



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
LAKE COUNTY**

CERTIFIED MAIL

Street Address:

50 West Town Street, Suite 700

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-22421

Fac ID: 0243011367

DATE: 11/27/2007

Astro Model Development
Watts Martin
34459 Curtis Blvd.
Eastlake, OH 44095

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

NEDO



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install

FINAL PERMIT TO INSTALL 02-22421

Application Number: 02-22421
Facility ID: 0243011367
Permit Fee: **\$1000**
Name of Facility: Astro Model Development
Person to Contact: Watts Martin
Address: 34459 Curtis Blvd.
Eastlake, OH 44095

Location of proposed air contaminant source(s) [emissions unit(s)]:
34459 Curtis Blvd.
Eastlake, Ohio

Description of proposed emissions unit(s):
Open top vapor degreaser, 4 coating lines.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to

the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or

required under this permit.

- iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit-To-Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

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12. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

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13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder.

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The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

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4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

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If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the permit-to-install application and the terms and conditions of the permit-to-install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit-To-Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	7.55 + 4(3.7) = 22.4
Individual HAP	TPY
Composite HAPs	7.55 TPY
	7.55 TPY

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Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (K001) - Binks Plastic and miscellaneous metal parts bench style coating spray booth #1 with 2 natural gas ovens rated at 600,000 and 700,000 BTU/hr and electrostatic air spray gun

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Volatile organic compound (VOC) emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 0.80 pound per hour, 20.0 pounds per day and 3.7 tons per year of VOC emissions, including cleanup.</p> <p>See section A.2.b below.</p>
OAC rule 3745-21-07(G)(2)	The emission limitations specified by this rule are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-21-09(U)(2)(e)	The material usage restriction specified by this rule is less stringent than the material usage restriction established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a This coating line is not subject to 40 CFR Part 63, Subpart PPPP (Plastic Parts Coating MACT) or 40 CFR Part 63, Subpart MMMM (Miscellaneous Metal Coating MACT) because the facility-wide potential to emit for hazardous air pollutants (HAPs) after controls is less than major source thresholds.
- 2.b The permittee shall not employ more than 3 gallons per day of coating material for the coating of miscellaneous metal and plastic parts.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the name and identification number of each coating employed;
 - b. the name and identification number of each additive, thinner and cleanup material;
 - c. the VOC content of each coating employed, in pounds per gallon, as applied;
 - d. the VOC content of each additive, thinner and cleanup material, in pounds per gallon, as applied;
 - e. the number of gallons of each coating employed;
 - f. the total number of gallons of all coatings employed;
 - g. the number of gallons of each additive, thinner and cleanup material;
 - h. the total VOC emissions from all the coatings employed, in pounds [i.e., the sum of (c) times (e) of each coating employed];
 - i. the total VOC emissions from all additives, thinners and cleanup materials, in pounds [i.e., the sum of (d) times (g) for each additive, thinner and cleanup material];
 - j. the total VOC emissions from the coating line, in pounds per day [(h) + (i)];
 - k. the total operating hours of the coating line;
 - l. the average hourly VOC emission rate from the coating line, in lbs per hour;
 - m. the cumulative monthly emissions, in pounds, to date [summation of (j)]; and
 - n. the cumulative annual emissions to date, in pounds and tons.

IV. Reporting Requirements

1. The permittee shall notify the Ohio EPA Northeast District Office in writing of any daily record showing that this coating line employed more than the applicable maximum daily coating usage limit of 3 (three) gallons per day. The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 45 days after the exceedance occurs.

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2. The permittee shall submit quarterly deviation (excursion) reports, in writing, that identify each day during which the average hourly, daily and/or annual emission limitations for VOC exceeded 0.80 pound per hour, 20.0 pounds per day and 3.7 tons per year, respectively, and the actual average hourly, daily and/or annual VOC emissions for each such day.
3. The permittee shall submit annual compliance reports that include the actual VOC emissions for the calendar year in tons per year.

The reports shall be submitted to the Ohio EPA Northeast District Office by February 1 of each year and shall cover the previous calendar year.

V. Testing Requirements

1. Compliance with the emission limitations and usage restriction in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

- a. Usage Restriction:

The permittee shall not employ more than 3 gallons per day of coating material for the coating of miscellaneous metal and plastic parts.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.f.

- b. Emission Limitation:

VOC emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 0.80 pound per hour, including cleanup.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.i.

- c. Emission Limitation:

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Emissions Unit ID: K001

VOC emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 20.0 pounds per day, including cleanup.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.j.

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d. Emission Limitation:

VOC emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 3.7 tons per year, including cleanup.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.n.

VI. Miscellaneous Requirements

None

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (K001) - Plastic and miscellaneous metal parts bench style coating spray booth #1 with 2 natural gas ovens rated at 600,000 and 700,000 BTU/hr and electrostatic air spray gun.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (K002) - Plastic and miscellaneous metal parts bench style coating spray booth #2 with 2 ovens rated at 600,000 and 700,000 BTU/hr, with electrostatic air gun

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Volatile organic compound (VOC) emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 0.80 pound per hour, 20.0 pounds per day and 3.7 tons per year of VOC emissions, including cleanup.</p> <p>See section A.2.b below.</p>
OAC rule 3745-21-07(G)(2)	The emission limitations specified by this rule are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-21-09(U)(2)(e)	The material usage restriction specified by this rule is less stringent than the material usage restriction established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a This coating line is not subject to 40 CFR Part 63, Subpart PPPP (Plastic Parts Coating MACT) or 40 CFR Part 63, Subpart MMMM (Miscellaneous Metal Coating MACT) because the facility-wide potential to emit for hazardous air pollutants (HAPs) after controls is less than major source thresholds.
- 2.b The permittee shall not employ more than 3 gallons per day of coating material for the coating of miscellaneous metal and plastic parts.

Emissions Unit ID: K002

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the name and identification number of each coating employed;
 - b. the name and identification number of each additive, thinner and cleanup material;
 - c. the VOC content of each coating employed, in pounds per gallon, as applied;
 - d. the VOC content of each additive, thinner and cleanup material, in pounds per gallon, as applied;
 - e. the number of gallons of each coating employed;
 - f. the total number of gallons of all coatings employed;
 - g. the number of gallons of each additive, thinner and cleanup material;
 - h. the total VOC emissions from all the coatings employed, in pounds [i.e., the sum of (c) times (e) of each coating employed];
 - i. the total VOC emissions from all additives, thinners and cleanup materials, in pounds [i.e., the sum of (d) times (g) for each additive, thinner and cleanup material];
 - j. the total VOC emissions from the coating line, in pounds per day [(h) + (i)];
 - k. the total operating hours of the coating line;
 - l. the average hourly VOC emission rate from the coating line, in lbs per hour;
 - m. the cumulative monthly emissions, in pounds, to date [summation of (j)]; and
 - n. the cumulative annual emissions to date, in pounds and tons.

IV. Reporting Requirements

1. The permittee shall notify the Ohio EPA Northeast District Office in writing of any daily

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record showing that this coating line employed more than the applicable maximum daily coating usage limit of 3 (three) gallons per day. The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 45 days after the exceedance occurs.

2. The permittee shall submit quarterly deviation (excursion) reports, in writing, that identify each day during which the average hourly, daily and/or annual emission limitations for VOC exceeded 0.80 pound per hour, 20.0 pounds per day and 3.7 tons per year, respectively, and the actual average hourly, daily and/or annual VOC emissions for each such day.
3. The permittee shall submit annual compliance reports that include the actual VOC emissions for the calendar year in tons per year.

The reports shall be submitted to the Ohio EPA Northeast District Office by February 1 of each year and shall cover the previous calendar year.

V. Testing Requirements

1. Compliance with the emission limitations and usage restriction in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

- a. Usage Restriction:

The permittee shall not employ more than 3 gallons per day of coating material for the coating of miscellaneous metal and plastic parts.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.f.

- b. Emission Limitation:

VOC emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 0.80 pound per hour, including cleanup.

Applicable Compliance Method:

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Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.i.

c. Emission Limitation:

VOC emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 20.0 pounds per day, including cleanup.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.j.

Emissions Unit ID: K002

d. Emission Limitation:

VOC emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 3.7 tons per year, including cleanup.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.n.

VI. Miscellaneous Requirements

None

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (K002) - Plastic and miscellaneous metal parts bench style coating spray booth #2 with 2 ovens rated at 600,000 and 700,000 BTU/hr, with electrostatic air gun

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (K003) - Plastic and miscellaneous metal parts bench style coating spray booth # 3 with 2 natural gas ovens rated at 600,000 and 700,000 BTU/hr and electrostatic air spray gun

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Volatile organic compound (VOC) emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 0.80 pound per hour, 20.0 pounds per day and 3.7 tons per year of VOC emissions, including cleanup.</p> <p>See section A.2.b below.</p>
OAC rule 3745-21-07(G)(2)	The emission limitations specified by this rule are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-21-09(U)(2)(e)	The material usage restriction specified by this rule is less stringent than the material usage restriction established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a This coating line is not subject to 40 CFR Part 63, Subpart PPPP (Plastic Parts Coating MACT) or 40 CFR Part 63, Subpart MMMM (Miscellaneous Metal Coating MACT) because the facility-wide potential to emit for hazardous air pollutants (HAPs) after controls is less than major source thresholds.
- 2.b The permittee shall not employ more than 3 gallons per day of coating material for the coating of miscellaneous metal and plastic parts.

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II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the name and identification number of each coating employed;
 - b. the name and identification number of each additive, thinner and cleanup material;
 - c. the VOC content of each coating employed, in pounds per gallon, as applied;
 - d. the VOC content of each additive, thinner and cleanup material, in pounds per gallon, as applied;
 - e. the number of gallons of each coating employed;
 - f. the total number of gallons of all coatings employed;
 - g. the number of gallons of each additive, thinner and cleanup material;
 - h. the total VOC emissions from all the coatings employed, in pounds [i.e., the sum of (c) times (e) of each coating employed];
 - i. the total VOC emissions from all additives, thinners and cleanup materials, in pounds [i.e., the sum of (d) times (g) for each additive, thinner and cleanup material];
 - j. the total VOC emissions from the coating line, in pounds per day [(h) + (i)];
 - k. the total operating hours of the coating line;
 - l. the average hourly VOC emission rate from the coating line, in lbs per hour;
 - m. the cumulative monthly emissions, in pounds, to date [summation of (j)]; and

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n. the cumulative annual emissions to date, in pounds and tons.

IV. Reporting Requirements

1. The permittee shall notify the Ohio EPA Northeast District Office in writing of any daily record showing that this coating line employed more than the applicable maximum daily coating usage limit of 3 (three) gallons per day. The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 45 days after the exceedance occurs.
2. The permittee shall submit quarterly deviation (excursion) reports, in writing, that identify each day during which the average hourly, daily and/or annual emission limitations for VOC exceeded 0.80 pound per hour, 20.0 pounds per day and 3.7 tons per year, respectively, and the actual average hourly, daily and/or annual VOC emissions for each such day.
3. The permittee shall submit annual compliance reports that include the actual VOC emissions for the calendar year in tons per year.

The reports shall be submitted to the Ohio EPA Northeast District Office by February 1 of each year and shall cover the previous calendar year.

V. Testing Requirements

1. Compliance with the emission limitations and usage restriction in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

a. Usage Restriction:

The permittee shall not employ more than 3 gallons per day of coating material for the coating of miscellaneous metal and plastic parts.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.f.

b. Emission Limitation:

VOC emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 0.80 pound per hour, including cleanup.

Applicable Compliance Method:

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Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.i.

c. Emission Limitation:

VOC emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 20.0 pounds per day, including cleanup.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.j.

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d. Emission Limitation:

VOC emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 3.7 tons per year, including cleanup.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.n.

VI. Miscellaneous Requirements

None

Issued: 11/27/2007

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (K003) - Plastic and miscellaneous metal parts bench style coating spray booth # 3 with 2 natural gas ovens rated at 600,000 and 700,000 BTU/hr and electrostatic air spray gun

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (K004) - Plastic and miscellaneous metal parts bench style coating spray booth # 4 with 2 natural gas ovens rated at 600,000 and 700,000 BTU/hr and electrostatic air spray gun

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 0.80 pound per hour, 20.0 pounds per day and 3.7 tons per year of VOC emissions, including cleanup. See section A.2.b below.
OAC rule 3745-21-07(G)(2)	The emission limitations specified by this rule are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-21-09(U)(2)(e)	The material usage restriction specified by this rule is less stringent than the material usage restriction established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a This coating line is not subject to 40 CFR Part 63, Subpart PPPP (Plastic Parts Coating MACT) or 40 CFR Part 63, Subpart MMMM (Miscellaneous Metal Coating MACT) because the facility-wide potential to emit for hazardous air pollutants (HAPs) after controls is less than major source thresholds.
- 2.b The permittee shall not employ more than 3 gallons per day of coating material for the coating of miscellaneous metal and plastic parts.

II. Operational Restrictions

None

Issued: 11/27/2007

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the name and identification number of each coating employed;
 - b. the name and identification number of each additive, thinner and cleanup material;
 - c. the VOC content of each coating employed, in pounds per gallon, as applied;
 - d. the VOC content of each additive, thinner and cleanup material, in pounds per gallon, as applied;
 - e. the number of gallons of each coating employed;
 - f. the total number of gallons of all coatings employed;
 - g. the number of gallons of each additive, thinner and cleanup material;
 - h. the total VOC emissions from all the coatings employed, in pounds [i.e., the sum of (c) times (e) of each coating employed];
 - i. the total VOC emissions from all additives, thinners and cleanup materials, in pounds [i.e., the sum of (d) times (g) for each additive, thinner and cleanup material];
 - j. the total VOC emissions from the coating line, in pounds per day [(h) + (i)];
 - k. the total operating hours of the coating line;
 - l. the average hourly VOC emission rate from the coating line, in lbs per hour;
 - m. the cumulative monthly emissions, in pounds, to date [summation of (j)]; and
 - n. the cumulative annual emissions to date, in pounds and tons.

IV. Reporting Requirements

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1. The permittee shall notify the Ohio EPA Northeast District Office in writing of any daily record showing that this coating line employed more than the applicable maximum daily coating usage limit of 3 (three) gallons per day. The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 45 days after the exceedance occurs.
2. The permittee shall submit quarterly deviation (excursion) reports, in writing, that identify each day during which the average hourly, daily and/or annual emission limitations for VOC exceeded 0.80 pound per hour, 20.0 pounds per day and 3.7 tons per year, respectively, and the actual average hourly, daily and/or annual VOC emissions for each such day.
3. The permittee shall submit annual compliance reports that include the actual VOC emissions for the calendar year in tons per year.

The reports shall be submitted to the Ohio EPA Northeast District Office by February 1 of each year and shall cover the previous calendar year.

V. Testing Requirements

1. Compliance with the emission limitations and usage restriction in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

- a. Usage Restriction:

The permittee shall not employ more than 3 gallons per day of coating material for the coating of miscellaneous metal and plastic parts.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.f.

- b. Emission Limitation:

VOC emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 0.80 pound per hour, including cleanup.

Applicable Compliance Method:

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Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.i.

c. Emission Limitation:

VOC emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 20.0 pounds per day, including cleanup.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.j.

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d. Emission Limitation:

VOC emissions resulting from the use of all coatings, additives and thinners in this emissions unit shall not exceed 3.7 tons per year, including cleanup.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.n.

VI. Miscellaneous Requirements

None

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (K004) - Plastic and miscellaneous metal parts bench style coating spray booth # 4 with 2 natural gas ovens rated at 600,000 and 700,000 BTU/hr and electrostatic air spray gun

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (L001) - Baron Blakesly open top batch vapor degreaser with rinsing tanks using trichloroethylene equipped with a cover and a refrigerated chiller

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Volatile organic compounds (VOC - trichloroethylene) emissions shall not exceed 1.72 lbs/hr and 7.55 tons per year.</p> <p>See section A.III.5 below.</p>
OAC rule 3745-21-09(O)(6)(b)	<p>exempt</p> <p>See section A.I.2.a below.</p>
40 CFR Part 63, Subpart T	See sections A.I.2.a and A.I.2.b below.

2. Additional Terms and Conditions

- 2.a After June 15, 1999, paragraphs (O)(2) to (O)(5) of OAC rule 3745-21-09(O) shall not apply to any solvent metal cleaning operation which is subject to Subpart T of 40 CFR Part 63, provided the requirements of Subpart T are specified in the terms and conditions of a permit to operate issued pursuant to OAC rule 3745-35-02, a permit to install issued pursuant to OAC rule 3745-31-05, or a Title V permit issued pursuant to OAC rule 3745-77-08.
- 2.b The batch vapor cleaning machine, having a solvent/air interface area greater than 1.21 square meters (13 square feet), shall employ a freeboard refrigeration device, a freeboard ration of 1.0 or greater and superheated vapor, as the chosen control combination selected from Table 2 of Subpart T [40 CFR 63.463(b)].

Emissions Unit ID: L001

- 2.c** The permittee shall ensure that the solvent cleaning machine conforms to the following design requirements:
- i. The vapor cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils.
 - ii. The vapor cleaning machine shall have a primary condenser.
 - iii. The vapor cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.
 - iv. The permittee shall use an idling and downtime mode cover, that shall be in place during the idling mode and during the downtime mode, unless:
(a) *the solvent has been removed*, (b) *solvent is being added or removed*, or (c) *maintenance, monitoring, and/or solvent level measurements is/are* being performed that requires the cover(s) to be removed.

II. Operational Restrictions

1. The permittee shall control air disturbances across the solvent cleaning machine by using an idling and downtime mode cover, that shall be in place during the idling and downtime modes, unless: (a) the solvent has been removed, (b) solvent is being added or removed, or (c) maintenance, monitoring, and/or solvent level measurements is/are being performed that requires the cover(s) to be removed. The cover shall be able to be readily opened or closed, shall completely cover the cleaning machine openings when in place, and shall be free of cracks, holes and other defects. A continuous web part that completely occupies an entry or exit port when the machine is idle is considered to meet this requirement.
2. The permittee shall meet the following required work and operational practices:
 - a. During startup of the solvent cleaning machine, the primary condensers shall be turned on before the sump heater.
 - b. During shutdown of the solvent cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.
 - c. When solvent is added or drained from the solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings, and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
 - d. The solvent cleaning machine and its associated controls shall be maintained as

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recommended by the manufacturers of the equipment; or maintained using alternative maintenance practices that have been demonstrated to the satisfaction of the regulating agency (appropriate Ohio EPA District Office or local air agency) to achieve the same or better results as those recommended by the manufacturer.

- e. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but must not allow liquid solvent to drain from the container.
 - f. Sponges, fabric, wood, paper products and/or other porous or absorbent material shall not be cleaned.
 - g. The solvent cleaning machine's automated parts handling system shall move the parts or parts baskets at a speed not to exceed 3.4 meters per minute (11 feet per minute, hoist speed).
3. The permittee shall meet all of the following required work and operational practices:
- a. Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine).
 - b. Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes must be tipped or rotated before being removed from the solvent cleaning machine unless an equally effective approach has been approved by the regulating agency.
 - c. Parts baskets or parts shall not be removed from the solvent cleaning machine until dripping has stopped.
4. The permittee shall conduct periodic monitoring of the parameters used to demonstrate compliance, as described in the "*Monitoring and Record keeping Requirements*" section of this permit; and these parameters shall meet the requirements established in this permit.
5. The permittee shall ensure that the chilled air blanket temperature, measured at the center of the air blanket, is no greater than 30 percent of the solvent's boiling point.
6. The permittee shall ensure that the cover is in place whenever parts are not in the

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solvent cleaning machine and it completely covers the cleaning machine openings during downtime and during the idling mode, unless solvent is being added or removed, and/or maintenance, monitoring, and/or solvent level measurements is/are being conducted. The permittee shall ensure that the idling-mode cover is maintained free of cracks, holes, and other defects.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:
 - a. the name and identification, if applicable, of each solvent employed;
 - b. the density of each solvent employed, in lbs per gallon;
 - c. the number of gallons of each solvent employed for each day;
 - d. the total VOC emissions from all solvents for each day, in pounds and tons per day; and
 - e. the total VOC emissions from all solvents, to date, in tons per month

Control reduction efficiencies shall be applied based on the following from the Radian Document, May 26, 1993, A-92; II-B-92 Summary:

E1 = Freeboard ratio of one or greater	20% reduction;
E2 = Freeboard refrigeration device	40% reduction; and
E3 = Superheated Vapor	50% reduction.

2. Using a thermometer or thermocouple, the permittee shall measure and record, on a weekly basis, the temperature at the center of the air blanket during the idling mode.
3. The permittee shall measure and record the freeboard ratio before each solvent addition to assure compliance with the control requirement limitation.
4. The permittee shall comply with the following requirements:

Freeboard refrigeration device

- a. ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10°F above the solvent's boiling point;

Freeboard ratio

- b. ensure that the manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system is followed; and

Superheated vapor system

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- c. ensure that parts remain within the superheated vapor for at least the minimum proper dwell time.
5. The permittee shall maintain a freeboard with a freeboard ratio equal to 1.0 or greater.
6. The permittee shall conduct a monthly visual inspection of the idling-mode/downtime cover(s) and shall maintain a record of the results. The records shall document that the cover is opening and closing properly, that it completely covers the cleaning machine openings when closed, and is free of cracks, holes and other defects.
7. The permittee shall monitor the hoist speed as described below and maintain records of the results:
 - a. The permittee shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute).
 - b. The permittee shall document that the parts and parts basket does not occupy more than 50 percent of the solvent/air interface area, if the hoist speed exceeds 0.9 meters per minute (3 feet per minute). This determination shall be re-calculated if the parts or basket size increase.
 - c. The permittee shall conduct monthly monitoring of the hoist speed. If after the first year, no exceedances of the hoist speed are measured, the permittee may begin monitoring the hoist speed quarterly.
 - d. If an exceedance of the hoist speed occurs during quarterly monitoring, the permittee shall return to a monthly monitoring frequency until another year of compliance without an exceedance is demonstrated.
 - e. If the permittee can demonstrate in the initial compliance report, and to the satisfaction of the regulating agency, that the hoist speed cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency may be quarterly, including during the first year of compliance.
8. The permittee shall maintain the following records in written or electronic form for the lifetime of the solvent cleaning machine:
 - a. owner's manuals, or if not available, written maintenance and operating procedures for the solvent cleaning machine and control equipment;

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- b. records of the halogenated HAP trichloroethylene solvent content for each solvent used in the solvent cleaning machine;
 - c. the date of installation for the solvent cleaning machine and all of its control device.
9. The permittee shall maintain the following records in written or electronic form for a period of five years for the solvent cleaning machine:
 - a. the results of the control device monitoring required in this permit;
 - b. information on the actions taken to comply with 40 CFR 63.463, including the control equipment, the required monitoring parameters, records of written or verbal orders for replacement parts, a description of the repair made, and additional monitoring conducted to demonstrate that monitored parameters have returned to acceptable levels;
 - c. estimates of annual solvent consumption for the solvent cleaning machine.
10. The permittee shall maintain a record of any malfunction of the following control equipment, during which time the machine was/is not shut down until repaired:
 - a. the device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils;
 - b. the vapor level control device(s) that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser, if the condenser coolant is not circulating, or if the coolant is too warm; and/or
 - c. the primary condenser.

Included in the record shall be the length of time the equipment was not in operation or malfunctioning, and the date it was repaired or replaced.
11. The hourly VOC emissions limitation of lbs per hour is based on the maximum potential to emit determined in the testing section of these terms and conditions. Therefore, no monitoring or record keeping is required to demonstrate compliance with the hourly limit.

IV. Reporting Requirements

1. The following information is to be submitted with/in the permit application as a requirement of the Initial Notification Reporting in this subpart. This information would need to be submitted before a permit could be issued and therefore would not appear as a term in the permit:

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- a. the name and address of the permittee;
 - b. a notification of intention to construct a new major affected source;
 - c. the address (i.e., physical location) of the solvent cleaning machine;
 - d. an identification of all the relevant standards applicable to the solvent cleaning machine
 - e. an expected completion date of construction or reconstruction, or the date of installation, if installed;
 - f. the anticipated startup date of the solvent cleaning machine;
 - g. the type and quantity of hazardous air pollutants expected to be emitted by the unit;
 - h. a brief description of the solvent cleaning machine type (batch vapor, batch cold, vapor in-line, or cold in-line), the solvent(s), the solvent/air interface area, and existing controls;
 - i. the anticipated compliance approach for the solvent cleaning machine; and
 - j. an estimate of the annual halogenated HAP solvent consumption for the solvent cleaning machine and annual estimated HAP emissions with records for any recovered materials; if an existing facility, these estimates shall be based on existing purchasing records of solvent usage.
2. The permittee shall submit an annual report by February 1 of each year, following the year for which the report is being made. This report shall contain the following information:
- a. a signed statement, by the facility owner or his designee, stating that "all operators of the solvent cleaning machine have received training on the proper operation of solvent cleaning machines and their control devices, sufficient to pass the testing required by the standard"; and
 - b. an estimate of solvent consumption during the reporting period and emissions of each HAP.

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3. The permittee shall submit a quarterly deviation report if monthly (or quarterly if adjusted after the first year) measurements and records are not maintained of the speed of the solvent cleaning machine's automated parts handling system, or if these measurements exceed 3.4 meters per minute (11.0 feet per minute).
4. The permittee shall submit an exceedance report on a semiannual basis, unless it is determined that more frequent reporting is necessary to accurately assess compliance or if an exceedance occurs. Once an exceedance has occurred, the permittee shall submit quarterly exceedance reports, until such time that the permittee requests and receives approval from the regulating agency of less frequent reporting requirements. The permittee may receive approval of less frequent reporting if the following conditions are met:
 - a. the emissions unit has demonstrated a full year of compliance without an exceedance;
 - b. the permittee continues to comply with all relevant recordkeeping and monitoring requirements specified in 40 CFR 63.1, General Provisions; and
 - c. the regulating agency does not object to a reduced frequency of reporting for the affected emissions unit as provided in paragraph (e) (3) (iii) of subpart A, 40 CFR 63.1, General Provisions.
5. The permittee shall submit a deviation report if the cover did not completely cover the cleaning machine openings, when containing the HAP solvent and during any idling or downtime mode, unless solvent is being added or removed, and/or maintenance, monitoring, and/or solvent level measurements were being conducted. Cracks, holes or other defects to the cover, that were not repaired or the cover not replaced within 15 days of detection, shall also be reported.
6. The permittee shall submit a deviation report if the manufacturer's specification for determining the minimum dwell time within the superheated vapor system was not followed; and/or parts did not remain within the vapor zone for at least the minimum proper dwell time; and/or if the temperature of the solvent vapor at the center of the superheated vapor zone was less than 10 degrees Fahrenheit above the solvent's boiling point and was not corrected within 15 days of detection.
7. The permittee shall submit a deviation report if the temperature of the chilled air blanket, measured at its center, was greater than 30% of the solvent's boiling point and was not adjusted within 15 days of detection.
8. The permittee shall submit a deviation report if the freeboard ratio is not maintained at 1.0 or greater.
9. Each exceedance report shall be delivered or post marked by the 30th day following

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the reporting period. Each exceedance report shall contain the following information:

- a. if an exceedance has occurred, the standard, monitored parameter, emission limit, or other requirement that was exceeded; the reason for the exceedance; and the actions taken to correct any future exceedance of the same limit or requirement;
 - b. action(s) taken to comply with 40 CFR 63.463 (e) and (f) including written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to acceptable levels; and
 - c. if no exceedance has occurred, a statement to that effect shall be submitted.
10. The permittee shall submit quarterly deviation reports if any of the following control equipment is not repaired or replaced within 15 days of any malfunction, and/or the machine is not shut down until repaired:
- a. the device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils;
 - b. the vapor level control device(s) that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser, if the condenser coolant is not circulating, or if the coolant is too warm; and/or
 - c. the primary condenser.

Included in the report shall be the length of time the equipment was not in operation or malfunctioning, and the date it was repaired or replaced.

11. The permittee shall submit an annual solvent emission report by February 1 of each year, which shall cover the previous calendar year, and shall contain the following information:
- a. the size and type of the solvent cleaning machine, including if it has a solvent/air interface area or is using cleaning capacity;
 - b. the average monthly solvent consumption for the solvent cleaning machine in kilograms and pounds per month; and

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- c. the 3-month monthly rolling average HAP emission estimates, calculated each month using the method as described in the standard and/or the "*Testing Requirements*" section of this permit.

V. Testing Requirements

1. Compliance with the emission limitations and control requirements in the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitation:

VOC (trichloroethylene) emissions shall not exceed 1.72 lbs/hr and 7.55 tons per year.

Applicable Compliance Method:

To determine the annual VOC emission rate, the following equation shall be used:

$$E = (L_s - L_w) \times D / 2000$$

where:

E = VOC emission rate (tons/year);

L_s = liquid volume of cleaning solvent employed each year (gallons);

L_w = liquid volume of cleaning solvent sent off-site as waste (gallons); and

D = density of cleaning solvent (pounds/gallon).

If more than one type of cleaning solvent is employed, the above equation shall be used for each cleaning solvent. The total annual VOC emissions rate shall be determined by the summation of the annual organic compound emission rates for all cleaning solvents.

Control reduction efficiencies shall be applied based on the following from the Radian Document, May 26, 1993, A-92; II-B-92 Summary:

E1 = Freeboard ratio of one or greater	20% reduction;
E2 = Freeboard refrigeration device	40% reduction; and
E3 = Superheated Vapor	50% reduction.

Compliance with the short term emission limit of 1.72 lbs per hour shall be assumed as long as compliance with the annual limit is demonstrated and maintained.

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b. Control Requirement:

The permittee has installed and shall employ working-mode cover, a freeboard refrigeration device, freeboard ratio of 1.0 and superheated vapor, as the control combination required from Table 2 and 3, found in 40 CFR 63.463.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the selected control combination from Table 2 and 3, through compliance with the "Additional Terms and Conditions", "Operational Restrictions", and "Monitoring and Recordkeeping Requirements" and "Testing Requirement" sections of this permit.

c. Control Requirement:

The chilled air blanket temperature measured at the center of the air blanket shall be no greater than 30% of the solvent's boiling point.

Applicable Compliance Method:

The solvent's boiling point shall be documented and, on a weekly basis, the permittee shall measure the temperature at the center of the air blanket during the idling mode using a thermometer or thermocouple.

d. Control Requirement:

The temperature of the solvent vapor at the center of the superheated vapor zone shall be at least 10 degrees F above the solvent's boiling point.

Applicable Compliance Method:

The solvent's boiling point shall be documented and, on a weekly basis, the permittee shall measure the temperature at the center of the superheated solvent vapor zone during the idling mode using a thermometer or thermocouple. The proper dwell time shall be determined and measured using the manufacture's specifications for determining and employing the minimum proper dwell time.

e. Control Requirement:

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The freeboard ratio shall not exceed 1.0

Applicable Compliance Method:

The permittee shall measure and record the freeboard ratio before and after each solvent addition to assure compliance with the control requirement limitation.

f. Control Requirement:

The hoist speed shall not exceed 3.4 meters per minute (11 feet per minute).

Applicable Compliance Method:

The permittee shall determine the hoist speed by measuring the time it takes for the hoist, part, or part basket to travel a measured distance, and at the frequency as required in the "Monitoring and Record keeping Requirements" section of this permit. The speed is equal to the distance in meters divided by the time in minutes (meters per minute).

2. The permittee shall determine the facility's potential to emit (PTE) from all solvent cleaning operations. A facility's total PTE is the sum of the HAP emissions from all solvent cleaning operations plus all HAP emissions from other emissions units from within the facility. The potential to emit for each emissions unit shall be determined in accordance with the following procedures:

- a. determine the potential to emit for each individual solvent cleaning machine using the following equation:

$$PTE_i = H_i \times W_i \times SA_i$$

where:

PTE_i = the potential to emit for the solvent cleaning machine i (kilograms solvent per year)

$$TPY \text{ limit} = PTE_i \times 0.0011023$$

H_i = hours of operation for solvent cleaning machine i (hours per year)
 = 8760 hours per year, unless otherwise restricted by a federally enforceable requirement

W_i = the working mode uncontrolled emission rate (kilograms per square meter per hour)

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= 1.95 kilograms per square meter per hour for batch vapor and cold cleaning machines

= 1.12 kilograms per square meter per hour for in-line solvent cleaning machines

SAl_i = solvent/air interface area of solvent cleaning machine i (square meters).

Control reduction efficiencies shall be applied based on the following from the Radian Document, May 26, 1993, A-92; II-B-92 Summary:

E1 = Freeboard ratio of one or greater	20% reduction;
E2 = Freeboard refrigeration device	40% reduction; and
E3 = Superheated Vapor	50% reduction.

VI. Miscellaneous Requirements

None

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (L001) - Open top vapor degreaser

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None