



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
122 S. Front Street  
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049  
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL  
MEDINA COUNTY  
Application No: 16-02263**

**CERTIFIED MAIL**

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
40 CFR Part 63, Subpart JJJJ	MACT
40 CFR Part 60, Subpart RR	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

**DATE:** 5/1/2003

3M Medina  
Darryl Vaci  
1030 Lake Rd  
Medina, OH 44256

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 by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
236 East Town Street, Room 300  
Columbus, Ohio 43215

Very truly yours,

Michael W. Ahern, Supervisor  
Field Operations and Permit Section  
Division of Air Pollution Control

CC: USEPA

ARAQMD



**Permit To Install  
Terms and Conditions**

**Issue Date: 5/1/2003  
Effective Date: 5/1/2003**

**FINAL PERMIT TO INSTALL 16-02263**

Application Number: 16-02263

APS Premise Number: 1652050059

Permit Fee: **\$1000**

Name of Facility: 3M Medina

Person to Contact: Darryl Vaci

Address: 1030 Lake Rd  
Medina, OH 44256

Location of proposed air contaminant source(s) [emissions unit(s)]:

**1030 Lake Rd  
Medina, Ohio**

Description of proposed emissions unit(s):

**Paper Coating Line.**

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

Director

## Part I - GENERAL TERMS AND CONDITIONS

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

#### 1. Monitoring and Related Record keeping 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 record keeping 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 record keeping 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 quarterly, i.e., 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, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., 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. 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.

## **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 reissuance, or modification, or for denial of a permit renewal application.
- 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, reopened, 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, reopening 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.

## **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 this Permit To Install.

## **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 of 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, the State, and citizens 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 To Install 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.

**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.

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

**1. Compliance Requirements**

The emissions unit(s) identified in this Permit to Install 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 record keeping 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 record keeping 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 quarterly, i.e., 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**

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

**4. Termination of Permit To Install**

This permit to install shall terminate within eighteen months of the effective date of the permit to install 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)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. 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 the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install 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**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) 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., 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 air 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>
PM	0.4
VOCs	116.34
NO <sub>x</sub>	56
CO	35

**Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

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

- 1.** The permittee's existing emissions units are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paper and Other Web Coating, 40 CFR Part 63, Subpart JJJJ and therefore are subject to all the requirements listed for existing sources pursuant to 40 CFR Part 63, Subpart JJJJ which include, but not limited to, the following:
  - a. 95% overall HAP emission reduction as calculated over a calendar month;
  - b. 0.04 kg of HAPs emitted/kg of coating applied each calendar month; or
  - c. 0.20 kg of HAPs emitted/kg of coating solids applied each calendar month.

**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 operations(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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
<p>K005 (Solvent Coater) pressure sensitive tape &amp; label adhesives applied to continuous web paper and film substrates, dried with rated 5.0 mmBtu/hr, natural gas-fired, direct heat transfer oven, air emissions of volatile organic compounds (VOCs) and organic hazardous air pollutants (HAPs) captured, vented to and destroyed by a natural gas-fired thermal oxidizer employing a 98% overall capture and control system.</p>	<p>OAC rule 3745-31-05(A)(3)</p>	<p>25.6 lbs/hr &amp; 112.3 tons per year (tpy) of VOC emissions (thermal oxidizer stack emissions);</p> <p>98% overall VOC emission reduction;</p> <p>5 % opacity from any stack as a 6-minute average;</p> <p>0.1 lb/hr &amp; 0.4 tpy of particulate emissions (PE) (thermal oxidizer stack emissions);</p> <p>12.8 lbs/hr &amp; 56 tpy of nitrogen oxides (NO<sub>x</sub>) emissions (thermal oxidizer stack emissions);</p> <p>7.92 lbs/hr &amp; 35 tpy of carbon monoxide (CO) emissions (thermal oxidizer stack emissions); and</p> <p>The requirements of this rule also include compliance with the requirements of 40 CFR Part 60 Subpart RR; OAC rule 3745-21-09(F); 40 CFR Part 63 Subpart JJJJ; OAC rule 3745-17-07(A); and OAC rule 3745-17-11(B).</p>
	<p>40 CFR Part 63 Subpart JJJJ (Paper and Other Web Coating MACT)</p>	<p>95% overall HAP emission reduction as calculated over a calendar month; or</p>

<p>OAC rule 3745-21-09(B)(6) in lieu of  OAC rule 3745-21-09(F)  40 CFR Part 60 Subpart RR  OAC rule 3745-17-07(A)  OAC rule 3745-17-10</p>	<p>0.04 kg of HAPs emitted/kg of coating applied each calendar month; or</p> <p>0.20 kg of HAPs emitted/kg of coating solids applied each calendar month.</p> <p>The emission limitations/reductions specified by these rules are less stringent than the emission limitations/reduction established pursuant to OAC rule 3745-31-05(A)(3).</p>
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**2. Additional Terms and Conditions**

**2.a** The hourly VOC, PM, NO<sub>x</sub>, and CO emissions limitations regulated per OAC rule 3745-31-05(A)(3) are based upon accepted USEPA potential to emit procedures for this emissions unit. Therefore, no associated record keeping or reporting are required to demonstrate compliance with these emissions limits.

However, if any proposed change(s), such as with production capacity, the types and/or quantities of materials used or processed, or anything else that increase(s) the potential emissions of any air pollutant, then the permittee shall apply for and obtain either a modification to the permit to install or a new final permit to install prior to the change(s).

**2.b** The permittee shall properly install, adjust, operate, and maintain, in accordance with the manufacturer's recommendations, instructions, and operating manual(s), a thermal oxidizer and associated control equipment as necessary to adequately capture, contain, vent, and destroy air emissions of VOCs and HAPs from this emissions unit as required by this permit and to the extent possible with good engineering design and practice.

**II. Operational Restrictions**

1. The thermal oxidizer with all associated control equipment serving this emissions unit shall be in operation at all times the emissions unit is in operation and coating raw materials. If the thermal oxidizer or any of its associated control equipment malfunctions or must be shut down for any reason, the emissions unit shall immediately cease coating until effective repairs are made. Once coating has ceased, the line may continue operating until the coated material is through the oven.
2. The emissions unit, vented to the thermal oxidizer as required in normal operation, shall only vent directly to ambient air (e.g., through a bypass stack) during emergency conditions as detected by Lower Explosive Level (LEL) instrumentation and the direct venting to ambient air shall only occur until the emissions unit safely ceases coating raw material. The emissions unit shall remain shut down

until the reason for the LEL emergency condition has been effectively identified and corrected and the emissions unit can resume normal operations, venting to the thermal oxidizer.

3. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
4. The permittee shall store all waste materials in closed containers with tightly fitted covers.

### III. Monitoring and/or Record keeping Requirements

1. The permittee shall document all times the thermal oxidizer and/or associated control equipment serving this emissions unit were/was not employed when the emissions unit was in operation.
2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperatures within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day:

- a. All 3-hour blocks of time during which any average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit/thermal oxidizers was in compliance.
  - b. A log or record of the downtime for the capture (collection) system(s), control devices, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall collect and record the following information each month:
- a. The name and identification number of each coating, as applied.
  - b. The HAP content of each coating, as applied, in kilogram (kg) of HAP emitted/kg of coating applied.
  - c. The pounds of HAP per gallon of coating solids, as applied, and the volume solids content, as applied.
  - d. The number of gallons of each coating employed.
  - e. The total volume of solids from all coatings, in gallons.

- f. The name and identification of each cleanup material employed.
  - g. The number of gallons of each cleanup material employed.
  - h. The HAP content of each cleanup material, as applied, in kilogram (kg) of HAP emitted/kg of coating applied.
  - i. The pounds of HAP per gallon of cleanup material solids, as applied, and the volume solids content, as applied.
  - j. The calculated, controlled HAP emission rate for all coatings and cleanup materials, in pounds or tons. The controlled HAP emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance.
  - k. The calculated, controlled HAP emission rate, as a rolling, 12-month summation of monthly HAP emissions for all coatings and cleanup materials, in pounds or tons. The controlled HAP emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance.
- 4.** The permittee shall collect and record the following information for the purpose of determining annual VOC emissions:
- a. The name and identification number of each coating, as applied.
  - b. The VOC content of each coating, as applied, in pounds per gallon.
  - c. The number of gallons of each coating employed.
  - d. The name and identification of each cleanup material employed.
  - e. The number of gallons of each cleanup material employed.
  - f. The VOC content of each cleanup material, in pounds per gallon.
  - g. The total uncontrolled VOC emissions from all coatings and cleanup materials employed, in pounds or tons.
  - h. The calculated, controlled VOC emission rate for all coatings and cleanup materials, in pounds or tons. The controlled VOC emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance.

#### IV. Reporting Requirements

1. The permittee shall notify the Director (the Akron Regional Air Quality Management District) in writing of any monthly record showing that the HAP content of any coating and/or clean up material exceeded the applicable limitation of (1) 95% overall control efficiency; or (2) 0.04 kg emitted per kg of coating; or 0.20 kg emitted per kg of coating solids as applied.

The notification shall include a copy of such record and shall be sent to the Akron Regional Air Quality Management District within 45 days after the exceedance(s) occurred.

2. The permittee shall submit quarterly deviation (excursion) reports which identify:
  - a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer did not comply with the temperature limitation specified above.
  - b. All periods when the stack that bypasses the thermal oxidizer is used while employing solvent-based coatings in the emissions unit.
  - c. All exceedances of the rolling, 12-month emission limitation for HAP.
3. The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports which specify the total VOC and HAP emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
5. This emissions unit is subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- a. Construction date (no later than 30 days after such date);
- b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. Actual start-up date (within 15 days after such date); and
- d. Date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Air Quality Modeling and Planning  
P.O. Box 1049  
Columbus, OH 43216-1049

and

Akron Regional Air Quality Management District  
146 South High Street, Room 904  
Akron, Ohio 44308

6. This emissions unit is subject to the applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as promulgated by the United States Environmental Protection Agency under 40 CFR Part 63.

The application and enforcement of these standards are delegated to Ohio EPA. The requirements of 40 CFR Part 63 are also federally enforceable.

Pursuant to the NESHAP, the source owner/operator is required to report the following milestones:

- a. Date of commencement of construction ( no later than 30 days after such date);
- b. Anticipated date of initial start-up (not more than 60 days or less than 30 days prior to such date);
- c. Actual date of initial start-up (within 15 days after such date); and
- d. Date of performance testing (at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Air Quality Modeling and Planning  
P.O. Box 1049  
Columbus, OH 43216-1049

and

Akron Regional Air Quality Management District  
146 South High Street, Room 904  
Akron, Ohio 44308

## **V. Testing Requirements**

1. The permittee shall determine the organic HAP and VOC contents for all coatings and cleanup materials using one of the three methods specified in 40 CFR 63.3360 (c) and (d). These methods include determination of the HAP and VOC mass fraction using USEPA Method 311, Method 24 or formulation data provided by the manufacturer. In the event of inconsistency between any of the referenced Methods and formulation data, the results of Method 311 will govern for HAP content and the results of Method 24 will govern for total VOC content.

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

a. Emission Limitation: 5% opacity from any stack, as a 6-minute average

Applicable Compliance Method: If required, compliance shall be determined by visible emission evaluations performed in accordance with procedures specified in 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitations: 0.1 lb/hr & 0.4 tpy of PM (thermal oxidizer stack emissions)

Applicable Compliance Method: The above emission limits are based upon the potential to emit as determined from vendor emissions data. If necessary, stack testing may be required to demonstrate compliance with the hourly emission limitation using US EPA Test Methods, 1-5 or another US EPA-approved test methods.

c. Emission Limitations: 25.6 lbs/hr & 112.3 tpy of VOC emissions (thermal oxidizer stack emissions)

Applicable Compliance Method: The hourly emission limit is based upon the controlled potential to emit as determined from company emissions data. Compliance with the annual emissions limit shall be based upon the use of Method 24 and formulation data, or any alternative compliance test method approved by the US EPA, for determining the VOC content of each coating, and the record keeping requirements of Part III.A.III.4 above.

[Note: Compliance with the hourly allowable VOC emission rate (i.e., 26.7 lbs/hr) can be verified during the "98% overall VOC emission reduction" performance testing.]

d. Emission Limitation: 98% overall VOC emission reduction.

Applicable Compliance Method: Performance testing shall be conducted within 60 days after achieving maximum production at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit and at such other times as may be required by the Administrator under section 114 of the Clean Air Act. See term and condition A.V.3.

e. Emission Limitations: 12.8 lbs/hr & 56 tpy of NO<sub>x</sub> emissions (thermal oxidizer stack emissions).

Applicable Compliance Method: The above emission limitations are based upon the potential to emit as determined from vendor emissions data. If necessary, stack testing may be required demonstrate compliance with the hourly emission limitation using US EPA Test Methods, 1-4 and 7 or another US EPA-approved test methods.

- f. Emission Limitations: 7.92 lbs/hr & 35 tpy of CO emissions (thermal oxidizer stack emissions).

Applicable Compliance Method: The above emissions limits are based upon the potential to emit as determined from vendor emissions data. If necessary, stack testing may be required to demonstrate compliance with the hourly emission limitation using US EPA Test Methods, 1-4 and 10 or another US EPA-approved test methods.

- g. Emission Limitation: 95% overall HAP emission reduction as calculated over a calendar month.

Applicable Compliance Method: performance testing shall be conducted within 60 days after achieving maximum production at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit and at such other times as may be required by the Administrator under section 114 of the Clean Air Act. See term and condition A.V.3.

[Note: Compliance with the 95% overall HAP emission reduction requirement is assumed if the permittee demonstrates compliance with the 98% overall VOC emission reduction requirement.]

- h. Emission Limitations: 0.04 kg of HAPs emitted/kg of coating applied each calendar month and 0.20 kg of HAPs emitted/kg of coating solids applied each calendar month

Applicable Compliance Method: Compliance shall be based upon one of the three methods specified in 40 CFR 63.3360 (c) and (d). These methods include determination of the HAP and VOC mass fraction using USEPA Method 311, Method 24 or formulation data provided by the manufacturer. In the event of inconsistency between any of the referenced Methods and formulation data, the results of Method 311 will govern for HAP content and the results of Method 24 will govern for total VOC content, and on the record keeping requirements of Part III.A.III.3 above.

### 3. Emission testing requirements

a. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

i. The emission testing shall be conducted within shall be conducted within 60 days after achieving maximum production at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit and at such other times as may be required by the Administrator under section 114 of the Clean Air Act.

ii. The emission testing shall be conducted to demonstrate compliance with the 98% overall VOC emission reduction requirement.

[Note: Compliance with the 95% overall HAP emission reduction requirement is assumed if the permittee demonstrates compliance with the 98% overall VOC emission reduction requirement.]

iii. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Akron Regional Air Quality Management District.

iv. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

The capture efficiency shall be determined using Methods 204 through Method 204F, as specified 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement.)

The control or destruction efficiency defined as the percent reduction of mass emissions between the inlet and outlet of the control system shall be determined in accordance with the test methods and procedures specified in Ohio Administrative Code 3745-21-10(C). The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Administrator.

b. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Akron Regional Air Quality Management District. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s)

who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Akron Regional Air Quality Management District's refusal to accept the results of the emission test(s).

Personnel from the Akron Regional Air Quality Management District shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Akron Regional Air Quality Management District within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the from the Akron Regional Air Quality Management District.

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- 1. The specific operations(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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K005 (Solvent Coater) pressure sensitive tape & label adhesives applied to continuous web paper and film substrates, dried with rated 5.0 mmBtu/hr, natural gas-fired, direct heat transfer oven, air emissions of volatile organic compounds (VOCs) and organic hazardous air pollutants (HAPs) captured by a permanent total enclosure (PTE) and vented to and destroyed by a natural gas-fired thermal oxidizer		

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record keeping Requirements**

None

**IV. Reporting Requirements**

None

**3M Medina**

**PTI Application: 16-02263**

**Issued: 5/1/2003**

**Facility ID: 1652050059**

**Emissions Unit ID: K005**

**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 operations(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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
L001 (Die Cleaning Station) cold solvent cleaning of metal coating die, air emissions of volatile organic compounds (VOCs) and organic hazardous air pollutants (HAPs) captured and vented to a roof stack	OAC rule 3745-31-05(A)(3)	0.9 pound/hour and 4 ton per year of VOC emissions.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(O).
	OAC rule 3745-21-09(O)	See Part III.A.I.2.b through e below.

**2. Additional Terms and Conditions**

- 2.a The hourly VOC emissions limitation regulated per OAC rule 3745-31-05(A)(3) is based upon accepted USEPA potential to emit procedures for this emissions unit. Therefore, no associated record keeping or reporting are required to demonstrate compliance with this emissions limit.

However, if any proposed change(s), such as with production capacity, the types and/or quantities of solvent and/or materials used or processed, or anything else that increase(s) the potential emissions of any air pollutant, then the permittee shall apply for and obtain either a modification to the permit to install or a new final permit to install prior to the change(s).

- 2.b The cold cleaner shall be operated with a cover, and if the solvent has a vapor pressure greater than 0.3 pound per square inch absolute, measured at 100 degrees Fahrenheit or, if the solvent is heated or agitated, the cover shall be designed and constructed so that it can be easily operated with one hand.
- 2.c The cold cleaner shall be equipped with a device for draining the cleaned parts; and if the solvent has a vapor pressure greater than 0.6 pound per square inch absolute, measured at 100 degrees Fahrenheit, the drainage facility shall be constructed internally so that parts are enclosed under the cover during draining, unless an internal type drainage device cannot fit into the cleaning system.

- 2.d** A freeboard ratio of greater than or equal to 0.7 shall be maintained.
- 2.e** The cold cleaner shall be operated and maintained in accordance with the following practices to minimize solvent evaporation from the unit:
  - i. Provide a permanent, legible, conspicuous label, summarizing the operating requirements.
  - ii. Store waste solvent in covered containers.
  - iii. Close the cover whenever parts are not being handled in the cleaner.
  - iv. Drain the cleaned parts until dripping ceases.
  - v. If used, supply a solvent spray that is a solid fluid stream (not a fine, atomized, or shower-type spray) at a pressure that does not exceed 10 pounds per square inch gauge.
  - vi. Clean only materials that are neither porous nor absorbent.

## **II. Operational Restrictions**

None

## **III. Monitoring and/or Record keeping Requirements**

- 1.** The permittee shall maintain records for at least five years of the types of solvents employed and the vapor pressure of each solvent (pounds per square inch absolute) measured at one hundred degrees Fahrenheit, and make these records available to the Director upon verbal or written request.
- 2.** The permittee shall collect and record the following information for the purpose of determining annual VOC emissions:
  - a. The name and identification number of each solvent employed.
  - b. The VOC content of each solvent employed, in pounds per gallon.
  - c. The number of gallons of each solvent employed.
  - d. The VOC emissions from all solvents employed.

#### IV. Reporting Requirements

1. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

#### V. Testing Requirements

1. The permittee shall determine the VOC contents for all coatings and cleanup materials using one of two methods specified in 40 CFR 63.3360 (d). These methods include determination of the VOC mass fraction using USEPA Method 24 or formulation data provided by the manufacturer. In the event of inconsistency between Method 24 and formulation data, the results of Method 24 will govern.
2. Compliance with the VOC emission limitations of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation: 0.9 pound/hour of VOC emissions.

Applicable Compliance Method: The above emissions limit was established as follows:

$$H = DVT$$

where,

H = 0.9 pound/hour VOCs [potential hourly VOC emissions];

D = 6.71 pounds VOCs/gallon solvent [solvent VOC content];

V = 1210 gallons solvent/year [estimated potential usage serving as cleanup for K005 at maximum capacity]; and

T = 1 year/8760 hours [time conversion].

- b. Emission Limitation: 4 tons/year of VOC emissions.

Applicable Compliance Method: Compliance with the above emissions limit shall be based on the record keeping requirements of Part III.A.III.2 above.

#### VI. Miscellaneous Requirements

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- 1. The specific operations(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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
L001 (Die Cleaning Station) cold solvent cleaning of metal coating die, air emissions of volatile organic compounds (VOCs) and organic hazardous air pollutants (HAPs) captured and vented to a roof stack		

**2. Additional Terms and Conditions**

2.a 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