit

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

Item 2-7.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD012
Process: K13 Emission Source: K3002

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

Item 2-7.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
In order to ensure that the VOC destruction efficiency of the thermal oxidizer will meet or exceed the 81% that is specified in 6 NYCRR 212-3, 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.
Subsequent reports are due every 12 calendar month(s).

Condition 1-6: Compliance Demonstration
Effective between the dates of 02/09/2016 and Permit Expiration Date

Applicable Federal Requirement:

Expired by Mod 2

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 2-8: Compliance Demonstration
Effective for entire length of Permit

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

Item 2-8.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD011
Process: F12 Emission Source: BHF12

Emission Unit: 0-KD011
Process: K11 Emission Source: K1003

Emission Unit: 0-KD012
Process: F34 Emission Source: BHF34

Emission Unit: 0-KD012
Process: K13 Emission Source: K3003

Emission Unit: 0-KD012
Process: K14 Emission Source: K4003

Emission Unit: 0-WWW01
Process: WWW Emission Source: W5001

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 2-8.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Facility shall ensure that SGC/AGC 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 and/or baghouse units shall be operated within the referenced pressure drop parameters while the associated source equipment 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/baghouses are in operation. This record and all other cartridge filter and baghouse 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.
Subsequent reports are due every 12 calendar month(s).

Condition 1-7: Compliance Demonstration
Effective between the dates of 02/09/2016 and Permit Expiration Date

Applicable Federal Requirement:

Expired by Mod 2

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 Permit Expiration Date

Applicable Federal Requirement:

Expired by Mod 2

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 2-9: Compliance Demonstration
Effective for entire length of Permit

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

Item 2-9.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-KD011
Process: K11 Emission Source: K1000

Emission Unit: 0-KD011
Process: K11 Emission Source: K2000

Emission Unit: 0-KD012
Process: K13 Emission Source: K3000

Emission Unit: 0-KD012
Process: K14 Emission Source: K4000

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

Item 2-9.2:
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 continuous 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 2-10: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 226-1.3

Item 2-10.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-VAPDG
Process: VDG Emission Source: V6000

Item 2-10.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Owners or operators conducting solvent cleaning processes must:
(a) 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;
(b) maintain equipment to minimize leaks and fugitive emissions;
(c) display at the equipment location a conspicuous summary of proper operating procedures consistent with minimizing emissions of VOCs;
(d) keep the degreaser cover closed except when parts are being placed into or being removed from the degreaser, the cover needs to be open in order or remove solvent from the degreaser, no solvent is in the degreaser, or manually cleaning parts in a cold cleaning degreaser;
(e) create and maintain a record of solvent consumption

for five years. Thais record must be retained for five years and made available to the department upon request;
(f) not clean sponges, fabric, wood, leather, paper products and other absorbent materials in a degreaser; and
(g) if using a cold cleaning degreaser that is subject to paragraph 6 NYCRR 226-1.4(a)(4), retain a record of the following three items for five years and provide these records to the Department upon request. An invoice, bill of sale, a certificate covering multiple sales, manufacturers published information, or other appropriate documentation acceptable to the Department may be used to comply with this requirement:
(1) name and address of the solvent supplier;
(2) the type of solvent including the product or vendor identification number; and
(3) the VOC content of the cleaning solution in grams per liter (gm/l) or the vapor pressure of the solvent measured in mm Hg at 20 degrees Celsius (68 degrees Fahrenheit) as appropriate to verify compliance.

Monitoring Frequency: WHEN THE SOURCE IS OPERATING
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 2-11: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 226-1.4 (b)

Item 2-11.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-VAPDG
Process: VDG Emission Source: V6000

Item 2-11.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
The following types of control requirements must be used by an owner or operator conducting solvent cleaning for open-top degreasing:
(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; and
(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.

Monitoring Frequency: WHEN THE SOURCE IS OPERATING
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 2-12: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 226-1.5 (b)

Item 2-12.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 0-VAPDG
Process: VDG Emission Source: V6000

Item 2-12.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
The following operating practices are required by an owner or operator conducting solvent cleaning for open-top vapor degreasing.
(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.

Monitoring Frequency: WHEN THE SOURCE IS OPERATING
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 12: Compliance Demonstration
Effective between the dates of 01/13/2014 and Permit Expiration Date

Applicable Federal Requirement:

Expired by Mod 2

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 Permit Expiration Date

Applicable Federal Requirement:

Expired by Mod 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).

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

Condition 2-13: Emission Unit Permissible Emissions
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 2-13.1:
The sum of emissions from all regulated processes specified in this permit for the emission unit cited
shall not exceed the following Potential to Emit (PTE) rates for each regulated contaminant:

Emission Unit: 0-KD011

CAS No: 007440020 (From Mod 2)
Name: NICKEL METAL AND INSOLUBLE COMPOUNDS
PTE(s): 82 pounds per year
1 pounds per hour

Emission Unit: 0-KD012

CAS No: 007440020 (From Mod 2)
Name: NICKEL METAL AND INSOLUBLE COMPOUNDS
PTE(s): 82 pounds per year
1 pounds per hour

Emission Unit: 0-VAPDG

CAS No: 000106945 (From Mod 2)
Name: PROPANE, 1-BROMO-
PTE(s): 2,023 pounds per year
1 pounds per hour

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

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

Item A: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined in 6 NYCRR subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the department for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) an emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;
(2) the equipment at the facility was being properly operated and maintained;
(3) during the period of the emergency the facility owner or operator took all reasonable steps to minimize the levels of emissions that exceeded the emission standards, or other requirements in the permit; and
(4) the facility owner or operator notified the department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.

(b) In any enforcement proceeding, the facility owner or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or malfunction provision contained in any applicable requirement.

Item B: **Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)**
Where facility owners and/or operators keep records pursuant to compliance with the requirements of 6 NYCRR Subpart 201-5.4, and/or the emission capping requirements of 6 NYCRR Subpart 201-7, the Department will make such records available to the public upon request in accordance

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

Item C: **General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5**
Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

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

STATE ONLY APPLICABLE REQUIREMENTS

The following conditions are state only enforceable.

Condition 14: Contaminant List
Effective between the dates of 01/13/2014 and Permit Expiration Date

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: 000106-94-5
Name: PROPANE, 1-BROMO-

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 Permit Expiration Date

Applicable State Requirement:

Expired by Mod 2

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 2-14: Malfunctions and Start-up/Shutdown Activities
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 201-1.4

Item 2-14.1:
(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

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

(c) In the event that air contaminant emissions exceed any applicable emission standard due to a malfunction, the facility owner or operator shall notify the department as soon as possible during normal working hours, but not later than two working days after becoming aware that the malfunction occurred. In addition, the facility owner or operator shall compile and maintain a record of all malfunctions. Such records shall be maintained at the facility for a period of at least five years and must be made available to the department upon request. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, the air contaminants emitted, and the resulting emission rates and/or opacity.

(d) The department may also require the facility owner or operator to include, in reports

described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.

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

Condition 16: Emission Unit Definition
Effective between the dates of 01/13/2014 and Permit Expiration Date

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 16.1(From Mod 2):
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 0-KD011
Emission Unit Description:
The emission unit consists of the operations of both rotary kiln #1 and kiln #2. These kilns apply natural gas-fired heat to nickel machine tool turnings (chips) for the purpose of burning off residual machine tool coolant, machine tool oils and also to evaporate water from the chips. This EU also covers one cyclone per each kiln. This then-cojoined airstream is ducted through a heat recuperator, one thermal oxidizer, one Torit/Donaldson baghouse and then is released through EP K0001, which is a 57 foot-tall stack that is 14.3" in diameter.
The natural gas combustion by-products are released separately through CMB01 and CMB02, which are through-the-roof stacks (immediately above eack kiln.

Each of these two kilns are also equipped with three fume hoods (total of six hoods) that collect otherwise-fugitive nickel PM; this airstream is then run through an A.C.T. cartridge-style filter (32 cartridges) and then this filtered air is released through emission point HOD12, which is a 24" diameter horizontally-oriented stack.

Processes K11 and F12 are in this emission unit.

Building(s): Main

Item 16.2(From Mod 2):
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 0-KD012
Emission Unit Description:
The emission unit consists of the operations of both

rotary kiln #3 and rotary kiln #4. Each of these kilns possess it's own dedicated airstream from kiln to stack, no control functions are co-joined (except-see below). These kilns apply natural gas-fired heat to nickel machine tool turnings (chips) for the purpose of burning off residual machine tool coolants, residual machine tool oils and also to evaporate water from the chips. One airstream goes from kiln #3, through a cyclone, through a heat recuperator, through a thermal oxidizer, through a Donldson/Torit baghouse and then releases through emission point K0002, which is a 36 foot-tall stack that is 16.2" in diameter.
The other airstream goes from kiln #4, through a cyclone, through a heat recuperator, through a thermal oxidizer, through a Donldson/Torit baghouse and then releases through emission point K0004, which is a 40 foot-tall stack that is 14.3" in diameter.

The natural gas combustion by-products from Kiln #3 are released separately through CMB03, which is a through-the-roof stack (immediately above kiln #3). The natural gas combustion by-products from Kiln #4 are released separately through CMB04, which is a through-the-roof stack (immediately above kiln #4).

Each of these two kilns are also equipped with three fume hoods (total of six hoods) that collect otherwise-fugitive nickel PM; this airstream is then run through an A.C.T. cartridge-style filter (32 cartridges) and then this filtered air is released through emission point HOD34, which is a 24" diameter horizontally-oriented stack. THIS FUME HOOD FUNCTION IS CO-JOINED BETWEEN KILN 3 AND KILN 4.

Processes K13, K14 and F34 are in this emission unit.

Building(s): Main

Item 16.3(From Mod 2):
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 0-VAPDG
Emission Unit Description:
This emission unit consists of the utilization of a non-halogenated open-top vapor degreaser that uses Techtride DG (100% VOC), which is an n Propyl bromide solvent. CAS number is 00106-94-5 (1-Bromopropane), it is an HTAC and it is expected to attain HAP status in possibly 2021. The unit (Source V6000), is an Ultra Kool "Cold Trap Plus", 18 gallon capacity with an open top surface area of 1.5 square feet. Facility historically uses nearly 2,200 pounds of solvent per year. There is no

emission point for this source; emissions elute directly to the inside of the plant.
Because the open-top area measures less than 11 square feet, this source is exempt from permitting per 6 NYCRR 201-3.2(c)(39)(iii). Also, due to solvent emissions that are less than three tons per year, Part 226 does not apply except for 226's General Requirements and Equipment Standards. Process VDG is associated with this emission unit.

Building(s): Main

Item 16.4(From Mod 2):
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 0-WWW01
Emission Unit Description:
The emission unit consists of nickel chip washing unit (Source W5000); this indoor machine is 687 feet long and it utilizes heated water and heated soap to clean and then rinse. The detergent is CDF34562, which contains potassium hydroxide and other contents. Various natural gas-fired heaters provide heat to the water. The chips are dried in a natural gas-fired fluidized-bed dryer. Air emissions are pulled through the building wall with an induced-draft fan and are then ducted through a Donaldson/Torit baghouse (Source W5001); filtered air is released through a rectangular (vertically-oriented) stack that is known as emission point W0001. Nickel chips that are cleaned in this Process (WWW) are not further processed in any of the kiln lines.

Building(s): Main

Item 16.5(From Mod 1):
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 0-KD001 End Date: 07/20/2021
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

Item 16.6(From Mod 0):
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 0-SMC01 End Date: 07/20/2015
Emission Unit Description:
This emission unit consists of solvent metal cleaning operations in a vapor degreaser, using a non-halogenated solvent. Scrap metal items are cleaned in this degreaser during the recycling process.

Building(s): Main

Condition 2-15: CLCPA Applicability
Effective for entire length of Permit

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

Item 2-15.1:
Pursuant to The New York State Climate Leadership and Community Protection Act (CLCPA) and Article 75 of the Environmental Conservation Law, emission sources shall comply with regulations to be promulgated by the Department to ensure that by 2030 statewide greenhouse gas emissions are reduced by 40% of 1990 levels, and by 2050 statewide greenhouse gas emissions are reduced by 85% of 1990 levels.

Condition 2-16: Compliance Demonstration
Effective for entire length of Permit

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

Item 2-16.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 2-16.2:
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.
Subsequent reports are due every 12 calendar month(s).

Condition 18: Compliance Demonstration
Effective between the dates of 01/13/2014 and Permit Expiration Date

Applicable State Requirement:

Expired by Mod 2

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 2-17: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 211.1

Item 2-17.1:
The Compliance Demonstration activity will be performed for the Facility.

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

Item 2-17.2:
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; the employment of an answering machine is acceptable.
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 action taken.
5. Each Annual Monitoring Report shall indicate the status of this log, in a format acceptable to the Department. Facility shall report the number of complaints (even if zero) that have been logged throughout the reporting period.

Monitoring Frequency: CONTINUOUS
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
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 Permit Expiration Date

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 21.1(From Mod 2):
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 0-KD011

Emission Point: CMB01
Height (ft.): 35 Diameter (in.): 8
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Emission Point: CMB02
Height (ft.): 36 Diameter (in.): 8
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Emission Point: HOD12
Height (ft.): 22 Diameter (in.): 24
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Emission Point: HOT12
Height (ft.): 24 Diameter (in.): 13
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

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

Item 21.2(From Mod 2):
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 0-KD012

Emission Point: CMB03
Height (ft.): 38 Diameter (in.): 11
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Emission Point: CMB04
Height (ft.): 37 Diameter (in.): 15
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Emission Point: HOD34
Height (ft.): 22 Diameter (in.): 24
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Emission Point: HOT03
Height (ft.): 24 Diameter (in.): 12
NYTMN (km.): 4764.695 NYTME (km.): 502.853 Building: Main

Emission Point: HOT04
Height (ft.): 24 Diameter (in.): 12
NYTMN (km.): 4764.652 NYTME (km.): 502.529 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

Item 21.3(From Mod 2):
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 0-WWW01

Emission Point: W0001
Height (ft.): 26 Length (in.): 20 Width (in.): 16
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Item 21.4(From Mod 1):
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 0-KD001

Emission Point: K001E Removal Date: 07/20/2021
Height (ft.): 22 Diameter (in.): 13
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Emission Point: K002E Removal Date: 07/20/2021
Height (ft.): 14 Diameter (in.): 12
NYTMN (km.): 4764.695 NYTME (km.): 502.853 Building: Main

Emission Point: K004E Removal Date: 07/20/2021
Height (ft.): 40 Diameter (in.): 20

NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Emission Point: KFH1E Removal Date: 07/20/2021
Height (ft.): 31 Diameter (in.): 12
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Emission Point: KFH2E Removal Date: 07/20/2021
Height (ft.): 31 Diameter (in.): 12
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Emission Point: KFH3E Removal Date: 07/20/2021
Height (ft.): 31 Diameter (in.): 12
NYTMN (km.): 4764.652 NYTME (km.): 502.529 Building: Main

Emission Point: KFH4E Removal Date: 07/20/2021
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 Permit Expiration Date

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 22.1(From Mod 2):
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-KD011
Process: F12 Source Classification Code: 3-04-010-63
Process Description:
This process consists of the operation of 6 indoor fume hoods and the downstream cartridge filtration unit that collects the nickel fines from the hoods. The 6 hoods are mounted above loading machinery for kilns 1 and kiln 2. Each kiln has 3 hoods each. Nickel fines would otherwise have become indoor fugitive emissions. The A.C.T. cartridge filter unit (32 cartridges) is located outside.

The stack that is associated with Process F12 has never been stack tested.

Emission Source/Control: BHF12 - Control
Control Type: FABRIC FILTER

Emission Source/Control: FHD12 - Process

Item 22.2(From Mod 2):
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-KD011
Process: K11 Source Classification Code: 3-04-010-99
Process Description:

This process consists of the operation of:
a) Kilns 1 and Kiln 2
b) the cyclone for kiln 1
c) the cyclone for kiln 2
d) the thermal oxidizer that covers both kiln 1 and kiln 2
e) the baghouse that covers both kiln 1 and kiln 2

The stack for Kilns 1 and 2 was stack tested on 9/18/2012.

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 22.3(From Mod 2):
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-KD012
Process: F34 Source Classification Code: 3-04-010-63
Process Description:
This process consists of the operation of 6 indoor fume hoods and the downstream cartridge filtration unit that collects the nickel fines from the hoods. The 6 hoods are mounted above loading machinery for kilns 3 and kiln 4. Each kiln has 3 hoods each. Nickel fines would otherwise have become indoor fugitive emissions. The A.C.T. cartridge filter unit (32 cartridges) is located outside.

The stack that is associated with Process F34 has never been stack tested.

Emission Source/Control: BHF34 - Control
Control Type: FABRIC FILTER

Emission Source/Control: FHD34 - Process

Item 22.4(From Mod 2):
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-KD012
Process: K13 Source Classification Code: 3-04-010-99
Process Description:
This process consists of:
a) kiln 3
b) the cyclone for kiln 3
c) the thermal oxidizer for kiln 3
d) the baghouse for kiln 3

The stack for Kiln 3 was stack tested on 9/18/2012.

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 22.5(From Mod 2):
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-KD012
Process: K14 Source Classification Code: 3-04-010-99
Process Description:
This process consists of:
a) kiln 4
b) the cyclone for kiln 4
c) the thermal oxidizer for kiln 4
d) the baghouse for kiln 4

The stack for Kiln 4 has never been stack tetsed.

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

Item 22.6(From Mod 2):
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-VAPDG
Process: VDG Source Classification Code: 4-01-002-97
Process Description:
This process consists of the operation of a non-halogenated open-top vapor degreaser. Solvent is Techtride DG (n propyl bromide or 1-bromopropane) (CAS# 00106-94-5) which is 100% VOC and an HTAC. The mass emission limit for this HTAC compound is 500 lb/yr. There is no emission point for this unit, emissions elute into the internal airspace of building.

Emission Source/Control: V6000 - Process
Design Capacity: 1.5 square feet

Item 22.7(From Mod 2):
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-WWW01
Process: WWW Source Classification Code: 3-04-007-11
Process Description:
This process consists of the operation of a 687 foot long water/detergent wash line. This wash and rinse line cleans nickel chips. Chips are dried in a natural gas-fired fluidized bed drier that is integral to the line. The airstream is ducted outside and then through a Donaldson/Torit baghouse (54 bags) and then released to the atmosphere via emission point W0001 (rectangular).

The stack that is associated with Process WWW has never been stack tested.

Emission Source/Control: W5001 - Control
Control Type: FABRIC FILTER

Emission Source/Control: W5000 - Process

Item 22.8(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 End Date: 7/20/2021
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 22.9(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 End Date: 7/20/2021
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 22.10(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 End Date: 7/20/2021
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

Item 22.11(From Mod 0):
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-SMC01
Process: VD1 Source Classification Code: 4-01-002-15
Process End Date: 7/20/2015
Process Description:
This process consists of batch vapor degreasing operations in two vapor degreasing machines. Degreasing is performed in a unit that has an open-top area that exceeds 11 square feet and therefore it is subject to 6 NYCRR 226. Facility also operates an exempt [per 6 NYCRR

201-3.2(c)(39)(iv)] vapor degreaser with an open-top surface area that is less than 11 square feet (Ultra Kool "Cold Trap Plus", 18 gallon capacity, 1.5 sq ft). As both units use a non-halogenated solvent, this process is not subject to 40 CFR 63 Subpart T. There is no emission point for this process.

Emission Source/Control: VD001 - Process Removal Date: 07/20/2021