



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

**IDENTIFICATION INFORMATION**

Permit Type: Air State Facility  
Permit ID: 3-3352-00142/00025  
Mod 0 Effective Date: 02/03/2004 Expiration Date: No expiration date.  
Mod 1 Effective Date: 10/27/2005 Expiration Date: No expiration date.  
Mod 2 Effective Date: 01/24/2011 Expiration Date: No expiration date.

Permit Issued To: CHROMALLOY GAS TURBINE LLC  
330 BLAISDELL RD  
ORANGEBURG, NY 10962

Facility: CHROMALLOY MIDDLETOWN  
105 TOWER DR  
MIDDLETOWN, NY 10941

Contact: BEN GROFF  
CHROMALLOY MIDDLETOWN  
105 TOWER DR  
MIDDLETOWN, NY 10941  
(845) 692-8912

**Description:**

This permit is for the air emission points and sources associated with plasma spraying, acid cleaning, autoclave treatment, heat treatment, and part cutting operations at Chromalloy Middletown. The facility provides repair services for turbine combustor parts. The facility is subject to 6NYCRR Part 212 requirements which limit and control emissions of gas and particulates. Gasses emitted and controlled at the facility include hydrogen chloride, hydrogen fluoride, and potassium hydroxide.

Modification #1 was for changing the differential pressure range of the acid cleaning scrubber, due to the installation of new gauges. Condition 1-2 replaces Condition 7.

Modification #2 is for adding seven new emission sources, modifying seven existing sources, and removing one source (an epoxy burn-off oven). In addition, some of the permit conditions have been enhanced.

**New York State Department of Environmental Conservation**  
Facility DEC ID: 3335200142



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:           KENNETH R GRZYB  
  NYSDEC REGION 3  
  21 S PUTT CORNERS RD  
  NEW PALTZ, NY 12561

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



**Notification of Other State Permittee Obligations**

**Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification**

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

**Item B: Permittee's Contractors to Comply with Permit**

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

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

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

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

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



**LIST OF CONDITIONS**

**DEC GENERAL CONDITIONS**

**General Provisions**

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

**Facility Level**

- Submission of Applications for Permit Modification or Renewal-REGION 3 HEADQUARTERS
- Submission of application for permit modification or renewal-REGION 3 HEADQUARTERS



**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 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.

**Item 2-1.2:**

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 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.

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**Applicable State Requirement: 6 NYCRR 621.13**

**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 2-2: Permit modifications, suspensions or revocations by the Department**

**Applicable State Requirement: 6 NYCRR 621.13**

**Item 2-2.1:**

The Department reserves the right 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.

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

**Applicable State Requirement: 6 NYCRR 621.14**

**Item 4.1:**

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

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



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

**Condition 5: Submission of Applications for Permit Modification or Renewal-REGION 3  
HEADQUARTERS**

**Applicable State Requirement: 6 NYCRR 621.5 (a)**

**Item 5.1:**

Submission of applications for permit modification or renewal are to be submitted to:  
NYSDEC Regional Permit Administrator  
Region 3 Headquarters  
Division of Environmental Permits  
21 South Putt Corners Road  
New Paltz, NY 12561-1696  
(845) 256-3054

**Condition 2-3: Submission of application for permit modification or  
renewal-REGION 3**

**HEADQUARTERS**

**Applicable State Requirement: 6 NYCRR 621.6 (a)**

**Item 2-3.1:**

Submission of applications for permit modification or renewal are to be submitted to:  
NYSDEC Regional Permit Administrator  
Region 3 Headquarters  
Division of Environmental Permits  
21 South Putt Corners Road  
New Paltz, NY 12561-1696  
(845) 256-3054

**New York State Department of Environmental Conservation**

Permit ID: 3-3352-00142/00025

Facility DEC ID: 3335200142



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

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

**IDENTIFICATION INFORMATION**

Permit Issued To: CHROMALLOY GAS TURBINE LLC  
330 BLAISDELL RD  
ORANGEBURG, NY 10962

Facility: CHROMALLOY MIDDLETOWN  
105 TOWER DR  
MIDDLETOWN, NY 10941

Authorized Activity By Standard Industrial Classification Code:  
3479 - METAL COATING AND ALLIED SERVICES, NEC

Mod 0 Permit Effective Date: 02/03/2004  
date.

Permit Expiration Date: No expiration

Mod 1 Permit Effective Date: 10/27/2005  
date.

Permit Expiration Date: No expiration

Mod 2 Permit Effective Date: 01/24/2011  
date.

Permit Expiration Date: No expiration



**LIST OF CONDITIONS**

**FEDERALLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 1-1 6 NYCRR 200.7: Maintenance of Equipment
- 2-1 6 NYCRR 212.4 (c): Compliance Demonstration
- 2-2 6 NYCRR 212.6 (a): Compliance Demonstration
- 2-3 6 NYCRR 212.9 (b): Compliance Demonstration
- 2-4 40CFR 63, Subpart WWWW: Compliance Demonstration

**Emission Unit Level**

**EU=U-00APS**

- 2-5 6 NYCRR 200.7: Compliance Demonstration
- 2-6 6 NYCRR 212.9 (b): Compliance Demonstration
- 2-7 6 NYCRR 212.9 (b): Compliance Demonstration

**EU=U-0LPPS**

- 2-8 6 NYCRR 200.7: Compliance Demonstration

**EU=U-0MISC,EP=00012,Proc=012,ES=0012A**

- 6 6 NYCRR 212.9 (b): Compliance Demonstration

**EU=U-0MISC,EP=00018,Proc=018,ES=0018A**

- 1-2 6 NYCRR 212.9 (b): Compliance Demonstration

**EU=U-0MISC,EP=00033,Proc=033,ES=0033A**

- 2-9 6 NYCRR 212.9 (b): Compliance Demonstration

**STATE ONLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 8 ECL 19-0301: Contaminant List
- 2-10 6 NYCRR 201-1.4: Unavoidable noncompliance and violations
- 10 6 NYCRR Subpart 201-5: Emission Unit Definition
- 2-11 6 NYCRR 201-5.4: Compliance Demonstration
- 2-12 6 NYCRR 211.2: Air pollution prohibited

**Emission Unit Level**

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



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

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

**This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability**

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

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation.

Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

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

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

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

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

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

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



required to operate such device effectively.

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

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

- (a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.
- (b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

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

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

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

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

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



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

**Item F: Recycling and Salvage - 6 NYCRR 201-1.7**

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

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

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

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

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

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

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

**Item J: Required Emission Tests - 6 NYCRR 202-1.1**



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

**Item K: Visible Emissions Limited - 6 NYCRR 211.3**

Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

**Item L: 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 M: 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 N: 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



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with 6NYCRR Part 202-1, the Department may require emission testing to ascertain compliance with this limit.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.050 grains per dscf

Reference Test Method: Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 2-2: Compliance Demonstration**  
**Effective between the dates of 01/24/2011 and Permit Expiration Date**

**Applicable Federal Requirement:6 NYCRR 212.6 (a)**

**Replaces Condition(s) 3**

**Item 2-2.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 2-2.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

No person will cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source, except only the emission of uncombined water. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time during facility operation.

The opacity limit applies to any emission point, identified in this permit, from which particulate matter is discharged.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: Method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 6 MINUTE AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 2-3: Compliance Demonstration**  
**Effective between the dates of 01/24/2011 and Permit Expiration Date**

**Applicable Federal Requirement:6 NYCRR 212.9 (b)**

**Replaces Condition(s) 1**

**New York State Department of Environmental Conservation**

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**Item 2-3.1:**

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: U-0LPPS                      Emission Point: 00013

Emission Unit: U-0LPPS                      Emission Point: 00021

Emission Unit: U-0LPPS                      Emission Point: 00026

Regulated Contaminant(s):

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

CAS No: 007440-47-3                      CHROMIUM

CAS No: 0NY075-00-0                      PARTICULATES

**Item 2-3.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

A reduction in particulate emissions of at least 99 percent must be achieved for each of the emission points listed above. Emission testing and reporting will be conducted by the facility, if directed by the Department.

Parameter Monitored: PARTICULATES

Lower Permit Limit: 99 percent reduction by weight

Reference Test Method: Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING  
DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 2-4: Compliance Demonstration**

**Effective between the dates of 01/24/2011 and Permit Expiration Date**

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

**Item 2-4.1:**

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: U-00APS

Process: APS

Emission Unit: U-0LPPS

Process: LPS

**Item 2-4.2:**

Compliance Demonstration shall include the following monitoring:

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Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

For all thermal operations, a capture system must be operated which collects particulate emissions from the thermal spraying process, and transports the emissions to a filtering device. Emission capture and control devices must be operated according to the manufacturer's specifications and operating instructions. These instructions shall be kept at the facility at all times in a location that is easily accessible to facility personnel.

Compliance shall be documented in an annual certification of compliance report for each calendar year. The annual report must include a statement that the control devices have been operated and maintained according to manufacturer's specifications and instructions. The annual report must be submitted only if any deviations from this permit condition have occurred during the year. Then such report shall include an explanation of the deviation and the corrective action taken, and the report must be postmarked or delivered to the delegated authority no later than January 31 of the year immediately following the reporting period.

All reports and records must be kept by the facility for a minimum of 5 years, and must be made available upon request by regulatory personnel.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

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

**Condition 2-5: Compliance Demonstration**  
**Effective between the dates of 01/24/2011 and Permit Expiration Date**

**Applicable Federal Requirement:6 NYCRR 200.7**

**Item 2-5.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00APS

**Item 2-5.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:



Dust collector filters must be replaced every 6 months,  
and a record of when they were replaced must be  
maintained.

Monitoring Frequency: SEMI-ANNUALLY  
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 2-6: Compliance Demonstration**  
**Effective between the dates of 01/24/2011 and Permit Expiration Date**

**Applicable Federal Requirement: 6 NYCRR 212.9 (b)**

**Item 2-6.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00APS

Regulated Contaminant(s):

CAS No: 007440-02-0	NICKEL METAL AND INSOLUBLE
COMPOUNDS	
CAS No: 007440-47-3	CHROMIUM
CAS No: 0NY075-00-0	PARTICULATES

**Item 2-6.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

A reduction in particulate emissions of at least 99  
percent must be achieved for each of the HEPA filters  
associated with the emission unit specified  
above.

Monitoring of the differential pressure across the HEPA  
filter will be used to demonstrate compliance with this  
emission reduction limit. The differential pressure shall  
be read and recorded at least once per week. The pressure  
is limited to a maximum of 6.0 inches of water. If the  
pressure reaches this maximum, then corrective action must  
be taken, in order to restore pressure to the appropriate  
level. A record shall be kept of corrective actions.

Parameter Monitored: PRESSURE CHANGE

Upper Permit Limit: 6.0 inches of water

Monitoring Frequency: WEEKLY

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

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 2-7: Compliance Demonstration**  
**Effective between the dates of 01/24/2011 and Permit Expiration Date**



**Applicable Federal Requirement:6 NYCRR 212.9 (b)**

**Item 2-7.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00APS

Regulated Contaminant(s):

CAS No: 007440-02-0 NICKEL METAL AND INSOLUBLE  
COMPOUNDS  
CAS No: 007440-47-3 CHROMIUM  
CAS No: 0NY075-00-0 PARTICULATES

**Item 2-7.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

A reduction in particulate emissions of at least 99 percent must be achieved for each of the dust collectors in the emission unit specified above. Emission testing and reporting will be conducted by the facility, if directed by the Department.

Lower Permit Limit: 99 percent reduction by weight

Reference Test Method: Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING  
DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 2-8: Compliance Demonstration**

**Effective between the dates of 01/24/2011 and Permit Expiration Date**

**Applicable Federal Requirement:6 NYCRR 200.7**

**Replaces Condition(s) 5**

**Item 2-8.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-0LPPS

**Item 2-8.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The two sets of filters prior to the vacuum pump must be replaced every 6 months, and a record of when they were replaced must be maintained.

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Monitoring Frequency: SEMI-ANNUALLY

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 6: Compliance Demonstration**  
**Effective between the dates of 02/03/2004 and Permit Expiration Date**

**Applicable Federal Requirement:6 NYCRR 212.9 (b)**

**Item 6.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-0MISC

Emission Point: 00012

Process: 012

Emission Source: 0012A

**Item 6.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The facility must monitor flow rate through the scrubber and record the gauge indication at least weekly when the autoclave is in operation. If the flow rate falls below 1.0 gallons per minute, the scrubber must be inspected and the appropriate corrective action taken. Any repairs made to the scrubber shall be documented.

This monitoring will ensure the required emission reduction of 75 percent.

Parameter Monitored: VOLUMETRIC FLOW RATE

Lower Permit Limit: 1.0 gallons per minute

Monitoring Frequency: WEEKLY

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

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 1-2: Compliance Demonstration**  
**Effective between the dates of 10/27/2005 and Permit Expiration Date**

**Applicable Federal Requirement:6 NYCRR 212.9 (b)**

**Replaces Condition(s) 7**

**Item 1-2.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-0MISC

Emission Point: 00018

Process: 018

Emission Source: 0018A

**Item 1-2.2:**

Compliance Demonstration shall include the following monitoring:

**New York State Department of Environmental Conservation**

Permit ID: 3-3352-00142/00025

Facility DEC ID: 3335200142



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

Monitoring Description:

The facility must monitor scrubber differential pressure and record the gauge indication at least weekly when the acid tank is in operation. If the differential pressure goes above 6.0 inches of water or falls below 3.0 inches of water, the scrubber must be inspected and the appropriate corrective action taken. Any repairs made to the scrubber shall be documented.

This monitoring will ensure the required emission reduction of 90 percent.

Parameter Monitored: PRESSURE CHANGE

Lower Permit Limit: 3.0 inches of water

Upper Permit Limit: 6.0 inches of water

Monitoring Frequency: WEEKLY

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

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 2-9: Compliance Demonstration**

**Effective between the dates of 01/24/2011 and Permit Expiration Date**

**Applicable Federal Requirement: 6 NYCRR 212.9 (b)**

**Item 2-9.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-0MISC

Emission Point: 00033

Process: 033

Emission Source: 0033A

Regulated Contaminant(s):

CAS No: 0NY075-00-0

PARTICULATES

CAS No: 007664-39-3

HYDROGEN FLUORIDE

**Item 2-9.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

A reduction in emissions of at least 99 percent must be achieved for the contaminants listed above.

Monitoring of scrubber differential pressure will be used to demonstrate compliance with this emission reduction limit. The differential pressure must be read and recorded weekly if the process is in operation. If the pressure exceeds 4 inches of water, the scrubber packing must be replaced, and a record kept.

**New York State Department of Environmental Conservation**

**Permit ID: 3-3352-00142/00025**

**Facility DEC ID: 3335200142**



Parameter Monitored: PRESSURE CHANGE

Upper Permit Limit: 4 inches of water

Monitoring Frequency: WEEKLY

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

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY



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

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

**Item A: Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)**

Where emission source owners and/or operators keep records pursuant to compliance with the operational flexibility requirements of 6 NYCRR Subpart 201-5.4(b)(1), and/or the emission capping requirements of 6 NYCRR Subparts 201-7.2(d), 201-7.3(f), 201-7.3(g), 201-7.3(h)(5), 201-7.3(i) and 201-7.3(j), the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. Emission source owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department of receipt of the request.

**Item B: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5**

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

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

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



**Condition 8: Contaminant List**

**Effective between the dates of 02/03/2004 and Permit Expiration Date**

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

**Item 8.1:**

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

CAS No: 007440-02-0

Name: NICKEL METAL AND INSOLUBLE COMPOUNDS

CAS No: 007440-47-3

Name: CHROMIUM

CAS No: 007664-39-3

Name: HYDROGEN FLUORIDE

CAS No: 0NY075-00-0

Name: PARTICULATES

**Condition 2-10: Unavoidable noncompliance and violations**

**Effective between the dates of 01/24/2011 and Permit Expiration Date**

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

**Replaces Condition(s) 9**

**Item 2-10.1:**

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

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

(b) In the event that emissions of air contaminants in excess of any emission standard in 6 NYCRR Chapter III Subchapter A occur due to a malfunction, the facility owner and/or operator shall report such malfunction by telephone to the commissioner's representative as soon



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

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

(d) In the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner and/or operator shall take appropriate action to prevent emissions which will result in contravention of any applicable ambient air quality standard. Reasonably available control technology, as determined by the commissioner, shall be applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

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

**Condition 10: Emission Unit Definition**

**Effective between the dates of 02/03/2004 and Permit Expiration Date**

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

**Item 10.1(From Mod 2):**

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

Emission Unit: U-00APS

Emission Unit Description:

Seven air plasma spray units used to apply various metal coatings to turbine parts. Emissions include metals from coatings. There are dust collectors on each of the exhausts.

Building(s): 1

**Item 10.2(From Mod 2):**

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

Emission Unit: U-0EVAP

Emission Unit Description:

This emission unit consists of three evaporators.

Building(s): 1

**Item 10.3(From Mod 2):**

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



Emission Unit: U-0LPPS

Emission Unit Description:

Three low-pressure, electro-plasma spray units to powder coat aircraft engine parts. The coating is done in a vacuum chamber and overspray passes through a vacuum pump. Emissions are controlled with filters prior to the pump and with an oil bath after the pump. Emissions include various metals from the powder.

Building(s): 1

**Item 10.4(From Mod 2):**

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

Emission Unit: U-0MISC

Emission Unit Description:

This emission unit includes the following emission sources: the quality control saw, the autoclave, the acid tanks, the peel coat operation, the Huffman laser welding machine, and the hydrogen fluoride cleaning operation.

Building(s): 1

**Item 10.5(From Mod 2):**

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

Emission Unit: U-0OVEN

Emission Unit Description:

This emission unit consists of two epoxy burn-off ovens.

Building(s): 1

**Condition 2-11: Compliance Demonstration**  
**Effective between the dates of 01/24/2011 and Permit Expiration Date**

**Applicable State Requirement:6 NYCRR 201-5.4**

**Item 2-11.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 2-11.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Permit modifications and physical or operational changes at the facility are subject to the following procedures:

1. The permittee must submit an application for a permit modification at least 30 calendar days in advance of making changes which involve the addition of any new emission points or processes.



2. The following changes and modifications to emission points, processes, and sources may be conducted without prior approval of the Department:

- (i) changes that do not cause emissions to exceed any emission limitation contained in regulations or in this permit;
- (ii) changes which do not cause the facility to become subject to any additional regulations or requirements to those specified in this permit;
- (iii) changes that do not seek to establish a federally-enforceable emission cap or limit.

3. The permittee must notify the Department in writing at least 30 calendar days in advance of making changes involving:

- (i) the relocation of any emission point at the facility;
- (ii) the emission of any air pollutant not previously emitted;
- (iii) the installation or alteration of any emission control device.

4. The Department may require a permit modification if any change at the facility impacts air quality or is extensive enough to change information or description contained in any permit condition.

5. For all changes made in regard to any emission point, process, or source, a record of the date and description of such changes must be kept. These records must be made available for review by Department representatives upon request.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 2-12: Air pollution prohibited**  
**Effective between the dates of 01/24/2011 and Permit Expiration Date**

**Applicable State Requirement:6 NYCRR 211.2**

**Replaces Condition(s) 11**

**Item 2-12.1:**

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



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

**Condition 12: Emission Point Definition By Emission Unit**  
Effective between the dates of 02/03/2004 and Permit Expiration Date

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

**Item 12.1(From Mod 2):**

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

Emission Unit: U-00APS

Emission Point: 00034  
Height (ft.): 36 Length (in.): 72 Width (in.): 48  
Building: 1

Emission Point: 00035  
Height (ft.): 35 Length (in.): 72 Width (in.): 24  
Building: 1

**Item 12.2(From Mod 2):**

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

Emission Unit: U-0EVAP

Emission Point: 00029  
Height (ft.): 39 Diameter (in.): 8  
Building: 1

Emission Point: 00030  
Height (ft.): 40 Diameter (in.): 6  
Building: 1

Emission Point: 00031  
Height (ft.): 36 Diameter (in.): 5  
Building: 1

**Item 12.3(From Mod 2):**

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

Emission Unit: U-0LPPS

Emission Point: 00013  
Height (ft.): 30 Diameter (in.): 8  
NYTMN (km.): 4590.9 NYTME (km.): 551.5 Building: 1

Emission Point: 00021  
Height (ft.): 29 Diameter (in.): 8  
NYTMN (km.): 4590.74 NYTME (km.): 552.078 Building: 1

Emission Point: 00026



Height (ft.): 29 Diameter (in.): 8  
NYTMN (km.): 4590.74 NYTME (km.): 552.078 Building: 1

**Item 12.4(From Mod 2):**

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

Emission Unit: U-0MISC

Emission Point: 00005  
Height (ft.): 27 Diameter (in.): 12  
NYTMN (km.): 4590.9 NYTME (km.): 551.5 Building: 1

Emission Point: 00032  
Height (ft.): 39 Diameter (in.): 6  
Building: 1

Emission Point: 00033  
Height (ft.): 32 Diameter (in.): 6  
Building: 1

**Item 12.5(From Mod 2):**

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

Emission Unit: U-0OVEN

Emission Point: 00023  
Height (ft.): 29 Diameter (in.): 9  
NYTMN (km.): 4590.74 NYTME (km.): 552.078 Building: 1

Emission Point: 00028  
Height (ft.): 29 Diameter (in.): 3  
NYTMN (km.): 4590.72 NYTME (km.): 552.121 Building: 1

**Item 12.6(From Mod 0):**

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

Emission Unit: U-00APS

Emission Point: 00011  
Height (ft.): 27 Length (in.): 25 Width (in.): 60  
NYTMN (km.): 4590.9 NYTME (km.): 551.5 Building: 1

Emission Point: 00019  
Height (ft.): 23 Diameter (in.): 26  
NYTMN (km.): 4590.694 NYTME (km.): 552.078 Building: 1

Emission Point: 00022  
Height (ft.): 29 Diameter (in.): 26  
NYTMN (km.): 4590.74 NYTME (km.): 552.078 Building: 1

Emission Point: 00024  
Height (ft.): 29 Diameter (in.): 26



NYTMN (km.): 4590.74 NYTME (km.): 552.078 Building: 1  
Emission Point: 00025  
Height (ft.): 29 Diameter (in.): 26  
NYTMN (km.): 4590.74 NYTME (km.): 552.078 Building: 1

**Item 12.7(From Mod 0):**

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

Emission Unit: U-0MISC  
Emission Point: 00012  
Height (ft.): 28 Diameter (in.): 6  
NYTMN (km.): 4590.5 NYTME (km.): 551.5 Building: 1  
Emission Point: 00018  
Height (ft.): 37 Diameter (in.): 30  
NYTMN (km.): 4590.9 NYTME (km.): 551.5 Building: 1  
Emission Point: 00020  
Height (ft.): 29 Diameter (in.): 8  
NYTMN (km.): 4590.74 NYTME (km.): 552.078 Building: 1

**Condition 13: Process Definition By Emission Unit  
Effective between the dates of 02/03/2004 and Permit Expiration Date**

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

**Item 13.1(From Mod 2):**

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

Emission Unit: U-00APS  
Process: APS Source Classification Code: 3-09-045-00  
Process Description:  
Coating of turbine parts with air plasma spray. Hydrogen  
is utilized in the process to achieve high operating  
temperatures.

Emission Source/Control: 0011A - Control  
Control Type: FABRIC FILTER

Emission Source/Control: 0011B - Control  
Control Type: HIGH EFFICIENCY PARTICULATE AIR FILTER

Emission Source/Control: 0019A - Control  
Control Type: FABRIC FILTER

Emission Source/Control: 0019B - Control  
Control Type: HIGH EFFICIENCY PARTICULATE AIR FILTER

Emission Source/Control: 0022A - Control  
Control Type: FABRIC FILTER



Emission Source/Control: 0022B - Control  
Control Type: HIGH EFFICIENCY PARTICULATE AIR FILTER

Emission Source/Control: 0024A - Control  
Control Type: FABRIC FILTER

Emission Source/Control: 0024B - Control  
Control Type: HIGH EFFICIENCY PARTICULATE AIR FILTER

Emission Source/Control: 0025A - Control  
Control Type: FABRIC FILTER

Emission Source/Control: 0025B - Control  
Control Type: HIGH EFFICIENCY PARTICULATE AIR FILTER

Emission Source/Control: 0034A - Control  
Control Type: FABRIC FILTER

Emission Source/Control: 0034B - Control  
Control Type: HIGH EFFICIENCY PARTICULATE AIR FILTER

Emission Source/Control: 0035A - Control  
Control Type: FABRIC FILTER

Emission Source/Control: 0035B - Control  
Control Type: HIGH EFFICIENCY PARTICULATE AIR FILTER

Emission Source/Control: 00011 - Process

Emission Source/Control: 00019 - Process

Emission Source/Control: 00022 - Process

Emission Source/Control: 00024 - Process

Emission Source/Control: 00025 - Process

Emission Source/Control: 00034 - Process

Emission Source/Control: 00035 - Process

**Item 13.2(From Mod 2):**

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

Emission Unit: U-0EVAP

Process: 029

Source Classification Code: 4-90-001-99

Process Description:

Input fluid is heated to boiling point. Vapors are exhausted to the atmosphere.

Emission Source/Control: 00029 - Process



Emission Source/Control: 00030 - Process

Emission Source/Control: 00031 - Process

**Item 13.3(From Mod 2):**

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

Emission Unit: U-0LPPS

Process: LPS

Source Classification Code: 3-09-040-20

Process Description:

Coating of aircraft engine parts with a low-pressure, electro-plasma spray.

Emission Source/Control: 0013A - Control

Control Type: MAT OR PANEL FILTER

Emission Source/Control: 0013B - Control

Control Type: LIQUID FILTRATION SYSTEM

Emission Source/Control: 0021A - Control

Control Type: MAT OR PANEL FILTER

Emission Source/Control: 0021B - Control

Control Type: LIQUID FILTRATION SYSTEM

Emission Source/Control: 0026A - Control

Control Type: MAT OR PANEL FILTER

Emission Source/Control: 0026B - Control

Control Type: LIQUID FILTRATION SYSTEM

Emission Source/Control: 00013 - Process

Emission Source/Control: 00021 - Process

Emission Source/Control: 00026 - Process

**Item 13.4(From Mod 2):**

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

Emission Unit: U-0MISC

Process: 020

Source Classification Code: 4-02-025-01

Process Description:

Turbine parts are dipped in melted thermoplastic and hung to cool. Potential VOC emissions occur from the thermal degradation of the thermoplastic. Emissions are vented via the exhaust hood and an 8 inch stack.

Emission Source/Control: 00020 - Process

**Item 13.5(From Mod 2):**



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

Emission Unit: U-0MISC  
Process: 032  
Process Description:  
The Huffman laser welding machine is used to cut and weld turbine parts that are made primarily out of nickel.

Emission Source/Control: 00032 - Process

**Item 13.6(From Mod 2):**

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

Emission Unit: U-0MISC  
Process: 033  
Process Description:  
The hydrogen fluoride cleaning operation involves the use of hydrogen and hydrogen fluoride gases in an industrial furnace for the purpose of removing scale and oxides from surfaces and cracks for turbine engine parts. The process also removes residual coatings from parts being repaired.

Emission Source/Control: 0033A - Control  
Control Type: PACKED GAS ABSORPTION SYSTEM, VENTURI SCRUBBER

Emission Source/Control: 00033 - Process

**Item 13.7(From Mod 2):**

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

Emission Unit: U-0OVEN  
Process: 023 Source Classification Code: 3-09-001-99  
Process Description:  
Small amounts of epoxy are injected into the ends of airfoils. A batch of airfoils are then placed into an electric furnace for one hour to remove epoxy through heat treatment. There are up to 30 airfoils in each batch.

Emission Source/Control: 00023 - Process

Emission Source/Control: 00028 - Process

**Item 13.8(From Mod 0):**

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

Emission Unit: U-0MISC  
Process: 005 Source Classification Code: 3-09-030-05  
Process Description:  
Cutting sections of engine parts and vanes for quality control purposes.



Emission Source/Control: 00005 - Process

**Item 13.9(From Mod 0):**

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

Emission Unit: U-0MISC

Process: 012

Source Classification Code: 3-09-011-01

Process Description:

Metal oxide/ceramic coatings are removed from turbine blades and parts. This is achieved by loading the autoclave vessel with the blades and parts, and filling the chamber with a 45% potassium hydroxide solution. The vessel is then heated and pressurized. At the end of the cleaning cycle, the pressure from the chamber is released and potassium hydroxide is emitted. The emissions are reduced by a water spray tower.

Emission Source/Control: 0012A - Control

Control Type: SPRAY TOWER

Emission Source/Control: 00012 - Process

**Item 13.10(From Mod 1):**

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

Emission Unit: U-0MISC

Process: 018

Source Classification Code: 3-09-011-02

Process Description:

Metal parts are placed in hydrochloric and nitric acid baths for cleaning. A liquid inhibitor (ARMOHIB) is used in the hydrochloric acid bath (3% of the acid volume) to enhance the cleaning and coating of the parts. Emissions include both hydrochloric and nitric acid and these emissions are reduced by a scrubber.

Emission Source/Control: 0018A - Control

Control Type: SODIUM-ALKALI SCRUBBING

Emission Source/Control: 00018 - Process

