



John R. Kasich, Governor
 Mary Taylor, Lt. Governor
 Craig W. Butler, Director

9/24/2015

Mr. Patrick Grothaus
 3M Medina
 1030 Lake Road
 Medina, OH 44256

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
 Facility ID: 1652050059
 Permit Number: P0119206
 Permit Type: Administrative Modification
 County: Medina

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTI is a final action of the Director 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, made payable to "Ohio Treasurer Josh Mandel," 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
 77 South High Street, 17th Floor
 Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging 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 Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

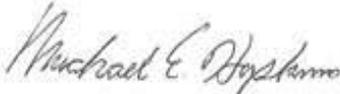
Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Akron Regional Air Quality Management District at (330)375-2480 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: U.S. EPA
ARAQMD; Canada



FINAL

**Division of Air Pollution Control
Permit-to-Install
for
3M Medina**

Facility ID: 1652050059
Permit Number: P0119206
Permit Type: Administrative Modification
Issued: 9/24/2015
Effective: 9/24/2015



Division of Air Pollution Control
Permit-to-Install
for
3M Medina

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Final Permit-to-Install
3M Medina
Permit Number: P0119206
Facility ID: 1652050059
Effective Date: 9/24/2015

Authorization

Facility ID: 1652050059
Facility Description: Paper, Coated and Laminated: NEC.
Application Number(s): M0003125
Permit Number: P0119206
Permit Description: Agency-initiated administrative modification to clarify in the VOC emission limitations that hand cleaning is not done in an enclosure that is vented to the thermal oxidizer and to update the terms and conditions to match the Title V permit.
Permit Type: Administrative Modification
Permit Fee: \$0.00
Issue Date: 9/24/2015
Effective Date: 9/24/2015

This document constitutes issuance to:

3M Medina
1030 Lake Road
Medina, OH 44256

of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Akron Regional Air Quality Management District
1867 West Market St.
Akron, OH 44313
(330)375-2480

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section 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 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


Craig W. Butler
Director



Final Permit-to-Install
3M Medina
Permit Number: P0119206
Facility ID: 1652050059
Effective Date:9/24/2015

Authorization (continued)

Permit Number: P0119206

Permit Description: Agency-initiated administrative modification to clarify in the VOC emission limitations that hand cleaning is not done in an enclosure that is vented to the thermal oxidizer and to update the terms and conditions to match the Title V permit.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	K005
Company Equipment ID:	Solvent Coater
Superseded Permit Number:	16-02263
General Permit Category and Type:	Not Applicable



Final Permit-to-Install
3M Medina
Permit Number: P0119206
Facility ID: 1652050059
Effective Date: 9/24/2015

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A.2.a), Severability Clause
 - (2) Standard Term and Condition A.3.c) through A. 3.e)General Requirements
 - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A.9., Reporting Requirements
 - (5) Standard Term and Condition A.10., Applicability
 - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A.14., Public Disclosure
 - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A.16., Fees
 - (10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

- a) 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.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they 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 and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

- a) 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.

4. 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:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) 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:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Akron Regional Air Quality Management District.

- (2) 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 Akron Regional Air Quality Management District. 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 A.15. below if no deviations occurred during the quarter.
 - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Akron Regional Air Quality Management District 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.
 - (4) This permit is for an emissions unit located at a Title V facility. 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.

5. 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 Akron Regional Air Quality Management District 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).

6. Compliance Requirements

- a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted

local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

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:
- (1) 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.
 - (2) 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.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) 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 Akron Regional Air Quality Management District 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:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) 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.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. 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 Akron Regional Air Quality Management District.
- 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 Akron Regional Air Quality Management District. 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, 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.)

10. 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) not exempt from the requirement to obtain a Permit-to-Install.

11. Construction of New Sources(s) and Authorization to Install

- a) 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.
- b) If applicable, authorization to install any new 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 has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. 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 permittee shows good cause for any such extension.

- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

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 operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.

13. Construction Compliance Certification

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. 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.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

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 by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. 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.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed. The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

18. 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.

19. 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.



Final Permit-to-Install
3M Medina
Permit Number: P0119206
Facility ID: 1652050059
Effective Date: 9/24/2015

B. Facility-Wide Terms and Conditions



Final Permit-to-Install
3M Medina
Permit Number: P0119206
Facility ID: 1652050059
Effective Date:9/24/2015

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.



Final Permit-to-Install
3M Medina
Permit Number: P0119206
Facility ID: 1652050059
Effective Date: 9/24/2015

C. Emissions Unit Terms and Conditions

1. K005, Solvent Coater

Operations, Property and/or Equipment Description:

pressure sensitive tape and label adhesives applied to continuous web paper and film substrates dried with a natural gas-fired direct heat transfer oven - Solvent Coater.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 16-02263)	51.4 pounds per hour (lbs/hr) of volatile organic compounds (VOC) emissions from coatings (thermal oxidizer stack emissions) & 112.57 tons per year (tpy) of VOC emissions from coatings and cleanup materials; 96% overall VOC emission reduction, by weight; Note: All VOC emissions are considered to be organic HAP emissions. 0.1 lb/hr& 0.4 tpy of particulate emissions (PE) (thermal oxidizer stack emissions); 13.2 lbs/hr& 57.8 tpy of nitrogen oxides (NO _x) emissions (thermal oxidizer stack emissions); 8.26 lbs/hr& 36.2 tpy of carbon monoxide (CO) emissions (thermal oxidizer stack emissions); and The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart JJJJ.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	40 CFR Part 63, Subpart JJJJ	You must limit organic hazardous air pollutant (HAP) emissions to no more than 5 percent of the organic HAP applied for each month (95 percent reduction) or no more than 4 percent of the mass of coating materials applied for each month or no more than 20 percent of the mass of coating solids applied for each month. See b)(2)c. below.
c.	OAC rule 3745-21-09(B)(6) in lieu of OAC rule 3745-21-09(F)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-21-09(F)(2)(a)(i)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-09(F)(2)(b)	See c)(1) below.
f.	40 CFR Part 60, Subpart RR	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
g.	40 CFR Part 64	Pursuant to 40 CFR 64.2(b), the Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64 shall not apply to the MACT emission limitations for HAPs of 40 CFR Part 63, Subpart JJJJ specified in this permit. The VOC emission limitations in OAC rule 3745-31-05(A)(3) shall be in compliance with the CAM requirements of 40 CFR Part 64 by complying with §§63.3321(b), 63.3350, 63.3400(c), and 63.3410 of 40 CFR Part 63, Subpart JJJJ.
h.	40 CFR Part 63, Subpart A	Table 2 to Subpart JJJJ of Part 63 - Applicability of 40 CFR Part 63 General Provisions to Subpart JJJJ shows which parts of the General Provisions in §§63.1 - 63.15 of 40 CFR Part 63, Subpart A apply.

(2) Additional Terms and Conditions

- a. The hourly VOC, PM, NO_x, and CO emission limitations were established for Permit to Install (PTI) purposes to reflect the emissions unit's potentials to emit. Therefore, no monitoring, record keeping or reporting is required to demonstrate compliance with these emission limitations.

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 PTI or a new final PTI prior to the change(s).

- 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.
- c. You must demonstrate compliance with 40 CFR Part 63, Subpart JJJJ by following the procedures in §63.3370.

c) Operational Restrictions

(1) Work practice standards for cleaning materials.

Unless emissions to the atmosphere are controlled by an approved emission control system with an overall control efficiency of at least ninety per cent, any person using an organic solvent for cleanup shall:

- a. Store all VOC containing cleaning materials and used shop towels in closed containers;
- b. Ensure that mixing and storage containers used for VOC-containing cleaning materials are kept closed at all times except when depositing or removing these materials;
- c. Minimize spills of VOC-containing cleaning materials;
- d. Convey VOC-containing cleaning materials from one location to another in closed containers or pipes; and
- e. Minimize VOC emission from cleaning of storage, mixing, and conveying equipment.

- (2) 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. Normal operation does not include oven startup before coating begins.

- (3) 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.
- (4) The permittee shall store all waste materials in closed containers with tightly fitted covers.
- (5) The permittee shall comply with the applicable operating limits required under 40 CFR Part 63, Subpart JJJJ, including the following section(s) and Table(s):

<u>Section/Table:</u>	<u>Requirement:</u>
63.3321(a)	You must meet the operating limits specified in Table 1 at all times after you establish them.
Table 1	Operating Limits for Add-On Control Devices and Capture Systems

d) Monitoring and/or Recordkeeping 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) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer, in any 3-hour block of time when the emissions unit(s) controlled by the thermal oxidizer is/are in operation, must not fall below 1500 degrees Fahrenheit or below the combustion temperature limit established according to §63.3360(e)(3)(i) of 40 CFR Part 63, Subpart JJJJ.
- (3) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature 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 monitor and recorder 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 for each day for the control equipment:

- a. a log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit; and
 - b. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, fell below 1500 degrees Fahrenheit or fell below the combustion temperature limit established according to §63.3360(e)(3)(i) of 40 CFR Part 63, Subpart JJJJ.
- (4) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range/limit specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the temperature readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future emission tests

that demonstrate compliance with the allowable VOC emission rate for the controlled emissions unit(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (5) The permittee shall collect and record each month the following information for the purpose of determining annual VOC emissions:
 - a. the name and identification number of each coating employed, as applied;
 - b. the VOC content of each coating employed, as applied, in pound(s) per gallon;
 - c. the number of gallons of each coating employed;
 - d. the name and identification of each cleanup material employed;
 - e. the VOC content of each cleanup material employed, in pounds per gallon;
 - f. the number of gallons of each cleanup material employed;
 - g. the total VOC emissions from all cleanup materials employed [summation of (e x f) for all cleanup materials], in pounds or tons;
 - h. the total uncontrolled VOC emissions from all coatings employed [summation of (b x c) for all coatings], in pounds or tons;
 - i. the calculated, controlled VOC emission rate for all the coatings, 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; and
 - j. the total VOC emission rate for all the coatings and cleanup materials (g + i), in pounds or tons

- (6) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63, Subpart JJJJ, including the following sections:

<u>Section:</u>	<u>Requirement:</u>
63.3350(a)	Summary of monitoring you must do
63.3350(b)	You must monitor and inspect each capture system and each control device used to comply with §63.3320. You must install and operate the monitoring equipment as specified.
63.3350(c)	Bypass and coating use monitoring – monitor bypass of the control device and the mass of each coating material applied during any such bypass.

- 63.3350(e) Continuous parameter monitoring system (CPSM) - Install, operate and maintain each CPMS specified in paragraphs (e)(9) and (10) and (f) of this section according to the requirements in paragraphs (e)(1) through (8) of this section excluding the calibration requirement in paragraph (e)(9)(i) as described in d)(5) below.
- 63.3350(f) Capture system monitoring – You must develop a site-specific monitoring plan and monitor the capture system as specified in this section. Any deviation from the operating parameter value or range of values is considered a deviation from the operating limit. The monitoring plan must be updated at least annually.
- 63.3410(a) Records that must be maintained on a monthly basis.

- (7) 3M Medina shall comply with the alternative comparative monitoring procedure approved by U.S. EPA on June 29, 2011 as an alternative to the calibration verification specified in §63.3550(e)(9)(i) of 40 CFR Part 63, Subpart JJJJ. The alternative comparative monitoring procedure specifies that on a quarterly basis the programmable logic control receiving temperature data from the thermal oxidizer must be evaluated for compliance with the Paper and Other Web Coating NESHAP. The four thermocouple readings within the chambers of the thermal oxidizer must be compared once per minute for ten minutes and deemed consistent in each set to within 50 °F. If the readings differ more than 50 °F, the permittee shall promptly investigate the cause of the deviation.
- (8) The permittee shall comply with the requirements for showing compliance required under 40 CFR Part 63, Subpart JJJJ, including the following sections:

Section:	Requirement:
63.3370(a)	Summary of how you must demonstrate compliance. The facility will comply via one of the following compliance options: §63.3370(e), (f) or (g).
63.3370(e)	Capture and control to reduce emissions to no more than allowable limit
63.3370(e)(1)	If the affected source has only always-controlled work stations and operates more than one capture system or more than one control device, you must demonstrate compliance in accordance with the provision of either paragraph (n) or (p) of this section.
63.3370(k)	Oxidizer compliance demonstration procedures.
63.3370(k)(1)	Demonstrate initial compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device

operating parameters.

- 63.3370(k)(1)(i) Determine the oxidizer destruction efficiency using procedures in §63.3360(e).
- 63.3370(k)(1)(ii) Determine the capture system capture efficiency in accordance with §63.3360(f).
- 63.3370(k)(1)(iii) Whenever a web coating line is operated, continuously monitor the operating parameters established in accordance with §63.3360(e) and (f) to ensure capture and control efficiency.
- 63.3370(k)(2)(i) If demonstrating compliance with §63.3320(b)(1) via §63.3370(p), calculate the overall organic HAP control efficiency achieved using Equation 11 of this section.
- 63.3370(n) Combinations of capture and control. Calculate organic HAP emissions according to the procedures in paragraphs (n)(1) through (4) of this section, and use the calculation procedures specified in paragraph (n)(5) of this section to convert the monitoring and other data into units of the selected control option in paragraphs (e) through (h) of this section. Use the procedures specified in paragraph (n)(6) of this section to demonstrate compliance.
- 63.3370(p) You are in compliance with the emissions standard in §63.3320(b)(1) for the month if the overall organic HAP control efficiency as determined by paragraphs (k)(1)(i) through (iii) and (k)(2)(i) of this section for each web coating line or group of web coating lines served by that control device and a common capture system is at least 95 percent.

e) Reporting Requirements

- (1) The permittee shall submit quarterly summaries of the following records:
 - a. a log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit; and
 - b. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, fell below 1500 degrees Fahrenheit or fell below the combustion temperature limit established according to §63.3360(e)(3)(i) of 40 CFR Part 63, Subpart JJJJ;
 - c. an identification of each incident of deviation described in "b" (above) where a prompt investigation was not conducted;
 - d. an identification of each incident of deviation described in "b" where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

- e. an identification of each incident of deviation described in "b" where proper records were not maintained for the investigation and/or the corrective action(s).

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

- (2) The permittee shall submit deviation (excursion) reports that identify any time periods when the thermal oxidizer and/or associated control equipment serving this emissions unit were/was not employed when the emissions unit was in operation. Each report shall be submitted within 30 days after the deviation occurs.
- (3) 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 April 30 of each year.
- (4) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 63, Subpart JJJJ, including the following sections:

<u>Section/Table:</u>	<u>Requirement:</u>
63.3400(a)	You must submit the reports specified in paragraphs (b) through (g) of this section.
63.3400(b)	Initial Notification
63.3400(c)	Semiannual compliance reports
63.3400(d)	Notification of Performance Tests
63.3400(e)	Notification of Compliance Status
63.3400(f)	Performance Test Reports
63.3400(g)	Startup, shutdown, and malfunction reports as specified in §63.10(d)(5)
Table 1	Submit monitoring plan to the Administrator that identifies operating parameters to be monitored according to §63.3350(f).

f) Testing Requirements

- (1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the 96% overall VOC emission reduction requirement.

[Note: Compliance with the 95% overall HAP emission reduction requirement is assumed if the permittee demonstrates compliance with the 96% overall VOC emission reduction requirement.]

- c. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 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 U.S. EPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
- d. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. 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.
- e. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- g. Personnel from the appropriate Ohio EPA District Office or local air agency 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.
- h. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

- (2) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitations:

0.1 lb/hr & 0.4 tpy of PE (thermal oxidizer stack emissions)

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above based on the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A, or other U.S. EPA-approved test methods.

As long as compliance with the hourly allowable PE limitation is maintained, compliance with the annual allowable PE limitation above shall be ensured (the annual limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000 lbs/ton).

- b. Emission Limitation:

51.4 lbs/hr of VOC emissions from coatings (thermal oxidizer stack emissions)

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the hourly allowable VOC emission limitation above based on the results of emission testing conducted in accordance with Methods 1-4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A, or other U.S. EPA-approved test methods.

- c. Emission Limitation:

112.57 tpy of VOC emissions from coatings and cleanup materials

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be demonstrated based upon the record keeping requirements established in d)(5) above.

- d. Emission Limitation:

96% overall VOC emission reduction, by weight



Applicable Compliance Method:

Compliance with the allowable VOC overall control efficiency above shall be based on the results of emission testing conducted in accordance with the methods as outlined in f)(1) above.

e. Emission Limitations:

13.2 lbs/hr & 57.8 tpy of NO_x emissions (thermal oxidizer stack emissions)

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the hourly allowable NO_x emission limitation above based on the results of emission testing conducted in accordance with Methods 1 - 4 and 7 of 40 CFR Part 60, Appendix A, or other U.S. EPA-approved test methods.

As long as compliance with the hourly allowable NO_x emission limitation is maintained, compliance with the annual allowable NO_x emission limitation above shall be ensured (the annual limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000 lbs/ton).

f. Emission Limitations:

8.26 lbs/hr & 36.2 tpy of CO emissions (thermal oxidizer stack emissions)

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation above based on the results of emission testing conducted in accordance with Methods 1 - 4 and 10 of 40 CFR Part 60, Appendix A, or other U.S. EPA-approved test methods.

As long as compliance with the hourly allowable CO emission limitation is maintained, compliance with the annual allowable CO emission limitation above shall be ensured (the annual limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000 lbs/ton).

g. Emission Limitation:

You must limit organic HAP emissions to no more than 5 percent of the organic HAP applied for each month (95 percent reduction) or no more than 4 percent of the mass of coating materials applied for each month or no more than 20 percent of the mass of coating solids applied for each month.

Applicable Compliance Method:

Compliance with the allowable organic HAP emission limitation above shall be demonstrated through the monitoring and record keeping requirements in d)(6) and d)(7) above and through requirements for showing compliance in d)(8) above.

If required, the permittee shall comply with the applicable testing requirements pursuant to 40 CFR Part 63, Subpart JJJJ, including the applicable parts for the following sections:

Section:	Requirement:
63.3360(a)(2)	Performance test methods you must conduct
63.3360(e)	Control device efficiency performance testing
63.3360(e)(1)	Methods and procedures specified for initial performance test
63.3360(e)(2)	Process information required that you must record during the performance test
63.3360(e)(3)	Establishing operating limit during the performance test
63.3360(f)	Capture efficiency performance testing
63.3360(f)(1)	Permanent total enclosure demonstration
63.3360(f)(2)	Determining capture efficiency according to the protocols for testing with temporary total enclosures
63.3360(f)(3)	You may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective or the Lower Confidence Limit approach as described in appendix A of 40 CFR Part 63, Subpart KK.

The initial performance test was conducted on March 28-29, 2006. An additional performance test was conducted on June 5-6, 2013 to establish a new minimum temperature limit.

- g) Miscellaneous Requirements
 - (1) None.