

**New York State Department of Environmental Conservation  
Facility DEC ID: 7110200006**



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

**IDENTIFICATION INFORMATION**

Permit Type: Air State Facility  
Permit ID: 7-1102-00006/00079  
Effective Date: 01/05/2005 Expiration Date: 01/05/2010

Permit Issued To: INTERNATIONAL ELECTRON DEVICES (USA) LLC  
30 KELLOGG ST  
CORTLAND, NY 13045

Facility: BUCKBEE MEARS COMPANY  
30 KELLOGG RD  
CORTLAND, NY 13045

Description:

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

Permit Administrator: MICHAEL K BARYLSKI  
DIVISION OF ENVIRONMENTAL PERMITS  
1285 FISHER AVE  
CORTLAND, NY 13045-1090

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



**Notification of Other State Permittee Obligations**

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

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

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

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

Permit Modifications, Suspensions and Revocations by the Department

**Facility Level**

Submission of Applications for Permit Modification or Renewal -REGION 7  
SUBOFFICE



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

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

**Item 1.1:**

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

**Item 1.2:**

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

**Item 1.3:**

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

**Condition 2: Relationship of this Permit to Other Department Orders and Determinations**  
**Applicable State Requirement: ECL 3-0301.2(m)**

**Item 2.1:**

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

**Condition 3: Applications for Permit Renewals and Modifications**  
**Applicable State Requirement: 6NYCRR 621.13**

**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

**New York State Department of Environmental Conservation**  
**Facility DEC ID: 7110200006**



transfer of ownership.

**Condition 4: Permit Modifications, Suspensions and Revocations by the Department**  
**Applicable State Requirement: 6NYCRR 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 7**  
**SUBOFFICE**  
**Applicable State Requirement: 6NYCRR 621.5(a)**

**Item 5.1:**

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

NYSDEC Regional Permit Administrator  
Region 7 Sub-office  
Division of Environmental Permits  
1285 Fisher Avenue  
Cortland, NY 13045-1090  
(607) 753-3095

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



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

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

**IDENTIFICATION INFORMATION**

Permit Issued To: INTERNATIONAL ELECTRON DEVICES (USA) LLC  
30 KELLOGG ST  
CORTLAND, NY 13045

Facility: BUCKBEE MEARS COMPANY  
30 KELLOGG RD  
CORTLAND, NY 13045

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

Permit Effective Date: 01/05/2005

Permit Expiration Date: 01/05/2010



**LIST OF CONDITIONS**

**FEDERALLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 1 6NYCRR 200.7: Maintenance of Equipment
- 8 40CFR 68: Accidental release provisions.
- 2 6NYCRR 200.7: Compliance Demonstration
- 3 6NYCRR 202-1: Compliance Demonstration
- 4 6NYCRR 212.4: Compliance Demonstration
- 5 6NYCRR 212.4: Compliance Demonstration
- 6 6NYCRR 212.4: Compliance Demonstration
- 7 6NYCRR 212.6(a): Compliance Demonstration

**Emission Unit Level**

**EU=0-00001**

- 9 40CFR 60.7(b), NSPS Subpart A: Recordkeeping requirements.
- 10 40CFR 60.48c, NSPS Subpart Dc: Compliance Demonstration

**EU=0-00001,Proc=BLR,ES=BLR01**

- 11 40CFR 60.40c, NSPS Subpart Dc: Applicability of this Subpart to this emission source

**EU=0-00001,Proc=BLR,ES=BLR02**

- 12 40CFR 60.40c, NSPS Subpart Dc: Applicability of this Subpart to this emission source

**STATE ONLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 13 ECL 19-0301: Contaminant List
- 14 6NYCRR 201-1.4: Unavoidable noncompliance and violations
- 15 6NYCRR 201-5: Emission Unit Definition
- 16 6NYCRR 201-7: Facility Permissible Emissions
- \*17 6NYCRR 201-7: Capping Monitoring Condition
- \*18 6NYCRR 201-7: Capping Monitoring Condition
- 19 6NYCRR 211.2: Air pollution prohibited
- 20 6NYCRR 212.4: Compliance Demonstration
- 21 6NYCRR 212.4: Compliance Demonstration

**Emission Unit Level**

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

NOTE: \* preceding the condition number indicates capping.



**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 - 6NYCRR Part 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 - 6NYCRR Part 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 - 6NYCRR Part 200.7**

Any person who owns or operates an air contamination

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



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 - 6NYCRR Part 201-1.2**

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

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

(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 - 6NYCRR Part 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



**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**

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 - 6NYCRR Part 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 - 6NYCRR Part 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 Part 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 Part 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



**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**

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 Part 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 6NYCRR Part 202-1.

**Item K: Visible Emissions Limited - 6 NYCRR Part 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 - 6 NYCRR Part 215**

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

**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



**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**

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 regulations.

**FEDERAL APPLICABLE REQUIREMENTS**  
**The following conditions are federally enforceable.**

**Condition 1: Maintenance of Equipment**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable Federal Requirement: 6NYCRR 200.7**

**Item 1.1:**

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

**Condition 8: Accidental release provisions.**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable Federal Requirement: 40CFR 68**

**Item 8.1:**

If a chemical is listed in Tables 1,2,3 or 4 of 40 CFR §68.130 is present in a process in quantities greater than the threshold quantity listed in Tables 1,2,3 or 4, the following requirements will apply:

a) The owner or operator shall comply with the provisions of 40 CFR Part 68 and;

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



b) The owner or operator shall submit at the time of permit issuance (if not previously submitted) one of the following, if such quantities are present:

1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a) or,

2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan. Information should be submitted to:

Risk Management Plan Reporting Center  
C/O CSC  
8400 Corporate Dr  
Carrollton, Md. 20785

**Condition 2: Compliance Demonstration**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable Federal Requirement: 6NYCRR 200.7**

**Item 2.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 2.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Section 200.7 requires that any person who owns or operates an air contamination source shall keep the device in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications.

Not later than the 60th production day commencing on the effective date of this permit, the owner or operator shall submit to the DEC a plan for maintaining the efficiency of the control devices at the facility (the "air pollution control device operation and maintenance plan"). Such plan shall include recommended operating ranges for scrubber flow, pH and pressure drop.

Upon submission of such a plan, and continuing after DEC approval, the owner or operator shall operate the control devices in accordance with the plan.

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



On an annual calendar year basis, the owner or operator shall submit to the DEC a report stating whether the control devices have been operated and maintained in accordance with the DEC-approved plan.

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 1/30/2006.

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

**Condition 3: Compliance Demonstration**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable Federal Requirement: 6NYCRR 202-1**

**Item 3.1:**

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: 0-00004 Emission Point: 0AS02

Emission Unit: 0-00004 Emission Point: 0AS23

Emission Unit: 0-00004 Emission Point: 0AS26

Emission Unit: 0-00004 Emission Point: 0AS13

Emission Unit: 0-00004 Emission Point: 0AS17

Emission Unit: 0-00004 Emission Point: 0AS18

Emission Unit: 0-00004 Emission Point: 0AS19

Regulated Contaminant(s):

CAS No: 0NY100-00-0 HAP

**Item 3.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Production of aperture masks involves multiple steps,

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



including coaters (and associated dryers), developers (and associated ovens), etchers, strippers and cleaners. The operation of each device on a given production line operates in combination with all other emission sources on that line. As such, the combination of all emissions sources on a given line will be treated as a single emission source, as allowed in 6 NYCRR 200.1(f). This condition is applicable to the grouping of all emissions sources on a given line. When emissions from a storage tank are vented to a control device that also serves a production line, those emissions are included in the calculation of emission rate potential for that line.

The facility shall determine the emission rate potential of HCl and Cl<sub>2</sub> from the listed emission points. Not later than the 60th production day commencing on the effective date of this permit, and at any other time specified by the DEC, the owner or operator shall submit a test protocol to the DEC for approval for determining the emission rate potential of HCl and Cl<sub>2</sub>. A production day shall be any part of a calendar day on which the facility uses raw material to make a product for sale. Within 30 days of submission of the test protocol, or at a different time period established by the DEC, the owner or operator shall conduct emissions testing to determine the emission rate potential and the actual emission rate of HCl, Cl<sub>2</sub> and any other pollutant designated by the DEC. Within 60 days of completion of all testing, the owner or operator shall submit to the DEC a report of such emissions, in triplicate.

Upper Permit Limit: 10 tons per year

Reference Test Method: Method 26

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 4: Compliance Demonstration**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable Federal Requirement: 6NYCRR 212.4**

**Item 4.1:**

The Compliance Demonstration activity will be performed for the facility:



**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**

The Compliance Demonstration applies to:

Emission Unit: 0-00004 Emission Point: 0AS02

Emission Unit: 0-00004 Emission Point: 0AS23

Emission Unit: 0-00004 Emission Point: 0AS26

Emission Unit: 0-00003

Emission Unit: 0-00007

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

**Item 4.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

No person shall cause or allow emissions of solid particulates that exceed 0.05 gr/dscf of exhaust gas, expressed at standard conditions on a dry gas basis.

Compliance shall be determined through emissions testing conducted using EPA Method 5 upon written request from the DEC and according to the time frames in 6 NYCRR 202-1.

Upper Permit Limit: 0.05 grains per dscf

Reference Test Method: EPA Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 5: Compliance Demonstration**

**Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable Federal Requirement: 6NYCRR 212.4**

**Item 5.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 5.2:**

Compliance Demonstration shall include the following monitoring:

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emissions of contaminants assigned an environmental rating and emission rate limits under Part 212.9.

Several emission sources at this facility emit A-rated contaminants, non-A-rated contaminants or both. Production of aperture masks involves multiple steps, including coaters (and associated dryers), developers (and associated ovens), etchers, strippers and cleaners. The operation of each device on a given production line operates in combination with all other emission sources on that line. As such, the combination of all emissions sources on a given line will be treated as a single emission source, as allowed in 6 NYCRR 200.1(f), for purposes of applicability under 6 NYCRR 212. This condition is applicable to the grouping of all emissions sources on a given line. When emissions from a storage tank are vented to a control device that also serves a production line, those emissions are included in the calculation of emission rate potential for that line. When emissions from a different production line are vented to a common stack or common control device, the total emissions from all devices emitted through such control device or stack are included (along with emissions from other process units in a given production line) in the calculation of the emission rate potential for purposes of applicability to Part 212. This condition applies to criteria pollutants (including individual VOCs) and is federally-enforceable.

For the combination of emission sources that comprise a single production line, and for individual emissions sources (such as storage tank emissions), the following conditions apply:

1. The emission rate potential of any A-rated pollutant shall not exceed 1.0 pound per hour.
2. The emission rate potential of any B-rated pollutant, excluding pollutants that are also defined to be volatile organic compounds, shall not exceed 10.0 pounds per hour.
3. For this facility, A-rated contaminants are those

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



contaminants listed with a "high" toxicity in the Department's most recent DAR-1 (Air Guide 1) guidance document, and any other contaminant that may be A-rated by the Department. All other pollutants are B-rated, unless otherwise rated by the Department.

4. The following shall not have an emissions rate that results in predicted ambient concentrations in excess of the Annual Guideline Concentration or the Short term Guideline Concentration for each contaminant, as determined pursuant to DAR-1:

(A) contaminants rated A with an emission rate potential less than one pound per hour and

(B) contaminants rated B with an emission rate potential less than 10 pounds per hour.

Determination of mass emission rates will be determined using a stack emission test, conducted upon request from the DEC, according to methods promulgated by EPA, as approved by the DEC.

5. If the emissions source is equipped with an emissions control device, such device must be operated and maintained in a satisfactory state of maintenance and repair.

6. On an annual basis, beginning one year after receipt of this permit, and on a calendar year basis ending December 31 thereafter, the owner or operator shall submit to the DEC a report stating whether any changes were made to the operation of these emissions sources, or the air pollution control equipment. The first report shall be due 30 days after the end of the first 12 month rolling period, commencing with the receipt of this permit. Thereafter, reports shall be due January 30.

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 1/30/2006.

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

**Condition 6: Compliance Demonstration**  
**Effective between the dates of 01/05/2005 and 01/05/2010**



**Applicable Federal Requirement: 6NYCRR 212.4**

**Item 6.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 6.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emissions of A and B - rated contaminants - Ambient  
Guideline Concentration Limits

Several emission sources at this facility emit A-rated contaminants, non-A-rated contaminants or both. This condition is applicable to all such devices. This federally-enforceable condition applies to criteria pollutants.

A facility-wide ambient impact analysis must be completed using DEC approved ambient modeling procedures for all pollutants for which an environmental rating is assigned by the DEC. This analysis must show that there are no predicted off-site ambient concentrations in excess of the Annual Guideline Concentration or Short term Guideline Concentration for each contaminant. This analysis shall include all emissions of such pollutant, facility-wide, so that cumulative impacts are modeled. Not later than the 60th production day commencing on the effective date of this permit, and at any other time specified by the DEC, the owner or operator must submit to the DEC a modeling protocol for the ambient impact analysis. A production day shall be any part of a calendar day on which the facility uses raw material to make a product for sale. Within 60 days of DEC's approval of the protocol, the owner or operator shall submit to the DEC a report describing the results of ambient impact analysis.

The owner or operator must not make any changes to the stack characteristics (height or exit velocity) that would alter dispersion characteristics unless approved by the DEC.

On an annual basis, beginning one year after receipt of this permit, and on a calendar year basis ending December 31 thereafter, the owner or operator shall submit to the



**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**

DEC a report stating whether any changes were made to the operation of these emissions sources, or the air pollution control equipment, that could result in increases in predicted emissions. The first report shall be due 30 days after the end of the first 12 month rolling period, commencing with the receipt of this permit. Thereafter, reports shall be due January 30.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 7: Compliance Demonstration**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

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

**Item 7.1:**

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: 0-00002

Emission Unit: 0-00003

Emission Unit: 0-00004

Emission Unit: 0-00007

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

**Item 7.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

No person shall 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.

Not later than the 60th production day commencing on the effective date of this permit, and at any other time specified by the DEC, the owner or operator shall conduct opacity observations in accordance with EPA Method 9 on those emissions points designated in writing by DEC. A

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



production day shall be any part of a calendar day on which the facility uses raw material to make a product for sale. Such testing shall be conducted in accordance with a protocol approved by the DEC following the time frames specified in 6 NYCRR 202-1.

Upper Permit Limit: 20 percent

Reference Test Method: EPA Method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

**DESCRIPTION**

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

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

**Condition 9: Recordkeeping requirements.**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable Federal Requirement: 40CFR 60.7(b), NSPS Subpart A**

**Item 9.1:**

This Condition applies to Emission Unit: 0-00001

**Item 9.2:**

Affected owners or operators shall maintain records of occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

**Condition 10: Compliance Demonstration**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable Federal Requirement: 40CFR 60.48c, NSPS Subpart Dc**

**Item 10.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: 0-00001

**Item 10.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of each affected facility shall

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by 40 CFR 60.7 of this part. The notification shall include the design heat input capacity of the affected facility and identification of the fuels to be fired in the affected facility and the annual capacity factor at which the owner or operator anticipates operating the affected facility.

The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 11: Applicability of this Subpart to this emission source  
Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable Federal Requirement: 40CFR 60.40c, NSPS Subpart Dc**

**Item 11.1:**

This Condition applies to Emission Unit: 0-00001  
Process: BLR Emission Source: BLR01

**Item 11.2:**

This emission source is subject to the applicable General Provisions of 40 CFR 60 Subpart Dc. The facility owner is responsible for reviewing these general provisions in detail and complying with all applicable technical, administrative and reporting requirements.

**Condition 12: Applicability of this Subpart to this emission source  
Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable Federal Requirement: 40CFR 60.40c, NSPS Subpart Dc**

**Item 12.1:**

This Condition applies to Emission Unit: 0-00001  
Process: BLR Emission Source: BLR02

**Item 12.2:**

This emission source is subject to the applicable General Provisions of 40 CFR 60 Subpart Dc. The facility owner is responsible for reviewing these general provisions in detail and complying with all applicable technical, administrative and reporting requirements.



**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 - 6NYCRR Part 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 13: Contaminant List**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

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

**Item 13.1:**

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

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

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

**Condition 14: Unavoidable noncompliance and violations**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

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

**Item 14.1:**

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



**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**

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 superseded 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 15: Emission Unit Definition**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

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

**Item 15.1:**

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

Emission Unit: 0-00001

Emission Unit Description:

TWO 16.7 MMBTU/HR AND TWO 29 MMBTU/HR  
NATURAL GAS-FIRED BOILERS WHICH ARE  
OPERATED FOR THE PURPOSES OF PROVIDING  
FACILITY COMFORT HEAT AND PROCESS STEAM.  
EMISSION UNIT 000001 INCLUDES EMISSION  
POINTS AE-31, AE-32, AE-37, AND AE-38.

Building(s): 1  
5

**Item 15.2:**

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

Emission Unit: 0-00002

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



Emission Unit Description:

EMISSION UNIT 000002 INCLUDES COATERS, RE-COATERS, AND COATER OVENS OPERATED IN CONJUNCTION WITH APERTURE MASK PRODUCTION LINES. COATERS ARE USED TO APPLY PHOTORESIST TO STEEL WEB. EMISSION UNIT 000002 INCLUDES EMISSION POINTS AE-06, AE-10, AE-22, AE-20, AE-25, AE-28, AE-29, AND AE-15.

Building(s): 1  
2  
4  
5

**Item 15.3:**

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

Emission Unit: 0-00003

Emission Unit Description:

EMISSION UNIT 000003 INCLUDES THE DEVELOPERS AND DEVELOPER OVENS OPERATED IN CONJUNCTION WITH PRODUCTION LINES 1-5. EMISSION UNIT 000003 INCLUDES THE FOLLOWING EMISSION POINTS: AE-07, AE-16, AE-11, AE-08, AE-12, AE-24, AND AE-27.

Building(s): 1  
2  
5

**Item 15.4:**

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

Emission Unit: 0-00004

Emission Unit Description:

EMISSION UNIT 000004 INCLUDES THE ETCHERS, STRIPPERS, AND CLEANERS OPERATED IN CONJUNCTION WITH PRODUCTION LINES 1-5. EMISSION UNIT 000004 ALSO CONTAINS ONE FERRIC CHLORIDE ABOVE GROUND STORAGE TANK, ONE SODIUM HYDROXIDE STORAGE TANK AND FOUR HYDROCHLORIC ACID ABOVE GROUND STORAGE TANKS. EMISSION UNIT 000004 INCLUDES THE FOLLOWING EMISSION POINTS AS-02, AS-13, AS-17, AS-18, AS-19, AS-23, AS-26, AW-01, AW-09.

Building(s): 1



**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**

2  
5

**Item 15.5:**

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

Emission Unit: 0-00005

Emission Unit Description:

EMISSION UNIT 000005 INCLUDES THREE FERRIC CHLORIDE ABOVEGROUND STORAGE TANKS AND ONE SODIUM HYDROXIDE ABOVEGROUND STORAGE TANK. EMISSION UNIT 000005 INCLUDES EMISSION POINTS AE-33, AE-34, AND AE-35.

Building(s): 1  
5

**Item 15.6:**

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

Emission Unit: 0-00006

Emission Unit Description:

EMISSION UNIT 000006 INCLUDES THE WASTEWATER TREATMENT PLANT. EMISSION UNIT 000006 INCLUDES EMISSION POINT AS-5.

Building(s): 3

**Item 15.7:**

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

Emission Unit: 0-00007

Emission Unit Description:

EMISSION UNIT 000007 INCLUDES THREE HOUSE VACUUM SYSTEMS. EMISSION UNIT 000007 INCLUDES EMISSION POINTS AE-36, AE-41, AND AE-42.

Building(s): 1  
4  
5

**Condition 16: Facility Permissible Emissions**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable State Requirement: 6NYCRR 201-7**

**Item 16.1:**

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



**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**

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

CAS No: 0NY100-00-0

PTE: 48,000 pounds per year

Name: HAP

**Condition 17: Capping Monitoring Condition**

**Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable State Requirement: 6NYCRR 201-7**

**Item 17.1:**

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:

6NYCRR 201-6

40CFR 63-A

**Item 17.2:**

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

**Item 17.3:**

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 17.4:**

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 17.5:**

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 17.6:**

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY100-00-0 HAP

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



**Item 17.7:**

Compliance Demonstration shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Facility-wide emissions of hazardous air pollutants (HAP) shall not exceed 24.0 tons per 12 calendar month rolling period. Emissions shall be computed based on material usage, DEC-approved emission factors, and/or measured control equipment efficiencies (where applicable). Emission factors shall be based on the results of the most recent stack emissions test, as approved by DEC.

Where HAP emissions control equipment is used, the owner or operator must operate and maintain such equipment consistent with the air pollution control device operation and maintenance plan required elsewhere in this permit.

On an annual basis, beginning one year after receipt of this permit, and on a calendar year basis ending December 31 thereafter, the owner or operator shall provide a certification to the DEC that the facility has operated within the 24.0 ton/year limit for each 12 calendar month rolling period. This certification shall include a summary of the emissions that occurred for this period. The owner or operator must maintain records of emissions calculations on-site for a period of five years and make them available to representatives of the DEC upon request.

The first report shall be due 30 days after the end of the first 12 month rolling period, commencing with the receipt of this permit. Thereafter, reports shall be due January 30. Additionally, if the owner or operator exceeds the rolling annual emissions limit for any period, the owner or operator shall submit to the DEC a notice of such excess emissions no later than 30 days after the last day in that annual period.

Monitoring Frequency: MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2006.

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

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



**Condition 18: Capping Monitoring Condition**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable State Requirement: 6NYCRR 201-7**

**Item 18.1:**

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:

6NYCRR 201-6  
40CFR 63-A

**Item 18.2:**

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

**Item 18.3:**

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 18.4:**

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 18.5:**

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 18.6:**

The Compliance Demonstration activity will be performed for the Facility.

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

**Item 18.7:**

Compliance Demonstration shall include the following monitoring:

Capping: Yes  
Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES



**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**

**Monitoring Description:**

Facility-wide emissions of any single hazardous air pollutants (HAP) shall not exceed 9.5 tons per 12 calendar month rolling period. Emissions shall be computed based on material usage, DEC-approved emission factors and/or measured control equipment efficiencies, where applicable.

Emission factors shall be based on the results of the most recent stack emissions test, as approved by the DEC.

Where HAP emissions control equipment is used, the owner or operator must operate and maintain such equipment consistent with the air pollution control device operation and maintenance plan required elsewhere in this permit.

On an annual basis, beginning one year after receipt of this permit, and on a calendar year basis ending December 31 thereafter, the owner or operator shall provide a certification to the DEC that the facility has operated within the 9.5 ton/year limit for each 12 calendar month rolling period. This certification shall include a summary of the emissions that occurred for this period. The owner or operator must maintain records of emissions calculations on-site for a period of five years and make them available to representatives of the DEC upon request.

The first report shall be due 30 days after the end of the first 12 month rolling period, commencing with the receipt of this permit. Thereafter, reports shall be due January 30. Additionally, if the owner or operator exceeds the rolling annual emissions limit for any period, the owner or operator shall submit to the DEC a notice of such excess emissions no later than 30 days after the last day in that annual period.

Monitoring Frequency: MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2006.

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

**Condition 19: Air pollution prohibited**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable State Requirement: 6NYCRR 211.2**

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



**Item 19.1:**

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

**Condition 20: Compliance Demonstration**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable State Requirement: 6NYCRR 212.4**

**Item 20.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 20.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emissions of contaminants assigned an environmental rating and emission rate limits under Part 212.9.

Several emission sources at this facility emit A-rated contaminants, non-A-rated contaminants or both. Production of aperture masks involves multiple steps, including coaters (and associated dryers), developers (and associated ovens), etchers, strippers and cleaners. The operation of each device on a given production line operates in combination with all other emission sources on that line. As such, the combination of all emissions sources on a given line will be treated as a single emission source, as allowed in 6 NYCRR 200.1(f), for purposes of applicability under 6 NYCRR 212. This condition is applicable to the grouping of all emissions sources on a given line. When emissions from a storage tank are vented to a control device that also serves a production line, those emissions are included in the calculation of emission rate potential for that line. When emissions from a different production line are vented to a common stack or common control device, the total emissions from all devices emitted through such control device or stack are included (along with emissions from other process units in a given production line) in the

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



calculation of the emission rate potential for purposes of applicability to Part 212. This condition applies to non-criteria pollutants and is state-enforceable.

For the combination of emission sources that comprise a single production line, and for individual emissions sources (such as storage tank emissions), the following conditions apply:

1. The emission rate potential of any A-rated pollutant shall not exceed 1.0 pound per hour.
2. The emission rate potential of any B-rated pollutant, excluding pollutants that are also defined to be volatile organic compounds, shall not exceed 10.0 pounds per hour.

For this facility, A-rated contaminants are those contaminants listed with a "high" toxicity in the Department's most recent DAR-1 (Air Guide 1) guidance document, and any other contaminant that may be A-rated by the Department. All other pollutants are B-rated, unless otherwise rated by the Department.

3. The following shall not have an emissions rate that results in predicted ambient concentrations in excess of the Annual Guideline Concentration or the Short term Guideline Concentration for each contaminant, as determined pursuant to DAR-1:

(A) contaminants rated A with an emission rate potential less than one pound per hour and

(B) contaminants rated B with an emission rate potential less than 10 pounds per hour.

Mass emission rates will be determined using a stack emission test, conducted upon request from the DEC, according to methods promulgated by EPA, as approved by the DEC.

4. If the emissions source is equipped with an emissions control device, such device must be operated and maintained in a satisfactory state of maintenance and repair.
5. On an annual basis, beginning one year after receipt



**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**

of this permit, and on a calendar year basis ending December 31 thereafter, the owner or operator shall submit to the DEC a report stating whether any changes were made to the operation of these emissions sources, or the air pollution control equipment.

The first report shall be due 30 days after the end of the first 12 month rolling period, commencing with the receipt of this permit. Thereafter, reports shall be due January 30.

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 1/30/2006.

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

**Condition 21: Compliance Demonstration**  
**Effective between the dates of 01/05/2005 and 01/05/2010**

**Applicable State Requirement: 6NYCRR 212.4**

**Item 21.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 21.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emissions of A and B - rated contaminants - Ambient  
Guideline Concentration Limits

Several emission sources at this facility emit A-rated contaminants, non-A-rated contaminants or both. This condition is applicable to all such devices. This state-enforceable condition applies to non-criteria pollutants.

A facility-wide ambient impact analysis must be completed using DEC approved ambient modeling procedures for all pollutants for which an environmental rating is assigned by the DEC. This analysis must show that there are no predicted off-site ambient concentrations in excess of the Annual Guideline Concentration or Short term Guideline Concentration for each contaminant. This analysis shall



**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**

include all emissions of such pollutant, facility-wide, so that cumulative impacts are modeled. Not later than the 60th production day commencing on the effective date of this permit, the owner or operator must submit to the DEC a modeling protocol for the ambient impact analysis. A production day shall be any part of a calendar day on which the facility uses raw material to make a product for sale. Within 60 days of DEC's approval of the protocol, the owner or operator shall submit to the DEC a report describing the results of ambient impact analysis.

The owner or operator must not make any changes to the stack characteristics (height or exit velocity) that would alter dispersion characteristics unless approved by the DEC.

On an annual basis, beginning one year after receipt of this permit, and on a calendar year basis ending December 31 thereafter, the owner or operator shall submit to the DEC a report stating whether any changes were made to the operation of these emissions sources, or the air pollution control equipment, that could result in increases in predicted emissions. The first report shall be due 30 days after the end of the first 12 month rolling period, commencing with the receipt of this permit. Thereafter, reports shall be due January 30.

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 1/30/2006.

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

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

**Condition 22: Emission Point Definition By Emission Unit  
Effective between the dates of 01/05/2005 and 01/05/2010**

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

**Item 22.1:**

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

Emission Unit: 0-00001



**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**

Emission Point: 0AE31 Height (ft.): 69	Diameter (in.): 24	Building: 5
Emission Point: 0AE32 Height (ft.): 69	Diameter (in.): 24	Building: 5
Emission Point: 0AE37 Height (ft.): 28	Diameter (in.): 24	Building: 1
Emission Point: 0AE38 Height (ft.): 28	Diameter (in.): 24	Building: 1

**Item 22.2:**

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

Emission Unit: 0-00002		
Emission Point: 0AE06 Height (ft.): 33	Length (in.): 24	Width (in.): 24 Building: 1
Emission Point: 0AE10 Height (ft.): 40	Length (in.): 37	Width (in.): 37 Building: 2
Emission Point: 0AE15 Height (ft.): 22 NYTMN (km.): 4716.322	Diameter (in.): 14 NYTME (km.): 404.931	Building: 1
Emission Point: 0AE20 Height (ft.): 27	Diameter (in.): 6	Building: 2
Emission Point: 0AE22 Height (ft.): 87	Diameter (in.): 24	Building: 4
Emission Point: 0AE25 Height (ft.): 90	Diameter (in.): 24	Building: 5
Emission Point: 0AE28		



**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**

Height (ft.): 68                      Diameter (in.): 24  
Building: 5

Emission Point: 0AE29  
Height (ft.): 44                      Diameter (in.): 12  
Building: 5

**Item 22.3:**

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

Emission Unit: 0-00003

Emission Point: 0AE07  
Height (ft.): 56                      Length (in.): 12                      Width (in.): 17  
Building: 1

Emission Point: 0AE08  
Height (ft.): 51                      Length (in.): 11                      Width (in.): 12  
Building: 1

Emission Point: 0AE11  
Height (ft.): 25                      Length (in.): 8                      Width (in.): 9  
Building: 2

Emission Point: 0AE12  
Height (ft.): 27                      Diameter (in.): 25  
Building: 2

Emission Point: 0AE16  
Height (ft.): 56                      Length (in.): 9                      Width (in.): 13  
Building: 1

Emission Point: 0AE24  
Height (ft.): 55                      Diameter (in.): 42  
Building: 5

Emission Point: 0AE27  
Height (ft.): 90                      Diameter (in.): 24  
Building: 5

**Item 22.4:**

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

Emission Unit: 0-00004

Emission Point: 0AS02  
Height (ft.): 45                      Length (in.): 54                      Width (in.): 36



**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**

			Building: 1
Emission Point: 0AS13			
Height (ft.): 41	Diameter (in.): 26		Building: 2
Emission Point: 0AS17			
Height (ft.): 41	Diameter (in.): 26		Building: 2
Emission Point: 0AS18			
Height (ft.): 44	Diameter (in.): 24		Building: 2
Emission Point: 0AS19			
Height (ft.): 44	Diameter (in.): 20		Building: 2
Emission Point: 0AS23			
Height (ft.): 76	Diameter (in.): 48		Building: 5
Emission Point: 0AS26			
Height (ft.): 45	Diameter (in.): 48		Building: 5
Emission Point: 0AW01			
Height (ft.): 34	Diameter (in.): 36		Building: 1
Emission Point: 0AW09			
Height (ft.): 41	Diameter (in.): 26		Building: 2

**Item 22.5:**

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

Emission Unit: 0-00005			
Emission Point: 0AE33			
Height (ft.): 24	Diameter (in.): 4		Building: 5
Emission Point: 0AE34			
Height (ft.): 21	Diameter (in.): 4		Building: 5



**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**

Emission Point: 0AE35

Height (ft.): 21

Diameter (in.): 4

Building: 5

**Item 22.6:**

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

Emission Unit: 0-00006

Emission Point: 0AS05

Height (ft.): 39

Diameter (in.): 16

Building: 3

**Item 22.7:**

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

Emission Unit: 0-00007

Emission Point: 0AE36

Height (ft.): 40

Diameter (in.): 12

Building: 5

Emission Point: 0AE41

Height (ft.): 30

Diameter (in.): 5

Building: 1

Emission Point: 0AE42

Height (ft.): 24

Diameter (in.): 6

Building: 4

**Condition 23: Process Definition By Emission Unit**

**Effective between the dates of 01/05/2005 and 01/05/2010**

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

**Item 23.1:**

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

Emission Unit: 0-00001

Process: BLR

Process Description:

TWO 16.7 MMBTU/HR AND TWO 29 MMBTU/HR  
GAS-FIRED BOILERS USED TO PROVIDE FACILITY  
COMFORT HEAT AS WELL AS PROCESS HEAT TO THE  
APERTURE MASK PRODUCTION LINES. EMISSION  
UNIT 000001 INCLUDES EMISSION POINTS AE-31,  
AE-32, AE-37 AND AE-38.

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



Emission Source/Control: BLR01 - Combustion

Emission Source/Control: BLR02 - Combustion

Emission Source/Control: BLR03 - Combustion

Emission Source/Control: BLR04 - Combustion

**Item 23.2:**

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

Emission Unit: 0-00002

Process: CTR

Process Description:

COATERS USED TO APPLY PHOTORESIST TO STEEL WEB. INCLUDES EIGHT COATERS OR RE-COATERS OVENS WHICH CORRESPOND TO THE FOLLOWING EMISSION POINTS: AE-06, AE-22, AE-10, AE-25, AE-28, AE-29, AE-15, AE20.

Emission Source/Control: CTR01 - Process

Emission Source/Control: CTR02 - Process

Emission Source/Control: CTR03 - Process

Emission Source/Control: CTR04 - Process

Emission Source/Control: CTR05 - Process

Emission Source/Control: CTR3R - Process

Emission Source/Control: CTR5R - Process

Emission Source/Control: CTRCC - Process

**Item 23.3:**

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

Emission Unit: 0-00003

Process: DVP

Process Description:

DEVELOPERS AND DEVELOPER OVENS ASSOCIATED WITH APERTURE MASK PRODUCTION LINES 1-5. EMISSION UNIT 000003 INCLUDES EMISSION POINTS AE-07, AE-16, AE-08, AE-11, AE-12,

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



AE-24 AND AE-27.

Emission Source/Control: MDVP1 - Control  
Control Type: MIST ELIMINATOR

Emission Source/Control: MDVP2 - Control  
Control Type: MIST ELIMINATOR

Emission Source/Control: MDVP3 - Control  
Control Type: MIST ELIMINATOR

Emission Source/Control: MDVP4 - Control  
Control Type: MIST ELIMINATOR

Emission Source/Control: MDVP5 - Control  
Control Type: MIST ELIMINATOR

Emission Source/Control: DVO03 - Process

Emission Source/Control: DVO04 - Process

Emission Source/Control: DVO05 - Process

Emission Source/Control: DVO12 - Process

Emission Source/Control: DVP01 - Process

Emission Source/Control: DVP02 - Process

Emission Source/Control: DVP03 - Process

Emission Source/Control: DVP04 - Process

Emission Source/Control: DVP05 - Process

**Item 23.4:**

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

Emission Unit: 0-00004

Process: ESC

Process Description:

ETCHERS, STRIPPERS, CLEANERS, AND CHEMICAL  
BULK STORAGE TANKS ASSOCIATED WITH APERTURE  
MASK PRODUCTION LINES 1-5. EMISSION UNIT  
000004 INCLUDES EMISSION POINTS AS-02,  
AS-13, AS-17, AS-18, AS-19, AS-23, AS-26,  
AW-01, AND AW-09.



Emission Source/Control: SCR02 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: SCR04 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: SCR05 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: SCR1C - Control  
Control Type: WET SCRUBBER

Emission Source/Control: SCR3A - Control  
Control Type: WET SCRUBBER

Emission Source/Control: SCR3B - Control  
Control Type: WET SCRUBBER

Emission Source/Control: SCR3C - Control  
Control Type: WET SCRUBBER

Emission Source/Control: SCS3A - Control  
Control Type: WET SCRUBBER

Emission Source/Control: SCS3B - Control  
Control Type: WET SCRUBBER

Emission Source/Control: CLML2 - Process

Emission Source/Control: CLN03 - Process

Emission Source/Control: CLN05 - Process

Emission Source/Control: CLNML - Process

Emission Source/Control: ETC01 - Process

Emission Source/Control: ETC02 - Process

Emission Source/Control: ETC04 - Process

Emission Source/Control: ETC3A - Process

Emission Source/Control: ETC3B - Process

Emission Source/Control: ETC5A - Process

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



Emission Source/Control: ETC5B - Process

Emission Source/Control: STR01 - Process

Emission Source/Control: STR02 - Process

Emission Source/Control: STR04 - Process

Emission Source/Control: STR05 - Process

Emission Source/Control: STR3A - Process

Emission Source/Control: STR3B - Process

Emission Source/Control: TNKF4 - Process

Emission Source/Control: TNKS2 - Process

**Item 23.5:**

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

Emission Unit: 0-00004

Process: STN

Process Description:

medical stent production: chemical cleaning, coating,  
laser imaging, developing, pumice scrub, chemical etching,  
stripping, electropolish.

Emission Source/Control: STCLN - Process

Emission Source/Control: STCTR - Process

Emission Source/Control: STDVL - Process

Emission Source/Control: STELC - Process

Emission Source/Control: STETC - Process

Emission Source/Control: STIMG - Process

Emission Source/Control: STPUM - Process

Emission Source/Control: STSTR - Process

**Item 23.6:**

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

**New York State Department of Environmental Conservation**

**Permit ID: 7-1102-00006/00079**

**Facility DEC ID: 7110200006**



Emission Unit: 0-00005

Process: TNK

Process Description:

EMISSIONS RESULTING FROM ABOVEGROUND  
FERRIC CHLORIDE AND SODIUM HYDROXIDE TANKS.  
EMISSION UNIT 000005 INCLUDES EMISSION  
POINTS AE-33, AE-34, AND AE-35.

Emission Source/Control: TNKF1 - Process

Emission Source/Control: TNKF2 - Process

Emission Source/Control: TNKF3 - Process

Emission Source/Control: TNKS1 - Process

**Item 23.7:**

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

Emission Unit: 0-00006

Process: WWT

Process Description:

EMISSIONS RESULTING FROM THE OPERATION OF  
THE FACILITY'S WASTEWATER TREATMENT PLANT.  
THIS PLANT TREATS PROCESS WASTEWATER  
RESULTING FROM THE APERTURE MASK PRODUCTION  
OPERATIONS. EMISSION UNIT 000006 INCLUDES  
EMISSION POINT AS-05.

Emission Source/Control: SCWTP - Control

Control Type: SPRAY TOWER

Emission Source/Control: WWTP1 - Process

**Item 23.8:**

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

Emission Unit: 0-00007

Process: HVS

Process Description:

EMISSIONS RESULTING FROM THE OPERATION OF  
THREE HOUSE VACUUM SYSTEMS USED FOR  
MANUFACTURING CLEANING. EMISSION UNIT  
000007 INCLUDES EMISSION POINTS AE-36,  
AE-41, AND AE-42.

**New York State Department of Environmental Conservation**  
**Permit ID: 7-1102-00006/00079      Facility DEC ID: 7110200006**



Emission Source/Control: HVS01 - Process

Emission Source/Control: HVS02 - Process

Emission Source/Control: HVS03 - Process